June 1, 2015

Mr. Kenneth A Harris Jr., Executive Officer
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

Dear Mr. Harris:

In accordance with the schedule set forth in the Central Coast Regional Board's April 22, 2015 letter, the Central Coast Groundwater Coalition (CCGC or Coalition) is submitting the final "Northern Counties Groundwater Characterization: Salinas Valley, Pajaro Valley and Gilroy-Hollister Valley" (Northern Counties Report or Report). The Report is a compilation of the valley-specific characterization reports (Technical Memorandums), an analysis of data gaps and limitations, and final conclusions.

The Regional Board provided conditional approval of CCGC's Northern Counties Technical Memorandums and the Northern Counties Report (May 18, 2015 letter), pending the required revisions contained in the letter. The final Report addresses the Regional Board's required revisions, particularly the requirements for additional information regarding ancillary data (e.g., stable isotopes, pharmaceuticals, and noble gases) outlined in the CCGC Work Plan and an explanation regarding why these data are not included in the Report. The Technical Memorandums (TMs) appended to the draft Report submitted on behalf of CCGC on May 8, 2015 have been revised to address the Regional Board's May 18 requirements (a new Appendix F has been added to each TM).

With the submission of the final Northern Counties Report, the CCGC has complied with the terms and conditions set forth in the Northern Counties Work Plan. We would be pleased to respond to any questions on the final Report.

Sincerely,

Parry Klassen
Executive Director

Tim Borel
Chair, Board of Directors

enclosures

Central Coast Groundwater Coalition
512 Pajaro Street • Salinas • CA • 93901
(831) 585-1435 • centralcoastgc.org

FINAL REPORT

Northern Counties Groundwater Characterization

Salinas Valley, Pajaro Valley and Gilroy-Hollister Valley

Prepared for:
Central Coast Groundwater Coalition

Prepared By:
Luhdorff & Scalmanini Consulting Engineers

Peter Leffler, P.G., C.Hg.
Principal Hydrogeologist
June 1, 2015

Table of Contents

1 INTRODUCTION ... 1
1.1 RWQCB Order Requirements ... 1
1.2 Workplan and Approvals ... 2
1.3 RWQCB Comment Letter ... 2
1.4 Checklist ... 3
1.5 CCGC Compliance with Requirements ... 3
1.6 Report Organization ... 3
2 SALINAS VALLEY GROUNDWATER BASIN ... 4
2.1 Basin Description ... 4
2.2 Sampling Results and Estimated Nitrate Concentrations ... 4
2.3 Uncertainty and Factors affecting Nitrate Concentrations ... 6
3 PAJARO VALLEY GROUNDWATER BASIN ... 6
3.1 Basin Description ... 6
3.2 Sampling Results and Estimated Nitrate Concentrations ... 7
3.3 Uncertainty and Factors affecting Nitrate Concentrations ... 8
4 GILROY-HOLLISTER VALLEY GROUNDWATER BASIN ... 9
4.1 Basin Description ... 9
4.2 Sampling Results and Estimated Nitrate Concentrations ... 9
4.3 Uncertainty and Factors affecting Nitrate Concentrations ... 10
5 DATA GAPS AND LIMITATIONS ... 11
5.1 Data Gaps ... 11
5.2 Limitations ... 11
6 CONCLUSIONS ... 12
6.1 Salinas Valley ... 12
6.2 Pajaro Valley ... 13
6.3 Gilroy-Hollister Valley ... 13
6.4 Summary ... 13

Figures

Figure 1. Salinas Valley Subbasins and Locations of Wells Used for Mapping of Nitrate Concentrations

Figure 2. Kriged Nitrate Concentrations in Salinas Valley

Figure 3. Distribution of Estimated Probability of Exceeding Nitrate (as NO_3) Concentrations of 45 mg/L in Groundwater in Salinas Valley

Figure 4. Pajaro Valley and Locations of Wells Used for Mapping of Nitrate Concentrations

Figure 5. Kriged Nitrate Concentrations in Pajaro Valley

Figure 6. Distribution of Estimated Probability of Exceeding Nitrate (as NO_3) Concentrations of 45 mg/L in Groundwater in Pajaro Valley

Figure 7. Gilroy-Hollister Valley Subbasins and Locations of Wells Used for Mapping of Nitrate Concentrations

Figure 8. Kriged Nitrate Concentrations in Gilroy-Hollister Valley

Figure 9. Distribution of Estimated Probability of Exceeding Nitrate (as NO_3) Concentrations of 45 mg/L in Groundwater in Gilroy-Hollister Valley

Appendices

Appendix A. Checklist

Appendix B. Technical Memorandum – Distribution of Groundwater Nitrate Concentrations, Salinas Valley, California

Appendix C. Technical Memorandum – Distribution of Groundwater Nitrate Concentrations, Pajaro Valley, California

Appendix D. Technical Memorandum – Distribution of Groundwater Nitrate Concentrations, Gilroy-Hollister Valley, California

Appendix E. Data Precision, Accuracy, and Completeness

Appendix F. Exceedance Notification Report

1 INTRODUCTION

The Northern Counties Groundwater Characterization Report has been prepared on behalf of the Central Coast Groundwater Coalition in response to Waste Discharge Requirements (WDRs) Order No. R3-2012-0011 for Discharges from Irrigated Lands (Agricultural Order), and Monitoring and Reporting Program Order Nos. R3-2012-0011-01, R3-2012-0011-02, and R3-2012-0011-03 (collectively, "MRPs"). These WDRs are for growers in the Central Coast Hydrologic Region.

The Central Coast Groundwater Coalition (CCGC) is a third-party cooperative groundwater monitoring program that was established to provide agricultural growers within the Central Coast region an alternative to conducting and reporting individual groundwater monitoring data. The cooperative program was designed to collect the data, synthesize the data, and respond to the requirement to characterize the groundwater quality of the uppermost aquifer, and identify and evaluate groundwater used for domestic drinking water purposes. Specifically, the CCGC's program has been designed to characterize drinking water for nitrate by evaluating the spatial distribution of nitrate concentrations in the Salinas, Pajaro, and Gilroy-Hollister Valleys and provide statistically-based estimates of where groundwater nitrate concentrations are likely to be above the maximum contaminant level (MCL) for nitrate.

1.1 RWQCB Order Requirements

The Central Coast Regional Water Quality Control Board (RWQCB) adopted Order No. R3-2012-0011 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Conditional Waiver) and associated Monitoring and Reporting Program Orders (MRPs) on March 15, 2012. The MRPs include groundwater monitoring and reporting requirements for all individual growers; however, the monitoring frequency varies depending on the tier in which a grower's operation was classified. For growers in all tiers, the MRPs include a provision that allows growers to participate in a cooperative groundwater monitoring program in lieu of conducting individual groundwater monitoring. Some growers in the Central Coast came together to establish a cooperative groundwater monitoring program for the northern areas of the Central Coast (e.g., CCGC). Other growers have worked collectively to develop cooperative groundwater monitoring programs for other areas.

In 2013, the State Board conducted a review of the Agricultural Order and the MRPs due to petitions filed by various parties. As part of its review, the cooperative groundwater program provisions in the Agricultural Order and the MRPs were discussed at length by the State Board, and the State Board modified the provisions in its Order WQ 2013-0101 (pp. 33-35.) The State Board's revisions to the MRP emphasized characterization of groundwater quality with respect to nitrate concentrations and particularly as concerned with domestic well water exceeding or potentially exceeding drinking water standards for nitrate. The State Board amendments to the MRPs stated the following (WQ 2013-0101, pp.33-34):

> "Because drinking water evaluation is a very high priority, the cooperative groundwater monitoring proposals must, at a minimum, include one or more of the following approaches for

each of the participating Dischargers' wells that is or may be used for drinking water purposes: (1) direct sampling; (2) submission of existing data for the well if it has been sampled and analyzed for nitrate using U.S. EPA approved methods at least twice within the last five years; or (3) a statistically valid projection of groundwater quality at the location of the well. In addition, each of the participating Dischargers' wells that is or may be used for drinking water that is projected to have a nitrate concentration between 22.5 and 45 mg/L nitrate as NO_3 (or between 5 and 10 mg/L nitrate + nitrite as N) must be individually sampled. Each of the participating Dischargers' wells that is or may be used for drinking water that has a nitrate concentration between 36 and 45 mg/L nitrate as NO_3 (or between 8 and 10 mg/L nitrate + nitrite as N) must have a repeat sample taken within 12 months and must be sampled annually thereafter unless an alternate sampling schedule based on trending data for the well is approved by the Executive Officer."

The CCGC aims to provide information that fills the gaps in the current understanding of groundwater quality for domestic consumption throughout the region. Nitrate is the primary constituent of concern and the focus of this report.

1.2 Workplan and Approvals

The approved workplan submitted by the CCGC set forth plans for satisfying the objectives in the MRP. The primary objectives of the tasks described in the CCGC workplan are to develop: 1) a process-level understanding of the spatial distribution of nitrate concentrations in domestic supply wells with single connections or a small number of connections, and 2) identify regions for evaluation of agricultural land and water management practices to reduce discharges to groundwater. The CCGC workplan is dated November 1, 2013, and is supplemented by RWQCB approval letters dated July 11 and December 17, 2013.

The CCGC had originally proposed to use contour maps to provide for statistical projections of groundwater quality to avoid the need to monitor all domestic wells for growers participating in CCGC's program. The State Board's review of amended the MRPs as described above such that cooperative groundwater monitoring proposals needed to include at least one of the three approaches for evaluating drinking water in participating grower wells. While the CCGC initiated its cooperative groundwater monitoring program with the approved approach to use a statistically valid projection of groundwater quality at the location of the well, CCGC ultimately also satisfied another of the three approaches, which was to conduct direct sampling of all domestic wells on the CCGC members' lands.

This Report summarizes three Technical Memoranda (TMs) prepared for the northern counties region that attempt to satisfy the objectives of the CCGC workplan and requirements of the MRP in the Salinas Valley, Pajaro Valley, and Gilroy-Hollister Valley.

1.3 RWQCB Comment Letter

In letters dated February 20 and March 20, 2015, the Central Coast RWQCB provided comments applicable to Technical Memoranda (TMs) for the Salinas Valley, Pajaro Valley, and Gilroy-Hollister

Valley Groundwater Basins. The detailed technical comments are summarized in the checklist for this report described in the following section and in **Appendix A**. The RWQCB comment letter also states that the Final Characterization Report shall provide, "… a brief overview of CCGC program areas, methods used, data gaps and limitations, and a summary of the results and conclusions compiled from the individual Technical Memorandums." The letter further states that the Final Characterization Report shall, "…provide a broad overview of nitrate in shallow groundwater for the northern counties and also provide focused information on nitrate impacts to domestic drinking water wells." The RWQCB requested that the report be written in layman's terms and reference that greater technical detail can be found in the TMs.

1.4 Checklist

A checklist was prepared based on review of the Agricultural Order, Northern Counties Workplan, workplan approvals, and RWQCB March 20, 2015 comment letter. The checklist is intended to provide a summary of items to be addressed in the TMs, which are included in the appendices of this Report. Due to the manner in which this study and RWQCB requirements have evolved over time, the checklist places greater emphasis on the most recent direction from the RWQCB in their March 20, 2015 comment letter. The checklist is provided in **Appendix A**.

1.5 CCGC Compliance with Requirements

The CCGC has met the Agricultural Order requirements by sampling all domestic drinking water wells on member parcels and analyzing for nitrates, major cations and anions, and field parameters, with the exception of those members who had already performed monitoring to be in compliance with the Agricultural Order. These sampling results are reported and evaluated in three TMs included as appendices to this Report. The data analyses conducted include mapping of estimated nitrate concentrations, evaluation of nitrate concentrations with depth, assessment of uncertainty and data gaps, and review of factors affecting nitrate concentrations. The overall assessment described in this Report and TMs provides a characterization of the shallow (upper 400 to 420 feet) drinking water aquifer in the Salinas Valley, Pajaro Valley, and Gilroy-Hollister Valley Groundwater Basins.

The checklist provided in **Appendix A** includes references to sections of the Report/TMs that include information relevant to each item listed. It should be noted that some items originally required to be included in the Report and TMs were amended and are no longer required in accordance with the RWQCB letter of March 20, 2015.

1.6 Report Organization

This report brings together all of the work completed to characterize groundwater in response to the WDRs. The individual TMs are included in their entirety as appendices:

- Appendix B – Salinas Valley
- Appendix C – Pajaro Valley
- Appendix D – Gilroy-Hollister Valley

This report provides a broad overview and summary of the TMs for each groundwater basin. More detailed information is provided in each TM included as an appendix to this report.

2 SALINAS VALLEY GROUNDWATER BASIN

The TM prepared for the Salinas Valley Groundwater Basin is provided in **Appendix B**. It provides a detailed description of sampling methodology, water quality data, methodologies used to analyze the data, and results. The following sections of this Report briefly summarize the information and data contained in the TM. The reader is referred to the TM in **Appendix B** for more detailed technical information.

2.1 Basin Description

The Salinas Valley Groundwater Basin contains four primary subbasins (**Figure 1**). The Pressure, East Side, Forebay, and Upper Valley Subbasins are hydraulically connected but are distinguished by their hydrogeologic characteristics. Three important characteristics differentiate the subbasins: the presence of fine-grained (clay and silt) and highly organic soil layers that may restrict groundwater flow and lead to chemically reducing conditions, the capacity of aquifers to supply groundwater to wells, and the source of groundwater recharge. In general, groundwater in the northernmost Pressure and East Side Subbasins is influenced by relatively well-defined fine-grained layers that restrict vertical water movement. These fine-grained layers tend to thin and disappear in the southern subbasins, the Forebay, and Upper Valley.

Groundwater recharge in the Salinas Valley occurs primarily as infiltration from the Salinas River and Arroyo Seco, and deep percolation of irrigation water, except in the Langley area where recharge is primarily from precipitation. Groundwater generally flows from high altitudes towards the drainages, and down valley towards Monterey Bay. Groundwater has historically flowed horizontally northward from the Pressure to the East Side Subbasins due to low groundwater levels in the East Side Subbasin.

2.2 Sampling Results and Estimated Nitrate Concentrations

Results of laboratory analysis of groundwater samples collected from wells on CCGC member landowners and growers (L&Gs) properties and other data collected for the Salinas Valley are summarized below. Other sources of nitrate data for mapping included GeoTracker, U.S. Geological Survey (USGS) National Water Information System, Lawrence Livermore National Laboratory, L&Gs enrolled in the Irrigated Lands Regulatory Program, data collected by the USGS as part of the Regional Water Quality Control Board Central Coast Ambient Monitoring Program - Groundwater Assessment and Protection (CCAMP-GAP) Domestic Well Project for the Salinas and Pajaro Valleys, and data provided by the Monterey County Water Resources Agency. It was assumed that water quality data collected from 2000 to 2014 are most representative of current conditions in the area. The overall approach was to process and evaluate available analytical data for inclusion in nitrate mapping by subbasin, and then integrate the data to create water quality maps for the entire Salinas Valley.

Water samples were collected and field parameters measured from 221 domestic wells on CCGC properties. Field parameters (pH, water temperature, specific conductance, oxidation-reduction potential (ORP) and dissolved oxygen (DO)) were measured at each well. Concentrations of nitrate and major ions (calcium, magnesium, potassium, sodium, chloride, sulfate and bicarbonate) were determined in all samples. An assessment of precision, accuracy, and completeness has been performed on well monitoring data collected between October 2013 and August 2014 and all data are considered useable (Appendix E). The Exceedance Notification Report is provided in Appendix F.

Geostatistics (kriging) was used to create a map of estimated groundwater nitrate concentrations in the Salinas Valley (**Figure 2**). Kriging is an interpolation technique based on surrounding measured values used to derive estimated values for unsampled locations. Using well completion reports gathered from DWR from throughout the Salinas Valley and hydrogeologic information, an attempt was made to restrict the data for mapping to wells completed within 400 feet of land surface to best characterize groundwater quality in the shallow aquifer used for domestic supply. Results from 758 wells were used to characterize the distribution of groundwater nitrate (as NO_3) concentrations for Salinas Valley. For wells with multiple sample dates from 2000 to 2014, the maximum nitrate concentrations were used for each well.

The mean nitrate concentration in groundwater used for domestic supply for the entire Salinas Valley Groundwater Basin was 68 mg/L as NO_3 and the median was 26 mg/L as NO_3. Values ranged from less than the detection limit of 0.09 mg/L to 614 mg/L. A total of 309 wells (41 %) had maximum concentrations over the MCL of 45 mg/L throughout the Salinas Valley. In the five subbasins, the mean nitrate concentration ranged from a low of 19 mg/L (median of 8 mg/L) in the Langley Subbasin to 105 mg/L (median of 50 mg/L) in the East Side Subbasin. The percentage of wells with maximum nitrate concentrations exceeding the MCL ranged from 13% in the Langley Subbasin to 58% in the Forebay Subbasin. Where well depths were available, nitrate concentrations were generally higher in wells completed within 400 feet of land surface, although there was some variation in nitrate concentrations with depth among the subbasins.

Mapped groundwater nitrate concentrations in the Pressure Subbasin are generally less than one-half of the MCL due to widespread distribution of a large number of low nitrate concentrations. Exceptions include areas of concentrations over the MCL northwest and south of Chualar. In the Langley Subbasin, mapped groundwater nitrate concentrations are generally less than one-half of the MCL. There are large areas in the East Side Subbasin where groundwater nitrate concentrations are mapped as greater than the MCL. These include areas north and east of Salinas, areas north and east of Chualar, and areas around Gonzales where concentrations were measured as high as several hundred mg/L. Forty-four percent (44%) of the area within the Forebay Subbasin is mapped as having nitrate concentrations in groundwater that are greater than the MCL. In the Upper Valley Subbasin, there are a relatively small number of sample points. The spatial distribution of high nitrate values results in clustered areas where concentrations were over the MCL near King City and along the eastern boundary both north and south of San Ardo.

2.3 Uncertainty and Factors affecting Nitrate Concentrations

Uncertainty was addressed using indicator kriging to show the estimated probability of exceeding the nitrate MCL (45 mg/L). **Figure 3** shows several areas throughout the Salinas Valley with a probability of greater than 50% for exceeding the nitrate MCL in shallow groundwater, including a large portion of the East Side Subbasin from northeast of Salinas to Gonzales, areas in the Forebay Subbasin from southeast of Gonzales to Soledad and around Greenfield, and areas in the Upper Valley Subbasin around King City and San Ardo. The majority of the areas within the Pressure Subbasin and Langley Subbasin have probabilities of less than 50% for exceeding the nitrate MCL (**Figure 3**).

Groundwater nitrate concentrations in the Salinas Valley subbasins are affected by different hydrogeologic and geochemical processes. Higher nitrate concentrations in groundwater are generally associated with higher sand content in near-surface soils in the Pressure Subbasin. However, the Pressure Subbasin may benefit from more extensive and lower permeability shallow aquitard (clay) layers (above screen intervals of typical domestic wells) that retard downward movement of nitrate and result in lower nitrate concentrations in shallow groundwater tapped by domestic wells. In other Salinas Valley subbasins, the relationship of nitrate concentrations to hydrogeology and soils is more variable.

Lower nitrate concentrations in CCGC samples were generally associated with chemically reducing conditions with oxidation-reduction potential values less than 75 mV. An ORP value of 75 mV indicates the theoretical redox potential below which nitrate is denitrified. The majority of the samples with oxidation-reduction potential values below 75 mV were collected in wells in the Pressure and Forebay Subbasins.

Major ion data (calcium, magnesium, sodium, potassium, sulfate, chloride, bicarbonate) were summarized on Piper diagrams showing general groundwater geochemistry. Points representing groundwater samples collected in the four subbasins indicate there may be a general geochemical shift from calcium-magnesium/chloride-sulfate waters to sodium/potassium bicarbonate waters.

Based on review of nitrate data and various factors as described above, there are likely several factors that influence nitrate concentrations in any given area of Salinas Valley.

3 PAJARO VALLEY GROUNDWATER BASIN

The TM prepared for the Pajaro Valley Groundwater Basin is provided in **Appendix C**. It provides a detailed description of sampling methodology, water quality data, methodologies used to analyze data, and results. The following sections of the report briefly summarize the information and data contained in the TM. The reader is referred to the TM in **Appendix C** for more detailed technical information.

3.1 Basin Description

The Pajaro Valley Groundwater Basin **(Figure 4)** is bordered on the east by the San Andreas Fault and consists of four water bearing formations. The Holocene and late Pleistocene alluvial deposits (which include eolian deposits) overlie the Aromas Sand (also referred to as the Aromas) of Pleistocene age that in turn overlie the Pliocene Purisima Formation. The upper aquifer is composed of discontinuous water producing zones within the younger eolian deposits of the Aromas Sands through the Quaternary dune sands. Basal gravel lying at the Pleistocene terrace deposits-Aromas Sands contact is a main source of water for shallow wells completed at 100 to 200 feet below sea level and is denoted as the middle aquifer. The main water producing aquifer (middle aquifer) bottom is approximately 300 to 500 feet below land surface. A confining clay layer reportedly separates the middle aquifer from the lower aquifer.

Groundwater recharge in the Pajaro Valley occurs primarily as infiltration of rainfall and irrigation water, and seepage from the Pajaro River. Seepage from smaller tributaries such as Corralitos Creek, seawater intrusion, and inter-basin underflow also contribute to groundwater recharge. Groundwater generally flows from higher elevations in the north and south towards the Pajaro River and to the Pacific Ocean.

3.2 Sampling Results and Estimated Nitrate Concentrations

Results of laboratory analysis of groundwater samples collected from wells on CCGC member landowners and growers (L&Gs) properties and other data collected for the Pajaro Valley are summarized below. Other sources of nitrate data for mapping included GeoTracker, USGS National Water Information System, L&Gs enrolled in the Irrigated Lands Regulatory Program, data collected by the USGS as part of the Regional Water Quality Control Board CCAMP-GAP Domestic Well Project for the Salinas and Pajaro Valleys, and data provided by the Pajaro Valley Water Management Agency. It was assumed that water quality data collected from 2000 to 2014 are most representative of current conditions for the area. The overall approach was to process and evaluate available analytical data for inclusion in nitrate mapping and create water quality maps for the Pajaro Valley.

Water samples were collected and field parameters measured from 73 domestic wells on CCGC properties. Field parameters (pH, water temperature, specific conductance, ORP and DO) were measured at each well. Concentrations of nitrate and major ions (calcium, magnesium, potassium, sodium, chloride, sulfate and bicarbonate) were determined in all samples. An assessment of precision, accuracy, and completeness has been performed on well monitoring data collected between October 2013 and August 2014 and all data are considered useable (Appendix E). The Exceedance Notification Report is provided in Appendix F.

Geostatistics (kriging) was used to create a map of estimated groundwater nitrate concentrations in the Pajaro Valley (Figure 5). Using well completion reports gathered from DWR from throughout the Pajaro Valley and hydrogeologic information, an attempt was made to restrict the data for mapping to wells completed within 400 feet of the land surface to best characterize groundwater quality in the shallow aquifer and for domestic supply. Results from 439 wells were used to characterize the distribution of groundwater nitrate (as NO_3) concentrations in Pajaro Valley. For wells with multiple sample dates from 2000 to 2014, the maximum nitrate concentrations were used for each well.

The mean nitrate concentration in groundwater used for domestic supply for the entire Pajaro Valley was 33.3 mg/L as NO_3 and the median was 5.1 mg/L as NO_3. Values ranged from less than the detection limit of 0.03 mg/L to 346.5 mg/L. A total of 94 wells (21%) had maximum nitrate concentrations over the MCL of 45 mg/L. Where well depths were available, nitrate concentrations were generally higher in wells completed within 400 feet of the land surface.

Mapped groundwater nitrate concentrations are generally less than one-half of the MCL due to widespread distribution of a large number of low nitrate concentrations; 9.7% of the area within the Pajaro Valley is mapped as having nitrate concentrations in groundwater greater than the MCL. The spatial distribution of high nitrate values indicates clustered areas where concentrations were over the MCL west, north, and east of Watsonville, and between Moss Landing and Aromas.

3.3 Uncertainty and Factors affecting Nitrate Concentrations

Uncertainty was addressed using indicator kriging to show the estimated probability of exceeding the nitrate MCL (**Figure 6**). In areas northwest of Aromas, northeast of Watsonville, west of Watsonville near the coast, and north of Moss Landing, the probability of exceeding the MCL is greater than 60%. In most of the remainder of the Valley, the probability is generally less than 40%.

Groundwater nitrate concentrations in the Pajaro Valley are affected by different hydrogeologic and geochemical processes. Low groundwater nitrate concentrations associated with the locations of tile drainage systems along the Pajaro River are likely the result of removal of high nitrate groundwater. Outside the drainage area, elevated nitrate concentrations are generally associated with sandy soils and moderate to high groundwater recharge rates. However, areas of higher recharge are also associated with areas of low nitrate concentrations (e.g., along the Pajaro River), and areas of soils with high percent sand are sometimes associated with low nitrate concentrations.

Lower nitrate concentrations in CCGC samples were generally associated with chemically reducing conditions with oxidation-reduction potential values less than 75 mV. An ORP value of 75 mV indicates the theoretical redox potential below which nitrate is denitrified. The majority of the samples with oxidation-reduction potential values below 75 mV were associated with relatively finer-grained soils in the northeastern part of the basin southeast of Corralitos and near the Pajaro River and Elkhorn Slough. Reducing conditions in riparian sediments likely result in denitrification.

Major ion data (calcium, magnesium, sodium, potassium, sulfate, chloride, bicarbonate) were summarized on Piper diagrams showing general groundwater geochemistry. Points representing groundwater samples collected in Pajaro Valley indicate a range from calcium-magnesium/chloride-sulfate waters to sodium/potassium bicarbonate waters.

Based on review of nitrate data and various factors as described above, there are likely several factors that influence nitrate concentrations in any given area of Pajaro Valley.

4 GILROY-HOLLISTER VALLEY GROUNDWATER BASIN

The TM prepared for the Gilroy-Hollister Valley Groundwater Basin is provided in **Appendix D**. It provides a detailed description of sampling methodology, water quality data, methodologies used for data analyses, and results. The following sections of the report briefly summarize the information and data contained in the TM. The reader is referred to the TM in **Appendix D** for more detailed technical information.

4.1 Basin Description

The Gilroy-Hollister Groundwater Basin contains four primary subareas or subbasins (**Figure 7**). The Llagas, Bolsa, Hollister, and San Juan Bautista Subbasins are separated by rivers or faults. The boundary between the Llagas and Bolsa Subbasins occurs at the Pajaro River, while fault barrier boundaries define the Hollister and San Juan Bautista Subbasins. Groundwater recharge in the Gilroy-Hollister Valley (GHV) occurs primarily as infiltration from rivers and streams, infiltration of rainfall and irrigation water, and subsurface flow from adjacent basins.

4.2 Sampling Results and Estimated Nitrate Concentrations

Results of laboratory analysis of groundwater samples collected from wells on CCGC member landowners and growers (L&Gs) properties and other data collected for the Gilroy-Hollister Valley are summarized below. Other sources of nitrate data for mapping included GAMA, Lawrence Livermore National Laboratory, Santa Clara Valley Water District (SCVWD), San Benito County Water District (SBCWD), USGS, the Central Coast Regional Water Quality Control Board, samples submitted to SWRCB associated with the Olin Site, and samples collected under the CCGC groundwater program. It was assumed that water quality data collected from 2000 to 2014 are most representative of current conditions for the area. The overall approach was to process and evaluate available analytical data for inclusion in nitrate mapping by subbasin, and then integrate the data to create water quality maps for Llagas Subbasin and for the other three subbasins in the Gilroy-Hollister Valley.

Water samples were collected and field parameters measured from 145 wells on CCGC properties. Field parameters (pH, water temperature, specific conductance, ORP and DO) were measured at each well. Concentrations of nitrate and major ions (calcium, magnesium, potassium, sodium, chloride, sulfate and bicarbonate) were determined in all samples. An assessment of precision, accuracy, and completeness has been performed on well monitoring data collected between October 2013 and August 2014 and all data are considered useable (Appendix E). The Exceedance Notification Report is provided in Appendix F.

Geostatistics (kriging) was used to create a map of estimated groundwater nitrate concentrations in the Gilroy-Hollister Valley (**Figure 8**). Using well completion reports gathered from DWR from throughout the Gilroy-Hollister Valley and hydrogeologic information, an attempt was made to restrict the data for mapping to wells completed within 420 feet of land surface to best characterize groundwater quality in the shallow aquifer used for domestic supply. Results from 1,105 wells were used to characterize the distribution of groundwater nitrate concentrations in Gilroy-Hollister Valley. For wells with multiple sample dates from 2000 to 2014, the maximum nitrate concentrations were used for each well.

Based on the processing and analysis of over 3,000 DWR well completion reports, the large majority of domestic wells (95%) in the GHV Basin are screened within 420 feet of land surface. The mean concentration was 36 mg/L, and the median was 30 mg/L. Concentrations ranged from less than the detection limit of 0.05 mg/L to 513 mg/L. Two hundred and eighty-five wells (26%) had maximum concentrations over the MCL of 45 mg/L. One-hundred and forty-five wells were sampled on CCGC parcels. Within the four subbasins, the percentage of wells exceeding the MCL varied from 16% in the San Juan Bautista Subbasin to 32% in the Bolsa Subbasin. Within the part of the GHV Basin where nitrate concentrations were estimated, 15% of the area was mapped as having nitrate concentrations over the MCL.

Groundwater nitrate concentrations did not show distinct trends with depth. In the Llagas Subbasin, median nitrate concentrations were between 20 and 40 mg/L for depths ranging from 50 to 500 feet. In the Hollister Subbasin, median nitrate concentrations were less than 25 mg/L for all depth intervals. In the San Juan Bautista Subbasin, median nitrate concentrations were less than 15 mg/L for all depth intervals.

Mapped groundwater nitrate concentrations in the Llagas Subbasin are generally less than one-half of the MCL near the basin boundary. Nitrate concentrations are generally greater than the MCL along the valley axis. Twenty-seven percent of the Llagas Subbasin is mapped as having concentrations greater than the MCL. In the Hollister Subbasin, mapped groundwater nitrate concentrations are generally less than one-half of the MCL. Exceptions include the southwest corner of the subbasin near Hollister. Five percent of the Hollister Subbasin is mapped as having concentrations greater than the MCL. In the San Juan Bautista Subbasin, mapped groundwater nitrate concentrations were limited to the northern half of the subbasin where the most nitrate data are available. Eleven percent of this area is mapped as over the MCL. Nine percent of the Bolsa Subbasin is mapped as having concentrations greater than the MCL.

4.3 Uncertainty and Factors affecting Nitrate Concentrations

Uncertainty was addressed using indicator kriging to show the estimated probability of exceeding the nitrate MCL. The map shows several areas throughout the Gilroy-Hollister Valley with a probability of greater than 50% for exceeding the nitrate MCL in shallow groundwater, including the northeastern and southeastern portions of the Llagas Subbasin, the southern portion of Bolsa Subbasin, the northern portion of San Juan Bautista Subbasin, and a few small areas of Hollister Subbasin (**Figure 9**). The majority of the areas within the Bolsa, San Juan Bautista, and Hollister Subbasins have probabilities of less than 50% for exceeding the nitrate MCL.

Groundwater nitrate concentrations in the Gilroy-Hollister Valley subbasins are affected by different hydrogeologic and geochemical processes. Major-ion data (calcium, magnesium, sodium, potassium, sulfate, chloride, bicarbonate) were summarized using Piper diagrams. Points representing groundwater samples collected in the four subbasins indicate water types range from calcium-magnesium/chloride-sulfate waters to sodium/potassium bicarbonate waters.

Lower nitrate concentrations in CCGC samples were generally associated with chemically reducing conditions with ORP values less than 75 mV. The line delineating an ORP value of 75 mV indicates the theoretical redox potential below which nitrate is denitrified. The majority of the samples with oxidation-reduction potential values below 75 mV were collected in wells in the Hollister and San Juan Bautista Subbasins.

Higher nitrate concentrations are sometimes associated with higher sand content in near-surface soils. However, there is no discernable relationship between nitrate concentrations and soil texture in the Gilroy-Hollister Groundwater Basin. High nitrate concentrations occur across a range of soil textures.

Based on review of nitrate data and various factors as described above, there are likely several factors that influence nitrate concentrations in any given area in the Gilroy-Hollister Valley.

5 DATA GAPS AND LIMITATIONS

5.1 Data Gaps

This study has utilized sampling results from all domestic wells on CCGC member properties and other available nitrate data to obtain the most widespread coverage possible for each groundwater basin. However, there are areas in each groundwater basin with a limited number of wells due to a combination of a lack of CCGC member properties and no other data available in those areas. The results of this study could be improved if existing wells that meet study criteria (i.e., considered representative of shallow groundwater tapped by domestic wells) could be found and sampled in these areas. The primary areas lacking nitrate data in this report include: the Upper Valley Subbasin and smaller areas in the Pressure and East Side Subbasins in Salinas Valley; the northern portion of the basin between Aptos and Corralitos and smaller areas in the extreme southeastern and southwestern corners in Pajaro Valley; the northern and western portions of the Bolsa Subbasin, the northwestern portion of the Hollister Subbasin, the southern portion of the San Juan Bautista Subbasin, and smaller areas along the fringes of each subbasin in Gilroy-Hollister Valley.

5.2 Limitations

There are two key areas of uncertainty which place limitations on the conclusions: 1) well depth information, and 2) GeoTracker data obfuscation and clustering. Due to lack of specific well construction information for many of the wells used in the analysis, the results of processing several thousand DWR well completion logs were used to make statements about well depths. While the results of the analysis indicate that the large majority of domestic wells are screened within 400 to 420 feet of land surface, there is a relatively small amount of uncertainty about the water quality influence of data from deeper wells that may be included in the mapping. Since nitrate concentrations tend to decrease with depth in some areas, there could be inclusion of lower nitrate concentration data not necessarily associated with the shallow drinking water supply. However, for GeoTracker data the maximum values were used for wells with multiple values and for multiple wells mapped at the same location. While this also introduces uncertainty, maximum values tend to result in conservative estimates of where nitrate concentrations are high.

High spatial variability in nitrate concentrations and obfuscation and clustering in GeoTracker create uncertainty in mapping nitrate distribution. The effects of obfuscation and clustering are very difficult to fully quantify. The primary effect is diminished spatial resolution about where drinking water wells are at risk for high nitrate concentrations. However, it should be noted that CCGC wells are accurately represented in development of nitrate contours for this study, even though the CCGC well locations shown on the maps in this report have been obfuscated.

6 CONCLUSIONS

The overall conclusions from this study for each of the groundwater basins are described below.

6.1 Salinas Valley

- Analysis of the well completion reports indicated that the large majority of domestic wells in the study area are screened within 400 feet of land surface.
- A small portion of the well completion reports provided by DWR were designated as Public Supply wells. These wells are generally completed at slightly deeper depths than the domestic wells. However, Public Supply well depths varied significantly by groundwater basin and subbasin.
- The coincidence of locations of wells sampled and locations of available well completion reports demonstrate that the CCGC sampling and inclusion of sampling results from other agencies generally adequately represent the locations where domestic wells have been installed.
- For 758 wells with nitrate concentrations in the Salinas Valley, 41% had maximum concentrations over the MCL.
- Within the Salinas Valley, 34% of the area was mapped as having nitrate concentrations over the MCL.
- For the domestic wells sampled on CCGC properties in Salinas Valley, 55% had concentrations exceeding the MCL. All available domestic wells on CCGC properties were sampled.
- Maps depicting estimated nitrate concentrations generally indicate concentrations below the MCL in the Pressure and Langley Subbasins. Concentrations above the MCL prevail throughout most of the East Side Subbasin. The Forebay and Upper Valley Subbasins each have significant areas with nitrate concentrations both above and below the MCL.
- Uncertainty was addressed using indicator kriging to develop a map of the estimated probability of exceeding the nitrate MCL throughout Salinas Valley. The results generally indicate the majority of the areas within the Pressure and Langley Subbasins have a probability of less than 50% for nitrate concentrations exceeding the nitrate MCL, most of the area in the East Side Subbasin has a greater than 50% probability of exceeding the nitrate MCL, areas around Soledad and Greenfield in the Forebay Subbasin have a greater than 50% probability of exceeding the nitrate MCL, and areas around King City and San Ardo in the Upper Valley Subbasin have greater than 50% probability of exceeding the nitrate MCL.

6.2 Pajaro Valley

- For 439 wells used in analysis of nitrate concentrations in the Pajaro Valley, 21% had concentrations over the MCL.
- Mapping of estimated nitrate concentrations resulted in an estimated 10% of the area in the Pajaro Valley where groundwater nitrate concentrations are over the MCL.
- For the domestic wells sampled on CCGC properties in the Pajaro Valley, 34% had concentrations exceeding the MCL. All available domestic wells on CCGC properties were sampled.
- The map depicting estimated nitrate concentrations generally indicates concentrations below the MCL for most of the Pajaro Valley. The areas above the MCL included locations between Moss Landing and Aromas, and areas west, north, and east of Watsonville.
- Uncertainty was addressed using indicator kriging to develop a map of the estimated probability of exceeding the nitrate MCL throughout Pajaro Valley. The results generally indicate less than 40% probability of exceeding the nitrate MCL throughout most of Pajaro Valley; however, some coastal areas and some areas east and south of Watsonville have greater than 60% probability of exceeding the nitrate MCL.

6.3 Gilroy-Hollister Valley

- For 1,105 wells used in analysis of nitrate concentrations in the Gilroy-Hollister Valley, 26% had average concentrations over the MCL of 45 mg/L.
- Within the part of the Gilroy-Hollister Valley where nitrate concentrations were estimated, 15% of the area was mapped as having nitrate concentrations over the MCL.
- Mapped groundwater nitrate concentrations in the Llagas Subbasin are generally less than one-half of the MCL near the basin boundary. Nitrate concentrations are generally greater than the MCL along the valley axis. Twenty-seven percent of the Llagas Subbasin is mapped as having concentrations greater than the MCL. In the Hollister Subbasin, mapped groundwater nitrate concentrations are generally less than one-half of the MCL. Exceptions include the southwest corner of the area, near Hollister. Five percent of the Hollister Subbasin is mapped as having concentrations greater than the MCL.
- In the San Juan Bautista Subbasin, mapped groundwater nitrate concentrations were limited to the northern half of the Subbasin where the most nitrate data are available. Eleven percent of this area is mapped as over the MCL. Nine percent of the Bolsa Subbasin is mapped as having concentrations greater than the MCL.
- Uncertainty was addressed using indicator kriging to develop a map of the estimated probability of exceeding the nitrate MCL throughout Gilroy-Hollister Valley. The results generally indicate that the central part of the Llagas Subbasin and the area spanning from western San Juan Bautista Subbasin to the City of Hollister have a greater than 60% probability of exceeding the MCL (45 mg/L). The estimated probability for the rest of the GHV Basin is generally less than 40%.

6.4 Summary

The CCGC cooperative program was designed to collect the data, synthesize the data, and respond to the requirement to characterize the groundwater quality of the uppermost aquifer, and identify and evaluate groundwater used for domestic drinking water purposes. The CCGC's program has emphasized the characterization of nitrate in groundwater by evaluating the spatial distribution of nitrate concentrations in the Salinas, Pajaro, and Gilroy-Hollister Valleys and providing statistically-based estimates of where nitrate concentrations are likely to be above the nitrate MCL.

The State Board's revisions to the MRP emphasized drinking water evaluation is a very high priority; correspondingly, the cooperative groundwater monitoring proposals must, at a minimum, include one or more of the following approaches for each of the participating Dischargers' wells that is or may be used for drinking water purposes:

(1) direct sampling;

(2) submission of existing data for the well if it has been sampled and analyzed for nitrate using U.S. EPA approved methods at least twice within the last five years; or

(3) a statistically valid projection of groundwater quality at the location of the well.

While the CCGC initiated its cooperative groundwater monitoring program with the approved approach to use a statistically valid projection of groundwater quality at the location of the well, CCGC ultimately also satisfied another of the three approaches which was to conduct direct sampling of all domestic wells on the CCGC members' lands. The CCGC has provided information that complies with the requirements of the Agricultural Order to characterize the groundwater quality of the uppermost aquifer and fills the gaps in the current understanding of groundwater quality for domestic consumption throughout the northern counties region.

FIGURES

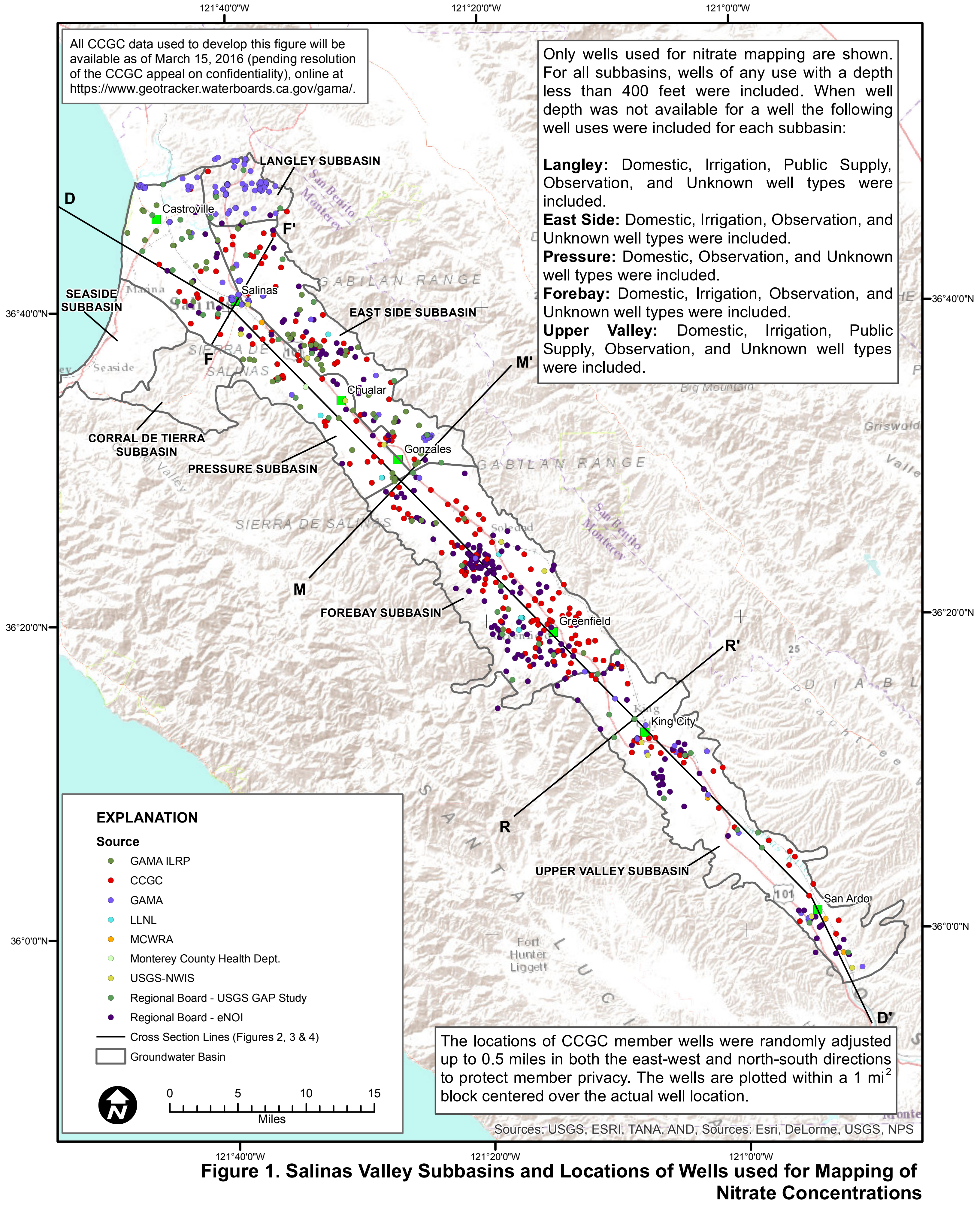


Figure 1. Salinas Valley Subbasins and Locations of Wells used for Mapping of Nitrate Concentrations

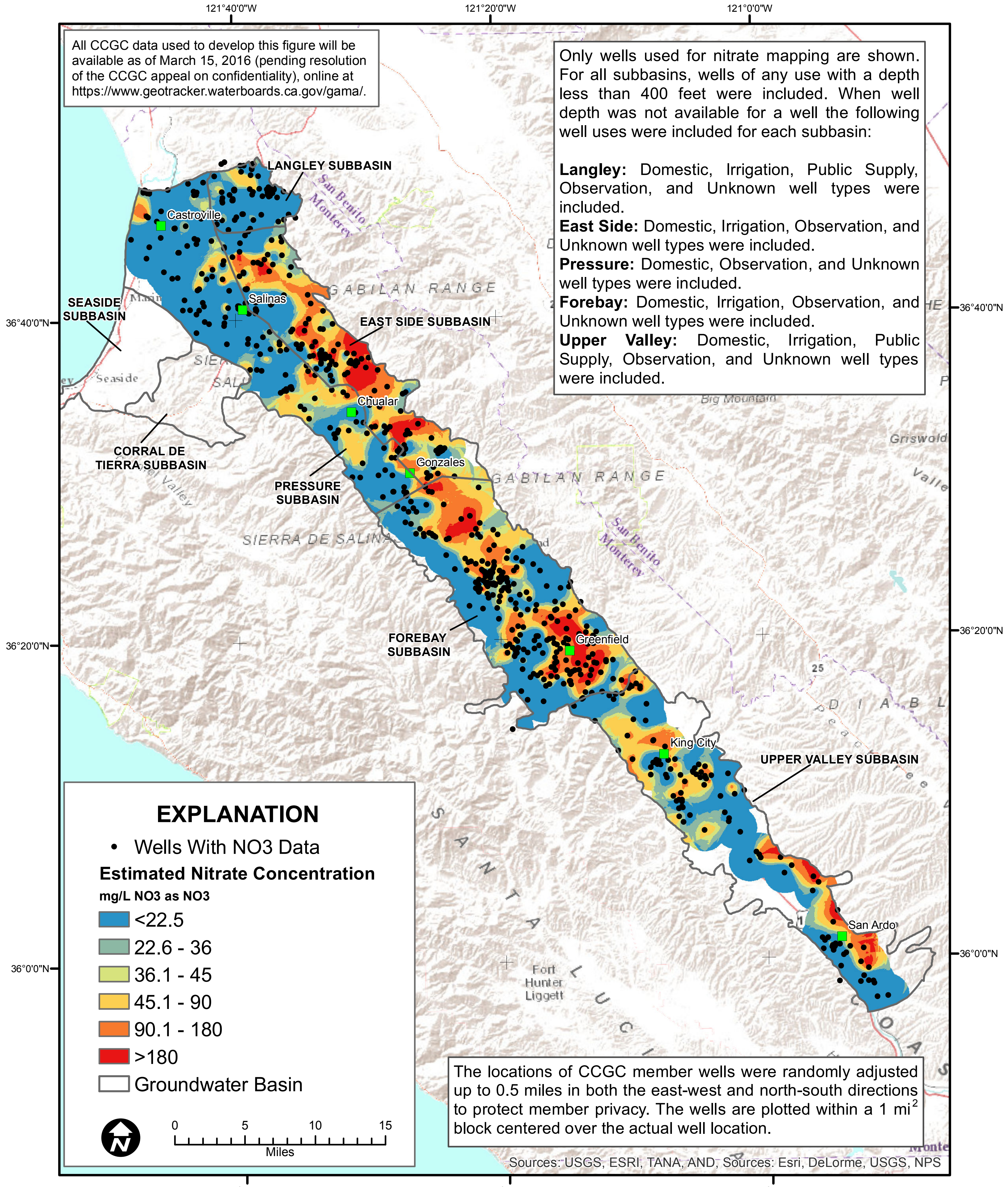


Figure 2. Kriged Nitrate Concentrations in Salinas Valley

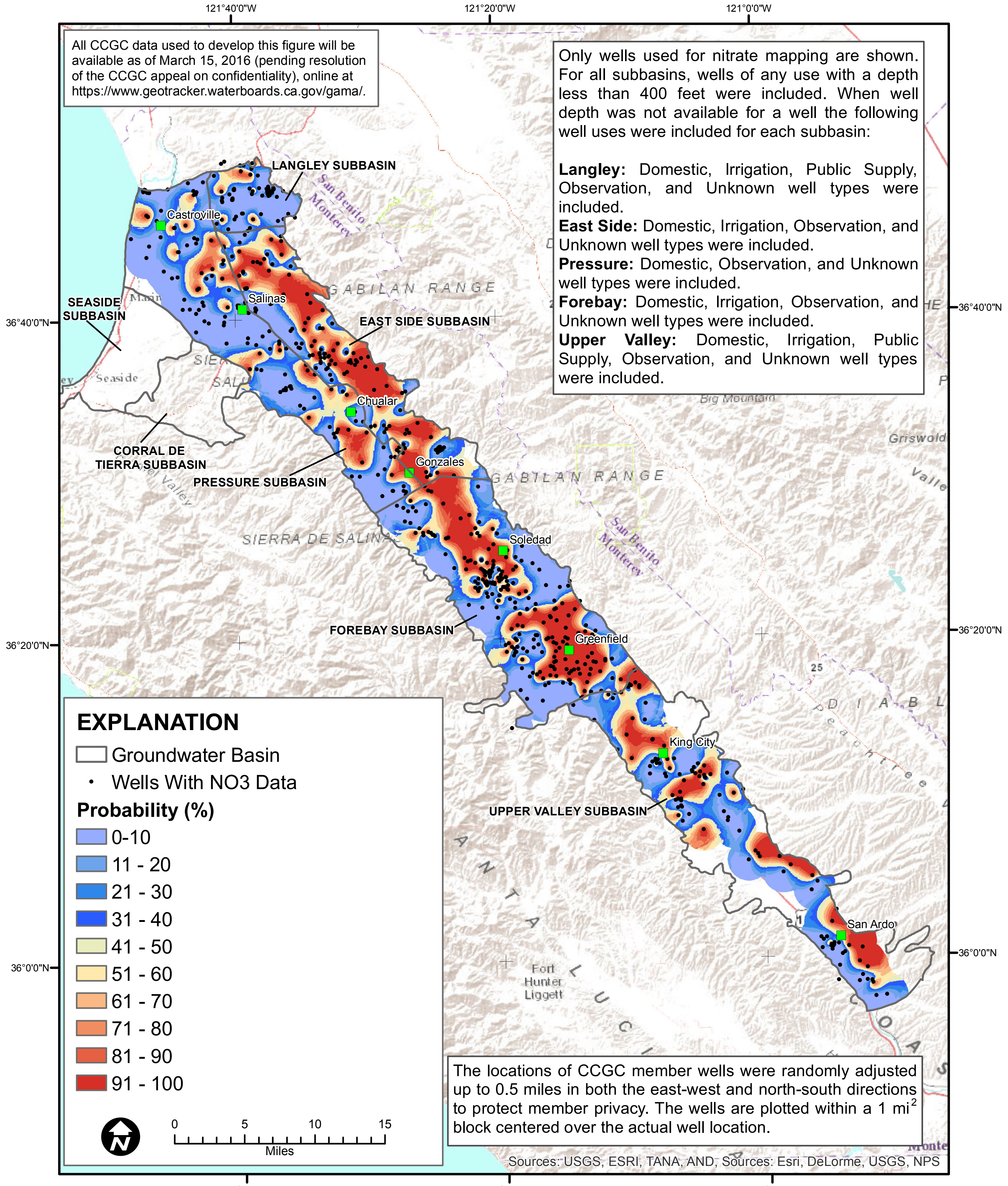


Figure 3. Distribution of Estimated Probability of Exceeding Nitrate (as NO3) Concentrations of 45 mg/L as NO3 in Groundwater in Salinas Valley

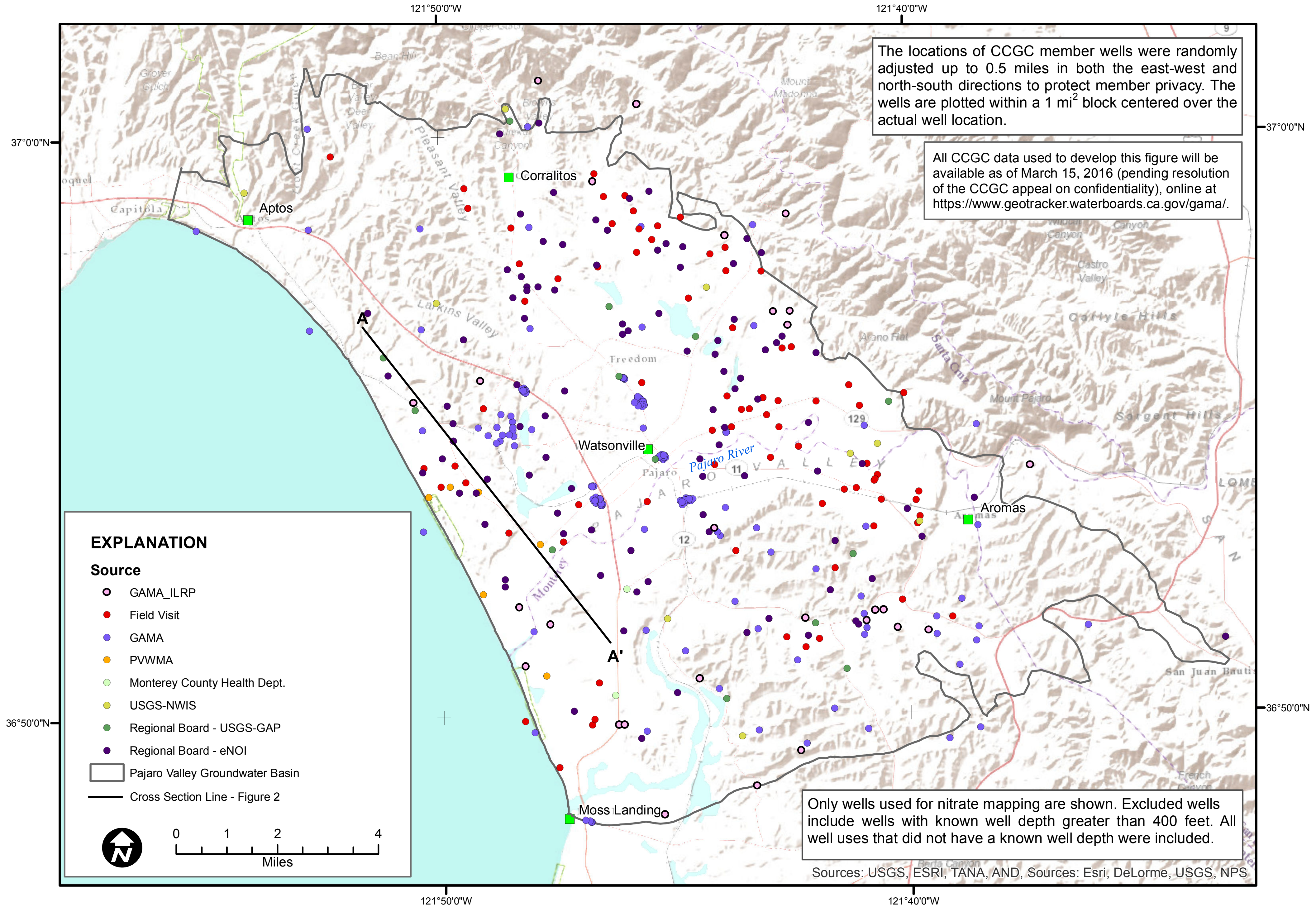


Figure 4. Pajaro Valley and Locations of Wells Used for Mapping of Nitrate Concentrations

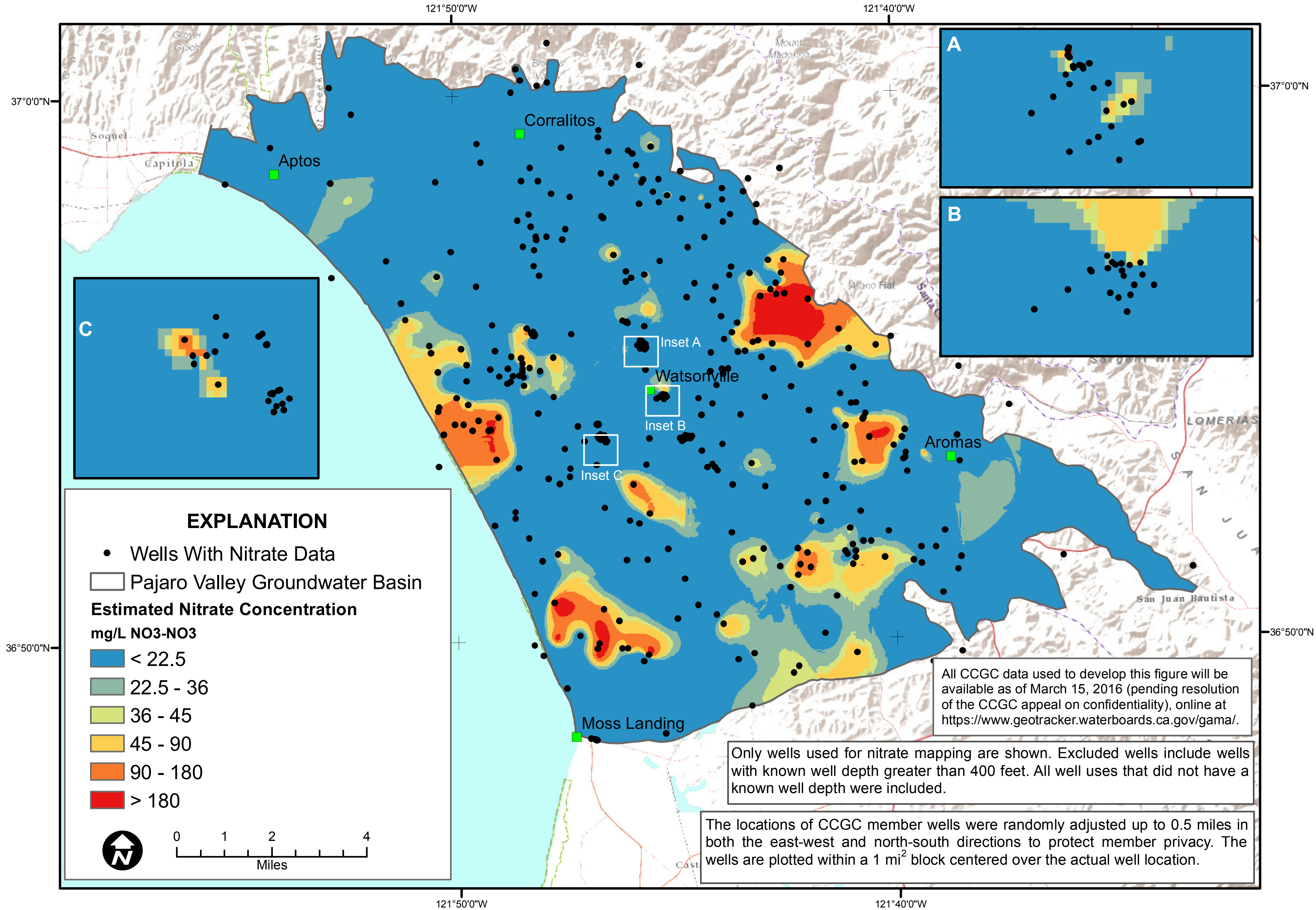


Figure 5. Kriged Nitrate Concentrations in Pajaro Valley

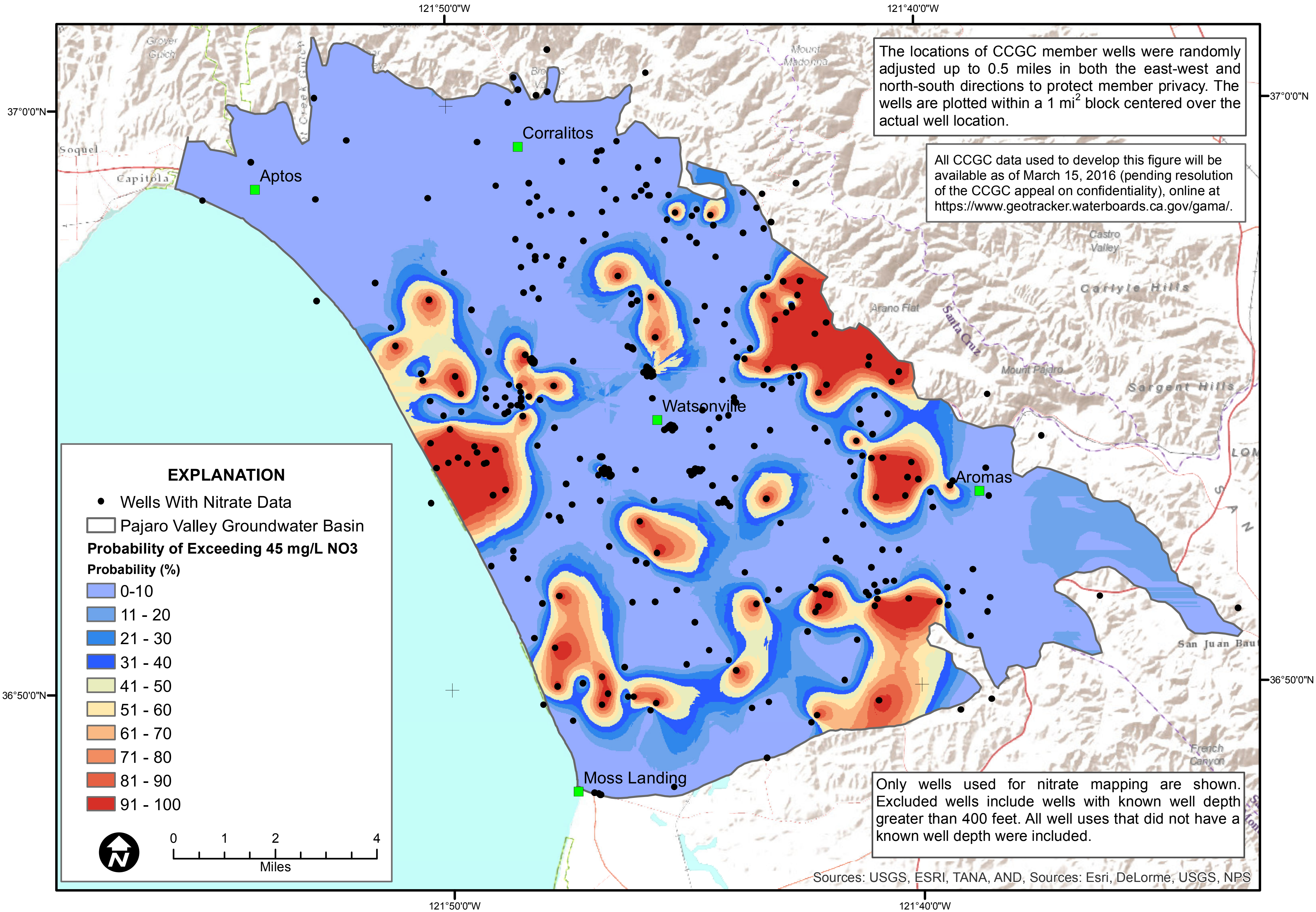


Figure 6. Distribution of Estimated Probability of Exceeding Nitrate as (NO3) Concentrations of 45 mg/L in Groundwater in Pajaro Valley

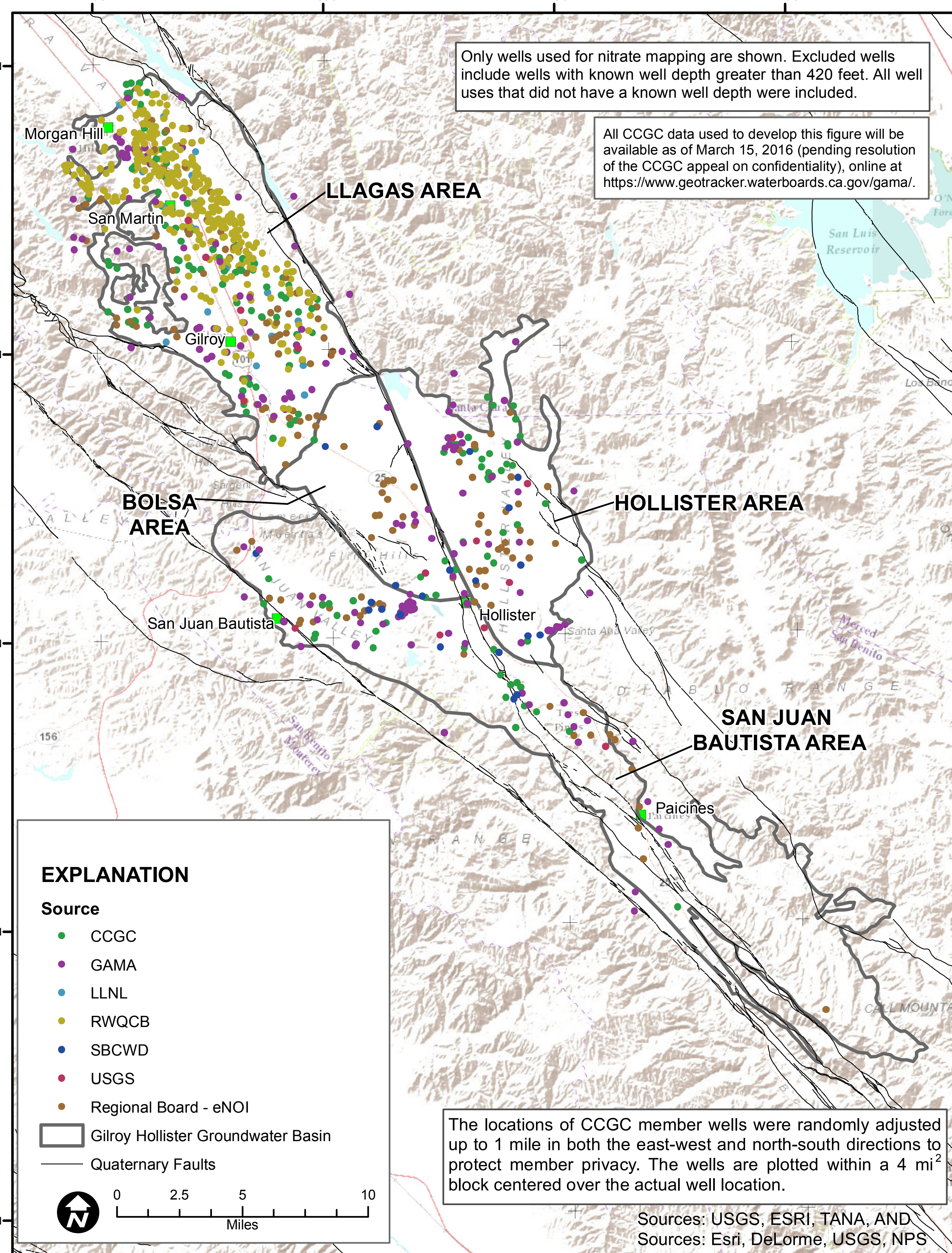


Figure 7. Gilroy-Holister Valley Subbasins and Locations of Wells Used for Mapping of Nitrate Concentrations

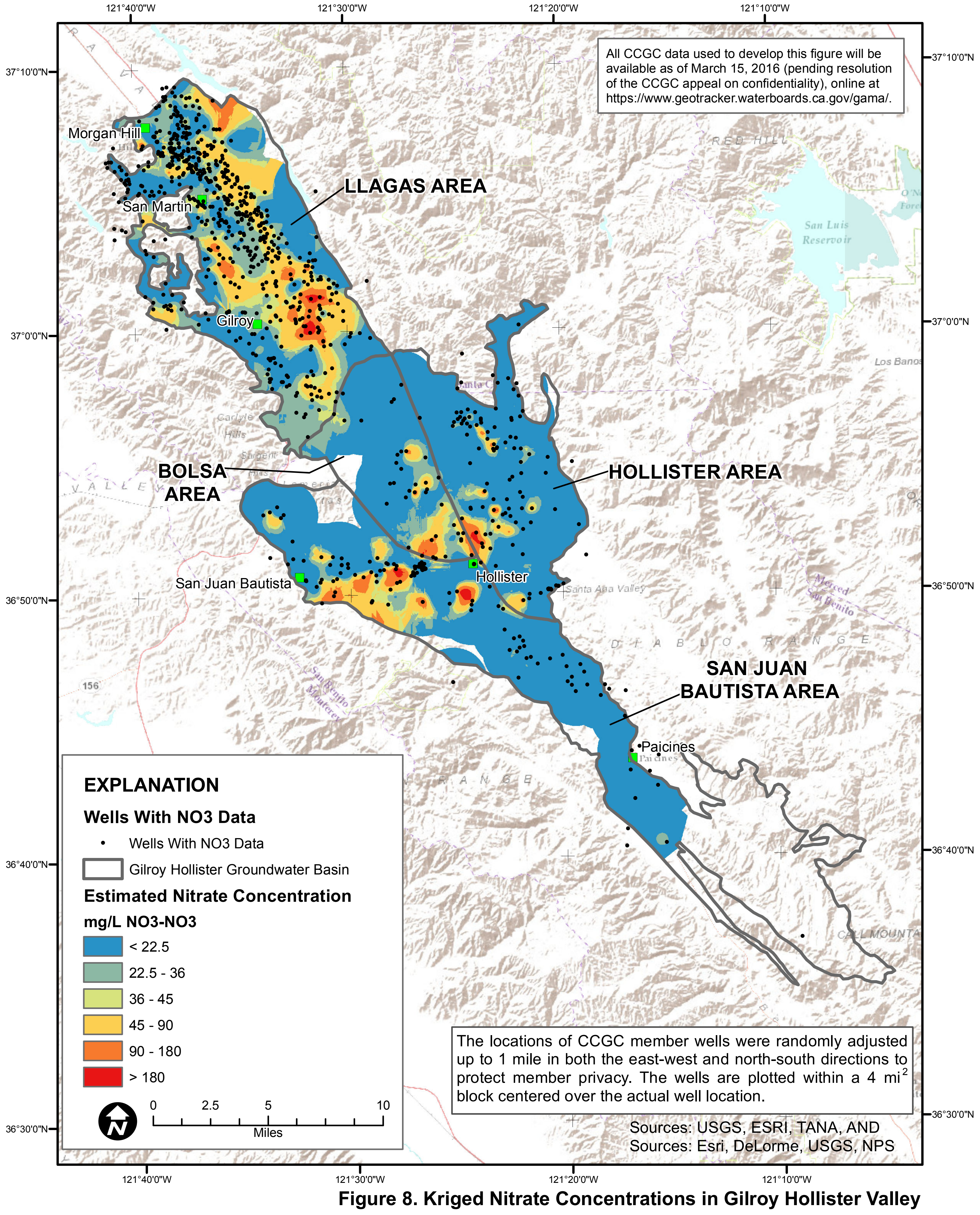


Figure 8. Kriged Nitrate Concentrations in Gilroy Hollister Valley

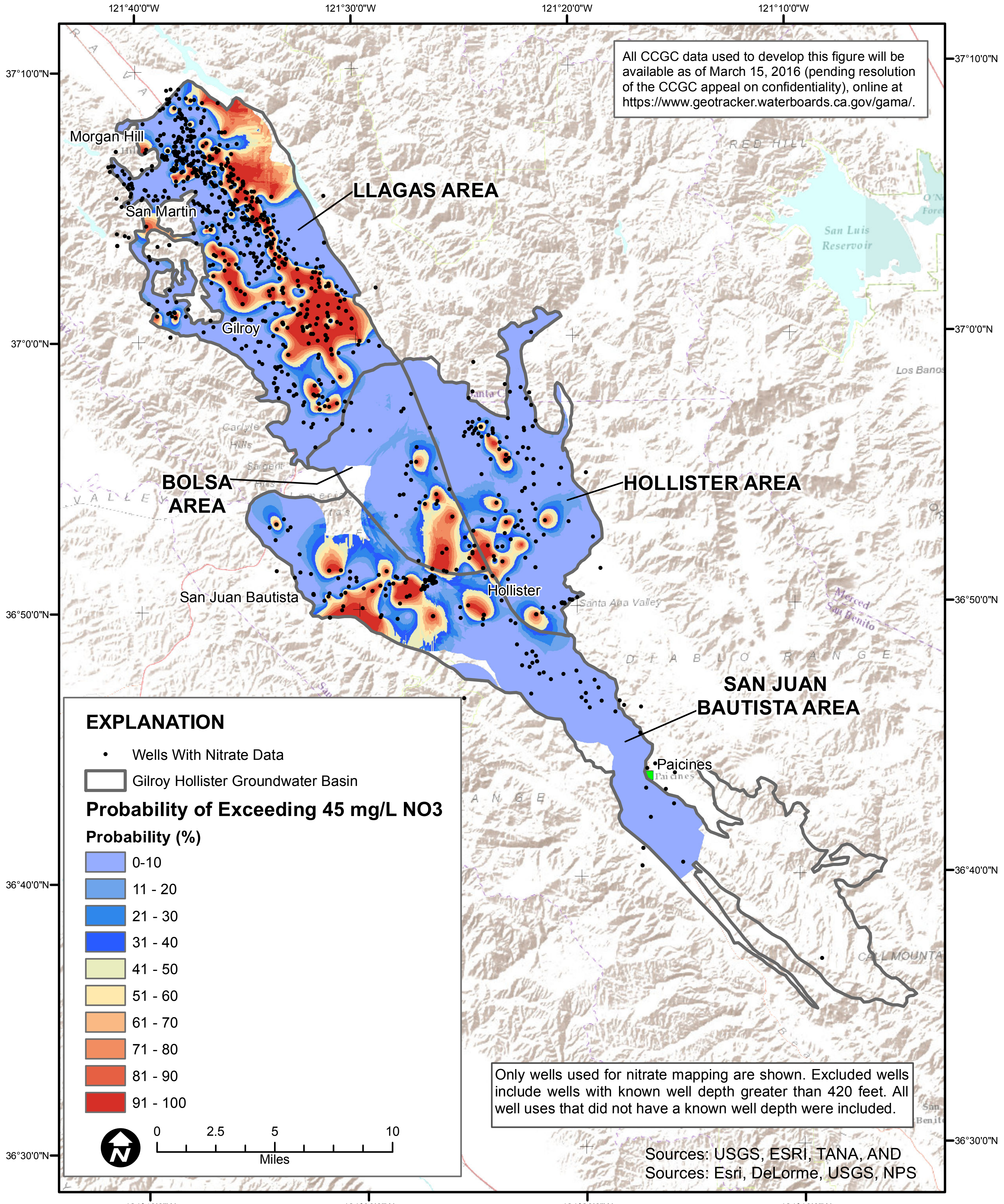


Figure 9. Distribution of Estimated Probability of Exceeding Nitrate (as NO3) Concentrations of 45 mgL in Groundwater in Gilroy-Hollister Valley.

APPENDIX A

CHECKLIST

Appendix A – Checklist of Reporting Requirements

Source (RWQCB or CCGC Document)	TM/Report Requirement	Modification /Additional Explanation	Report Location
p. 14 of CCGC Workplan	Contour Confidence Interval – "…the analysis will explicitly provide the confidence value for any location on the map".	p. 3 of 3/20/15 RWQCB Letter, Item 6, states, "Separate maps to describe uncertainty or confidence interval are useful but not required..." Probability (Indicator Kriging) maps were provided to address uncertainty.	Section 4.2 (Distribution of Nitrate Concentrations) of each TM and Report
p. 16 of CCGC Workplan	Characterizing groundwater aquifers with focus on domestic drinking water supply and shallow groundwater.	NA	Report and TMs
Tables 3, 4, and 5 of CCGC Workplan	a) Discussion of sampling results including contour map and shape file of nitrate concentrations; for each of the three TMs.	Shape files will be provided upon RWQCB acceptance of Report.	Section 4.2 (Distribution of Nitrate Concentrations) of each TM.
	b) "…use existing data to provide information about the source of the nitrates and the age of the groundwater (year of recharge)".	NA	Section 2.2 (Previous Groundwater Quality Studies and Data) of each TM.
	c) "…utilize groundwater data collected by the CCGC to more fully explain the nature of groundwater degradation and its causality".	NA	Section 4.3 (Factors Affecting the Distribution of Nitrate Concentrations) of each TM.

p. 4 of 7/11/13 RWQCB Workplan Approval Letter and Table 1 Condition 10 of RWQCB 2/20/15 Letter	TMs submitted with nitrate contour maps must incorporate items a, b, and c listed below:		
	a) Sampling density, resolution and scale must be sufficient such that individual domestic well owners that reside in agricultural areas within the cooperative groundwater monitoring program boundary can make informed decisions related to their drinking water quality and potential health exposure to nitrate.	NA	Section 4.2 (Distribution of Nitrate Concentrations) of each TM
	b) Contour maps must characterize groundwater nitrate concentrations at specific depth, focus on shallow groundwater, and indicate depth represented on the map.	NA	Section 4.2 (Distribution of Nitrate Concentrations) of each TM.
	c) The analysis will be performed to achieve the highest level of certainty possible with the wells that are selected for sampling, and the analysis will explicitly provide the confidence value for any location on the map.	The original assumption was that not all CCGC domestic wells would be sampled; however, all pertinent CCGC wells were sampled.	Section 4.2 (Distribution of Nitrate Concentrations) of each TM and Sections 1 and 6.4 of the Report.
p. 4 of 7/11/13 RWQCB Workplan Approval Letter and Table 1 Condition 11 of 2/20/15 and 3/20/15 RWQCB Letters	TMs submitted with nitrate contour maps must:		

	a) Additional sampling shall be used as a validation data set.	All CCGC member domestic wells were sampled and incorporated into the nitrate mapping analysis; thus, no additional wells needed for validation.	Section 1 and 6.4 of Report.
	b) Contour maps must include the confidence interval for estimated values, which is acceptable for providing reliable information to the public.	p. 3 of 3/20/15 RWQCB Letter, Item 6, states, "Separate maps to describe uncertainty or confidence interval are useful but not required..." Probability maps were provided to address uncertainty.	Maps displaying Probability of Exceeding MCL are provided in Section 4.2 of each TM.
	c) Contour maps should use the state drinking water standard of 45 mg/L Nitrate as NO3 and initial contour intervals of approximately 10 mg/L, and contour intervals can be greater for Nitrate as NO3 greater than 45 mg/L.	Maps displaying estimated nitrate concentrations are provided in Section 4.2 of each TM: given the variability of nitrate data for these groundwater basins, the most appropriate contour intervals to use are 22.5, 36, 45, 90, and 180 mg/L.	Section 4.2 of each TM
p. 5 of 7/11/13 RWQCB Workplan Approval Letter and Table 1 Condition 12 of 2/20/15 RWQCB Letter	TMs submitted with nitrate contour maps must:		
	a) Sampling density, resolution, and scale must be approved by the Executive Officer prior to contour map preparation.	Numerous meetings were held, and multiple drafts of the TMs were submitted to the RWQCB. Groundwater samples were collected and analyzed for nitrate for all CCGC member domestic wells. Since all member wells were sampled, density and resolution are fixed.	Section 4.2 (Distribution of Nitrate Concentrations) of each TM.
	b) Contour maps must be developed under direction of Professional Geologist or Engineer.	NA	Cover Page of each TM and Final Report.

	c) Contour maps must be based on a sampling design that is statistically defensible given the spatial variability of the aquifer and specific local conditions.	Groundwater samples were collected and analyzed for nitrate for all CCGC member domestic wells.	Sections 1 and 6.4 in Report; and Section 4.2 and Appendix A of TMs.
	d) Contour maps must be provided as a GIS shapefile.	Shape files will be provided upon RWQCB acceptance of report.	Section 4.2 (Distribution of Nitrate Concentrations) of each TM.
p. 5 of 7/11/13 RWQCB Workplan Approval Letter	TMs submitted with nitrate contour maps must:		
Also listed in Table 1 Condition 13 of 2/20/15 RWQCB Letter	a) "…clearly describe the method used to contour the groundwater monitoring data, the associated confidence intervals, and the area of uncertainty".	p. 3 of 3/20/15 RWQCB Letter, Item 6, states, "Separate maps to describe uncertainty or confidence interval are useful but not required..." Probability maps were provided to address uncertainty.	Section 4.2 (Distribution of Nitrate Concentrations) and Appendix A of TMs.
	b) "…include list of wells specifically used in the development of the contour map and also describe any wells excluded from the contour map development (i.e. outliers) along with rationale for exclusion".	NA	Appendices B and D of the TMs.
	c) "…identification and discussion of areas of insufficient data or data gaps as well as recommendations for resolving data gaps".	NA	Section 5.3 (Data Gaps) of TMs, and Section 5 of Report.
3/20/15 RWQCB Letter	The 3/20/15 comment letter from the RWQCB requires the following for TMs:		

	a) Professional Certification. PG name/number on title page;	NA	Cover/title page of each TM and Final Report.
	b) Executive Summary. Confirm that accuracy of statistical/probability descriptions are consistent with results of contouring method; add description of data gaps and uncertainty;	Appendix A was added to each TM to describe contouring method and parameters used.	Section 1 (Executive Summary) of each TM and Appendix A of each TM.
	c) Sample Density. Describe well density for all wells included in report;	NA	Section 4.2 (Distribution of Nitrate Concentrations) of each TM.
	d) Data Analysis. Confirm that described statistics and contour map information is consistent with results of the data analysis and any associated uncertainty is described;	Previous draft data analyses were reviewed and inconsistencies were rectified.	Section 4.2 (Distribution of Nitrate Concentrations) of each TM.
	e) Contour Maps. Do not include areas without sufficient data; describe rationale for areas with/without contours; include description of methods/parameters used to develop contour maps;	Due to lack of data, some areas such as in Upper Valley Subbasin of Salinas Valley and San Juan Bautista in GHV were not contoured.	Section 4.2 (Distribution of Nitrate Concentrations) and Appendix A of each TM.

	f) Describe Uncertainty. Contour maps must clearly indicate data is estimated and describe associated uncertainty/confidence level; text must explain uncertainty/confidence levels in layman terms;	NA	Section 4.2 (Distribution of Nitrate Concentrations) of each TM.
	g) Exclusion of Data. Each map, table, and figure must clearly indicate data that has been excluded, and a summary statement provided on what data was excluded and associated rationale;	Excluded data is also described in various maps, tables, and figures.	Sections 3.5 and 4.1 and Appendix B of each TM. Excluded data is also described in various maps, tables, and figures.
	h) Reference Actual Data. Include reference on each map/figure indicating all CCGC data used in the map/figure is available online at GeoTracker (include website address);	The note added to maps/figures is: All CCGC data used to develop this figure will be available as of March 15, 2016 (pending resolution of the CCGC appeal on confidentiality), online at https://www.geotracker.waterboards.ca.gov/gama/.	Added to map/figures.
	i) Contour Map Legend. Include additional contour intervals beyond >90 mg/L;	Appropriate contour intervals to use are 22.5, 36, 45, 90, and 180 mg/L. The contour map legends were updated to reflect this.	Section 4.2 (Distribution of Nitrate Concentrations) of each TM.

	j) Additional Data. – Potentially Explanatory Factors. Include discussion of additional types of data collected, summary data table, and actual data in appendix;	NA	Section 4.3 (Factors Affecting the Distribution of Nitrate Concentrations) and Appendix D of each TM.
	k) Appendix – Data. Include all well information and groundwater quality data collected by CCGC in Appendix and confirm it is uploaded to GeoTracker; data presentation should include well ID, well type, well construction info, analytical results, whether or not result exceeds standard, QA/QC, and identify excluded data;	Data have all been uploaded to GeoTracker and are assessed in the Precision and Accuracy appendix (Appendix E).	Appendices B (excluded data) and D (results) of each TM. Appendices E and F of Report.
	l) Exceedance Notification Follow-Up Report. Include the complete Exceedance Notification Follow-Up Report previously submitted.	Added as Appendix F; report has been modified to only reflect exceedance notification follow-up in the Northern Counties.	Appendix F in the Report.

	m) Final Characterization Report – Provide brief overview of CCGC program areas, method used, data gaps and limitations, summary of results, conclusions from individual TMs, broad overview of nitrate in shallow groundwater, focused information on nitrate impacts to domestic drinking water wells, written in layman's terms, and inform reader technical details found in TMs.	NA	Report.

NA – Not Applicable

APPENDIX B

SALINAS VALLEY

TECHNICAL MEMORANDUM

Distribution of Groundwater Nitrate Concentrations, Salinas Valley, California

Prepared for:
Central Coast Groundwater Coalition

Prepared By:
Luhdorff & Scalmanini Consulting Engineers

Peter Leffler, P.G., C.Hg.
Principal Hydrogeologist

June 1, 2015

Table of Contents

1 EXECUTIVE SUMMARY 1
2 INTRODUCTION AND BACKGROUND 4
2.1 Hydrogeologic Context 5
2.1.1 Hydrogeologic Characteristics of Subbasins 6
2.1.2 Groundwater Inflows and Outflows 8
2.2 Previous Groundwater Quality Studies and Data 10
3 METHODS AND DATA SOURCING 12
3.1 Sampling of CCGC Member Wells 12
3.2 Analytical Methods 16
3.2.1 Nitrate 16
3.2.2 Major Ions and Total Dissolved Solids 16
3.3 Ancillary Sampling 16
3.3.1 Sampling Methods 17
3.3.2 Analytical Methods 17
3.4 Other Sources of Nitrate Data 18
3.5 Mapping of Nitrate Concentrations in Groundwater 18
3.6 Mapping Assumptions 19
3.7 Well Construction Information 21
4 RESULTS AND DISCUSSION 22
4.1 Well Construction 22
4.1.1 Langley Area Subbasin 23
4.1.2 Pressure Subbasin 24
4.1.3 East Side Subbasin 24
4.1.4 Forebay Subbasin 24
4.1.5 Upper Valley Subbasin 24
4.2 Distribution of Groundwater Nitrate Concentrations 29
4.3 Factors Affecting the Distribution of Nitrate Concentrations 32
4.3.1 Major Ions and Piper Diagrams 32
4.3.2 Nitrate Concentrations and Oxidation-Reduction Potential and Dissolved Oxygen Concentrations 34
4.3.3 Relation of Nitrate Concentrations to Spatially Variable Soil Texture 34

5 SUMMARY AND CONCLUSIONS ... 35
5.1 Study Objectives ... 35
5.2 General Findings ... 35
5.3 Data Gaps ... 37

Tables

Table 1	Groundwater Budget Components by Subbasin for the Salinas Valley Groundwater Basin in Acre-Feet per Year
Table 2	Average Annual Recharge from Taghavi and Associates
Table 3	Wells Sampled Under the CCGC by Well Type
Table 4	Wells and Samples Collected by the CCGC
Table 5	Supplemental Constituents
Table 6	List of Wells Deeper than 400 feet included in the Nitrate Mapping Analysis
Table 7	Summary Statistics for Domestic Depth and Screen Bottom reported on well completion reports by subbasin
Table 8	Summary Statistics for Public Supply Wells - Well Depth and Screen Bottom reported on DWR well completion reports
Table 9	Summary Well Depth Statistics for Public Supply Wells by Subbasin
Table 10	Average Nitrate Concentrations by Subbasin and Well Type
Table 11	Summary Statistics for Average Groundwater Nitrate Concentrations
Table 12	Summary Statistics for Average Groundwater Nitrate Concentrations Sampled under the CCGC

Figures

Figure 1	Subbasins and Locations of Wells Used for Mapping of Nitrate Concentrations
Figure 2	Conceptual Geologic Cross-Section, Northwest to Southeast (down Valley)
Figure 3	Geologic Cross Section, Southwest to Northeast (cross Valley) near Salinas
Figure 4a	Conceptual Aquifer Cross Section, Southwest to Northeast (cross Valley) near Gonzales
Figure 4b	Conceptual Aquifer Cross Section, Southwest to Northeast (cross Valley) near King City
Figure 5	Locations of CCGC Member Parcels and Wells used for Analysis
Figure 6	Average and Range of Domestic Well Depths by Township
Figure 7	Wells with Nitrate Tests and a Known Depth
Figure 8	Average Public Supply Well Depth by Section
Figure 9	Domestic Wells, and Sections containing at least one DWR Domestic Well Completion Report
Figure 10	Boxplots showing Medians and Ranges for Average Nitrate Concentrations for the Five Subbasins

Figure 11 Boxplots showing Medians and Ranges for Average Nitrate Concentrations for Langley Area (a), East Side (b), Pressure (c), Forebay (d), and Upper Valley (e) Subbasins by Depth

Figure 12a Kriged Nitrate Concentrations in Salinas Valley

Figure 12b Kriged Nitrate Concentrations in Pressure, East Side, and Langley Subbasins

Figure 12c Kriged Nitrate Concentrations in Forebay Subbasin

Figure 12d Kriged Nitrate Concentrations in Upper Valley Subbasin

Figure 12e Kriged Nitrate Concentrations in Lockwood Valley Basin

Figure 13 Kriged Nitrate Concentrations and Member Parcels

Figure 14 Distribution of Estimated Probability of Exceeding Nitrate Concentrations of 45 mg/L as NO3 in Groundwater

Figure 15 Chemical Characteristics and Areas of Ionic Dominance represented by the Piper Diagram

Figure 16 Piper Plot of Upper Valley Subbasin Wells Sampled by the CCGC

Figure 17 Piper Plot of Forebay Subbasin Wells Sampled by the CCGC

Figure 18 Piper Plot of Pressure Subbasin Wells Sampled by the CCGC

Figure 19 Piper Plot of East Side Subbasin Wells Sampled by the CCGC

Figure 20 Relation of Groundwater Nitrate Concentrations to Oxidation-Reduction Potential for CCGC Samples

Figure 21 Distribution of Soil Percent Sand and Groundwater Nitrate Concentration Contours above the MCL in the Salinas Valley Basin

Figure 22 Distribution of Soil Percent Sand and Groundwater Nitrate Concentration Contours above the MCL in the Pressure, East Side, and Langley Area Subbasins

Figure 23 Distribution of Soil Percent Sand and Groundwater Nitrate Concentration Contours above the MCL in the Forebay Subbasin

Figure 24 Distribution of Soil Percent Sand and Groundwater Nitrate Concentration Contours above the MCL in the Upper Valley Subbasin

Appendices

Appendix A-1	Kriging and Development of Variogram Models: Salinas Valley Basin
Appendix A-2	Kriging and Development of Variogram Models: Lockwood Valley Basin
Appendix B	Wells Excluded from Nitrate Mapping
Appendix C	Quality Assurance and Quality Control
Appendix D	CCGC Sampled Well Information and Results
Appendix E	Exceedance Notification Follow-Up Report
Appendix F	Response to Submittal of Ancillary Sampling Data

1 EXECUTIVE SUMMARY

The Central Coast Regional Water Quality Control Board (Regional Water Board) adopted Order No. R3-2012-0011 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Conditional Waiver) and associated Monitoring and Reporting Program Orders (MRPs) on March 15, 2012. The Conditional Waiver and the MRPs specify that landowners and growers may meet groundwater monitoring requirements by either monitoring groundwater individually on their agricultural operations, or by joining a groundwater cooperative monitoring program. The approved workplan submitted by the Central Coast Groundwater Coalition (CCGC) set forth plans for satisfying the objectives in the MRP. The CCGC aims to provide information that fills the gaps in the current understanding of groundwater quality for domestic consumption throughout the region. Nitrate is the primary constituent of concern and the focus of this report. The program also commits to provide information about the effects of land- and water-management practices that will result in improved groundwater quality over time.

The primary objectives of the tasks described in the CCGC workplan are to develop 1) a process-level understanding of the spatial distribution of nitrate concentrations in domestic supply wells with single connections or a small number of connections, and 2) identify regions for evaluation of agricultural land- and water-management practices to reduce discharges to groundwater. In addition, the MRP requires that, at a minimum, the cooperative groundwater monitoring effort must include sufficient monitoring to adequately characterize the groundwater aquifer(s) in the local area of the participating Dischargers, characterize the groundwater quality of the uppermost aquifer, and identify and evaluate groundwater used for domestic drinking water purposes. This Technical Memorandum (TM) is one of three TMs for the northern counties region that attempts to satisfy the objectives of the CCGC workplan and requirements of the MRP in the Salinas Valley.

The Salinas Valley Groundwater Basin contains four primary subbasins. The Pressure, East Side, Forebay, and Upper Valley Subbasins are hydraulically connected but are distinguished by their hydrogeologic characteristics. Three important characteristics differentiate the subbasins including the presence of fine-grained (clay and silt) and highly organic soil layers that may restrict groundwater flow and lead to chemically reducing conditions, the capacity of aquifers to supply groundwater to wells, and the source of groundwater recharge. In general, groundwater in the northernmost Pressure and East Side subbasins is influenced by relatively well-defined fine-grained layers that restrict vertical water movement. These fine-grained layers tend to thin and disappear in the southern subbasins, the Forebay and Upper Valley.

Groundwater recharge in the Salinas Valley occurs primarily from infiltration from the Salinas River and Arroyo Seco, and deep percolation of irrigation water, except in the Langley area where recharge is primarily from precipitation. Groundwater generally flows from high altitudes towards the drainages, and down valley towards Monterey Bay. Groundwater has historically flowed horizontally northward from the Pressure to the East Side Subbasins due to low groundwater levels in the East Side Subbasin.

Results of laboratory analysis of groundwater samples collected from wells on CCGC member landowners and growers (L&Gs) properties in the Salinas Valley are evaluated and presented herein. Other sources of nitrate data for mapping included GeoTracker, USGS National Water Information System, Lawrence Livermore National Laboratory, L&Gs enrolled in the Irrigated Lands Regulatory Program, data collected by the USGS as part of the Regional Water Quality Control Board Central Coast Ambient Monitoring Program - Groundwater Assessment and Protection (CCAMP-GAP) Domestic Well Project for the Salinas and Pajaro Valleys, and data provided by the Monterey County Water Resources Agency. It was assumed that water quality data collected from 2000 to 2014 are most representative of current conditions for the area. The overall approach was to process and evaluate available analytical data for inclusion in nitrate mapping by subbasin, and then integrate the data to create water quality maps for the entire Salinas Valley.

Water samples were collected and field parameters measured from 221 domestic wells on CCGC properties. Field parameters (pH, water temperature, specific conductance, oxidation-reduction potential (ORP) and dissolved oxygen (DO)) were measured at each well. Concentrations of nitrate and major ions (calcium, magnesium, potassium, sodium, chloride, sulfate and bicarbonate) were determined in all samples.

Geostatistics (kriging) was used to create a map of estimated groundwater nitrate concentrations in the Salinas Valley. Kriging is an interpolation technique based on surrounding measured values used to derive estimated values for unsampled locations. Using well completion reports gathered from DWR from throughout the Salinas Valley and hydrogeologic information, an attempt was made to restrict the data for mapping to wells completed within 400 feet of land surface to best characterize groundwater quality in the shallow aquifer and for domestic supply. Results from 758 wells were used to characterize the distribution of groundwater nitrate (as NO_3) concentrations. For wells with multiple sample dates from 2000 to 2014, the maximum nitrate concentrations were used for each well.

The mean nitrate concentration in groundwater used for domestic supply for the entire Salinas Valley Groundwater Basin was 68 mg/L as NO_3 and the median was 26 mg/L as NO_3. Values ranged from less than the detection limit of 0.09 mg/L to 614 mg/L. A total of 309 wells (41 %) had maximum concentrations over the MCL of 45 mg/L throughout the Salinas Valley. In the five subbasins, the mean nitrate concentration ranged from a low of 19 mg/L (median of 8 mg/L) in the Langley Subbasin to 105 mg/L (median of 50 mg/L) in the East Side Subbasin. The percentage of wells with maximum nitrate concentrations exceeding the MCL ranged from 13 % in the Langley Subbasin to 58 % in the Forebay Subbasin. Where well depths were available, nitrate concentrations were generally higher in wells completed within 400 feet of land surface; however, the relationship of nitrate concentrations with depth varied among the various subbasins.

Mapped groundwater nitrate concentrations in the Pressure Subbasin are generally less than one-half of the MCL due to widespread distribution of a large number of low nitrate concentrations. Exceptions include areas of concentrations over the MCL northwest and south of Chualar. In the Langley Subbasin, mapped groundwater nitrate concentrations are generally less than one-half of the MCL. There are large areas in the East Side Subbasin where groundwater nitrate concentrations are mapped as greater than the MCL. These include areas north and east of Salinas, areas north and east of Chualar, and areas around Gonzales where concentrations were measured as high as several hundred mg/L. Forty-four percent (44%) of the area within the Forebay Subbasin is mapped as having nitrate concentrations in groundwater that are greater than the MCL. In the Upper Valley Subbasin there are a relatively small number of sample points. The spatial distribution of high nitrate values results in clustered areas where concentrations were over the MCL near King City and along the eastern boundary both north and south of San Ardo.

Uncertainty was addressed using indicator kriging to show the estimated probability of exceeding the nitrate MCL (45 mg/L). The map shows several areas throughout the Salinas Valley with a probability of greater than 50% for exceeding the nitrate MCL in shallow groundwater, including a large portion of the East Side Subbasin from northeast of Salinas to Gonzales, areas in the Forebay Subbasin from southeast of Gonzales to Soledad and around Greenfield, and areas in the Upper Valley Subbasin around King City and San Ardo. The majority of the areas within the Pressure Subbasin and Langley Subbasin have probabilities of less than 50% for exceeding the nitrate MCL.

Groundwater nitrate concentrations in the Salinas Valley subbasins are affected by different hydrogeologic and geochemical processes. Higher nitrate concentrations are generally associated with higher sand content in near-surface soils in the Pressure Subbasin. However, the Pressure Subbasin may benefit from more extensive and lower permeability shallow aquitard (clay) layers (above screen intervals of typical domestic wells) that retard downward movement of nitrate and result in lower nitrate concentrations in shallow groundwater tapped by domestic wells. In other Salinas Valley subbasins, the relationship of nitrate concentrations to hydrogeology and soils is more variable.

Lower nitrate concentrations in CCGC samples were generally associated with chemically reducing conditions with oxidation-reduction potential values less than 75 mV. An ORP value of 75 mV indicates the theoretical redox potential below which nitrate is denitrified. The majority of the samples with oxidation-reduction potential values below 75 mV were collected in wells in the Pressure and Forebay Subbasins.

Major ion data (calcium, magnesium, sodium, potassium, sulfate, chloride, bicarbonate) were summarized on Piper diagrams showing general groundwater geochemistry. Points representing groundwater samples collected in the four subbasins indicate there may be a general geochemical shift from calcium-magnesium/chloride-sulfate waters to sodium/potassium bicarbonate waters.

Based on review of nitrate data and various factors as described above, there are likely several factors that influence nitrate concentrations in any given area.

There are two key areas of uncertainty which place limitations on the conclusions: 1) well depth information, and 2) GeoTracker data obfuscation and clustering. Due to lack of specific well construction information for wells used in the analysis, the results of processing over 5,000 DWR well completion logs were used to make statements about well depths. While the results of the analysis indicate that the large majority of domestic wells are screened within 400 feet of land surface, there is a relatively small amount of uncertainty about the water-quality influence of data from deeper wells that may be included in the mapping. Since nitrate concentrations generally decrease with depth, there could be inclusion of lower nitrate concentration data not necessarily associated with the shallow drinking water supply. This appears to be primarily the case in the northern Salinas Valley. However, for GeoTracker data the maximum values were used for wells with multiple values and for multiple wells mapped at the same location. While this also introduces uncertainty, maximum values tend to result in conservative estimates of where nitrate concentrations are high.

High spatial variability in nitrate concentrations and obfuscation and clustering in GeoTracker create uncertainty in mapping nitrate distribution. Uncertainty due to spatial variability associated with the estimated nitrate concentration maps is addressed with a map that shows the probability of exceeding the nitrate MCL (45 mg/L) throughout the basin. The effects of obfuscation and clustering are very difficult to fully quantify. The primary effect is diminished spatial resolution about where drinking water wells are at risk for high nitrate concentrations.

2 INTRODUCTION AND BACKGROUND

The Central Coast Regional Water Quality Control Board (Regional Water Board) adopted Order No. R3-2012-0011 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Conditional Waiver) and associated Monitoring and Reporting Program Orders (MRPs) on March 15, 2012. The Conditional Waiver and the MRPs specify that landowners and growers (L&Gs) may meet groundwater monitoring requirements by either monitoring groundwater individually on their agricultural operations, or by joining a groundwater cooperative monitoring program. A workplan approved by the Regional Water Quality Board on June 20, 2013, set forth the plan for a Northern Central Coast Cooperative Groundwater Program that satisfies the requirements in the Conditional Waiver and MRPs for participating L&Gs in Monterey, Santa Cruz, Santa Clara, and San Benito Counties. The steps outlined in the workplan provide a foundation for a Groundwater Cooperative Program (GCP) that satisfies the requirements as set forth in the MRPs. A key GCP purpose undertaken by the Central Coast Groundwater Coalition (CCGC) is to provide the Regional Water Board with information that fills the gaps in the current understanding of groundwater quality for domestic consumption throughout the region. Nitrate is the primary constituent of concern and the focus of this report. The program will also provide information about the effects of land- and water-management practices that will result in improved groundwater quality over time.

The primary objectives of the tasks described in the workplan are to develop: 1) a process-level understanding of the spatial distribution of nitrate concentrations in domestic supply wells with single connections, or a small number of connections and 2) identify regions for evaluation of agricultural land- and water-management practices to reduce discharges to groundwater. The workplan also described the approach for sampling and reporting. In addition, the MRP requires that, at a minimum, the cooperative groundwater monitoring effort must include sufficient monitoring to adequately characterize the groundwater aquifer(s) in the local area of the participating Dischargers, characterize the groundwater quality of the uppermost aquifer, and identify and evaluate groundwater used for domestic drinking water purposes.

This Technical Memorandum (TM) is one of three TMs that provide information about the spatial distribution of nitrate concentrations in groundwater used for domestic drinking water in the CCGC service area. This TM also attempts to address the probability of domestic drinking water having nitrate concentrations over the Maximum Contaminant Level (MCL) at a given location in the basin.

To assess the spatial variability in groundwater nitrate concentrations, results of laboratory analysis of groundwater samples collected from wells on CCGC member L&G's properties in the Salinas Valley are evaluated and presented herein. Also, the analytical results from other sampling conducted by the California Department of Public Health, US Geological Survey (USGS), Monterey County Water Resources Agency (MCWRA) and L&Gs who conducted individual sampling were integrated in this study. The approach focused on the uppermost aquifer. The available analytical data for the shallow groundwater used for drinking was processed and evaluated to create water quality maps for the entire Salinas Valley. Available depth information was used to provide some understanding of the depth-distribution of nitrates in shallow groundwater. **Figure 1** shows the Salinas Valley and subbasins where data were available for mapping[1]: Langley, Pressure, East Side, Forebay, and Upper Valley Subbasins.

This report also provides some data related to factors and processes affecting groundwater nitrate concentrations throughout in the Salinas Valley. Included in this report are the data for field parameters and major ions (calcium, magnesium, potassium, sodium, sulfate, chloride and bicarbonate). Field parameter data (oxidation-reduction potential, electrical conductivity, pH, dissolved oxygen and temperature) and major ion data were analyzed in all samples collected from wells on CCGC properties and are required as part of the MRP. Groundwater recharge volumes and sources, soil texture, and hydrogeology have been used to interpret the spatial distribution of groundwater chemical data.

2.1 Hydrogeologic Context

Located within the Coast Ranges between the San Joaquin Valley and the Pacific Ocean, the Salinas Valley Groundwater Basin is the largest coastal groundwater basin in Central California. Drained by the Salinas River, the valley extends about 150 miles from the La Panza Range north-northwest to its mouth at Monterey Bay. The entire watershed includes about 5,000 square miles in Monterey and San Luis Obispo Counties. The valley is bounded on the west by the Santa Lucia Range and Sierra de Salinas, and on the east by the Gabilan and Diablo Ranges and in the north by Monterey Bay **(Figure 1)**. Tectonic processes formed the Basin, which is filled with up to 15,000 feet of sediments derived from Tertiary/Quaternary marine and terrestrial sources. These basin sediments include up to 2,000 feet of

[1] The locations of CCGC member wells were obfuscated to protect member privacy. The locations of CCGC member wells shown on Figure 1 were randomly adjusted up to 0.5 miles in both the east-west and north-south directions. The wells are plotted within a 1 mi^2 block centered over the actual well location. This block is consistent with the area of obfuscation required by a Public Records Act Request (PRAR).

saturated alluvium. The Basin contains four primary subbasins **(Figure 1)**. Much of the following discussion is from Department of Water Resources Bulletin 118[2].

2.1.1 Hydrogeologic Characteristics of Subbasins

The Pressure Subbasin **(Figure 1)** is generally underlain by three aquifers that range from semi-confined to confined[3]; the 180 foot, 400 foot, and Deep (900 foot) aquifers. Groundwater in the East Side Subbasin is generally semi-confined; groundwater in the Forebay Subbasin varies spatially from semi-confined to unconfined; and groundwater in the Upper Valley Subbasin is mostly unconfined. Specific capacities of irrigation wells (yield divided by drawdown) generally increase up-valley and the proportions of recharge from irrigation return flow and stream infiltration vary among the subbasins.

The Pressure (or 180/400 foot aquifer) Subbasin includes, from oldest to youngest, the Pliocene to Pleistocene Paso Robles Formation, the Pleistocene Aromas Sands, Quaternary terrace deposits, Holocene alluvium, and sand dunes. Three primary water-bearing units, the 180-Foot, the 400-Foot, and the 900-Foot aquifers, are named for the average depths of each aquifer. The confined 180-Foot Aquifer occurs only in this subbasin; the confining blue clay layer thins and generally disappears northeast and southeast of the subbasin and does not extend into the East Side Subbasin **(Figure 1)**. In the Pressure Subbasin, groundwater bearing units beneath the 180-Foot Aquifer have been referred to as the Pressure 400-Foot aquifer zone. Water bearing units below the 400-Foot aquifer zone are referred to as the "Pressure Deep" zone[4].

The 180-Foot Aquifer consists of interconnected sand, gravel, and clay lenses, and ranges in thickness from 50 to 150 feet. The 180-Foot Aquifer is generally separated from the 400-Foot Aquifer by a zone of less coarse-grained strata and confining units that range in thickness from 10 to 70 feet. The 400-Foot Aquifer is about 200-feet thick and consists of sands, gravels, and clay lenses. The upper portion of the aquifer appears to be correlated with the Aromas Sand and the lower portion with the upper part of the Paso Robles Formation. The 900-Foot Aquifer, present in the lower (northern) Salinas Valley, consists of alternating layers of sand, gravels and clays and is separated from the 400-Foot Aquifer by a clay confining unit.

Groundwater in the 180- and 400-Foot Aquifers is generally interconnected with the semi-confined groundwater bearing zones in the East Side Subbasin **(Figure 1)**. The geology underlying the East Side Subbasin is lithologically similar to the Pressure Subbasin except that the mostly well-defined confining blue clay layer generally thins and disappears to the east. In the East Side Subbasin, wells screened

[2] California Department of Water Resources (DWR). 2003. California's Groundwater, Bulletin 118 – Update 2003.
[3] The terms confined and semi-confined refer to the depth distribution of water levels in wells screened in different aquifers. In a confined aquifer, groundwater is under sufficient pressure such that the water level in a well screened solely in the confined aquifer rises above the elevation of the top of the aquifer. Semi-confined aquifers are intermediate between confined and unconfined aquifers. The extent of confinement varies spatially due to the heterogeneous nature of the subsurface fine-grained layers.
[4] Geomatrix, 2001, FINAL REPORT Evaluation and Proposed Redesign of the Salinas Valley Ground Water Monitoring Network, Salinas Valley, California

above 350 feet below land surface have been designated by others as East Side shallow wells and those screened below this depth have been referred to as East Side deep wells[5].

The Forebay Subbasin overlays the entire width of the unconsolidated alluvium between Gonzales and the bluff line two miles south of Greenfield **(Figure 1)**. Groundwater in the Forebay Subbasin ranges from unconfined to semi-confined and occurs in lenses of sand and gravel that are interbedded with finer grained material such as clays and silts. The Upper Valley Subbasin includes the entire alluvial fill in the valley floor between the bluff two miles south of Greenfield to San Ardo **(Figure 1)**. The primary aquifer is unconfined and consists of unconsolidated to semi-consolidated interbedded gravel, sand, and silt of the Paso Robles Formation, alluvial fans, and river deposits. These deposits are lithologically equivalent to the 180-Foot and 400-Foot Aquifer units of the lower Salinas Valley. However, confining units comparable to those separating aquifers in the lower Salinas Valley are not present.

In the Forebay and Upper Valley subbasins, aquifers have not been officially distinguished as deep or shallow. In the Forebay Subbasin, wells with at least 80% of perforations less than 350 feet below land surface or the total well depth less than 350 feet below land surface are considered shallow. Wells with perforations below this depth are considered as deep[6]. In the Upper Valley Subbasin, wells with at least 80% of perforations less than 250 feet below land surface or the total well depth less than 250 feet below land surface, are generally considered as shallow. Wells with perforations below this depth are considered deep[7].

Figure 2 is a generalized cross section from Montgomery Watson[8]showing the depths of the aquifer zones within the Salinas Valley from northwest to southeast. **Figure 3** is a cross section from Kennedy/Jenks Consultants[9] showing the depths of the aquifer zones near Salinas from southwest to northeast. These cross sections show that confining layers influence the groundwater flow in the northernmost groundwater subbasins, especially the Pressure, East Side, and Forebay Subbasins. The Upper Valley Subbasin is less influenced by confining clays and generally has a shallower aquifer zone **(Figure 4)**. **Figure 1** shows all cross section locations.

Directions of groundwater flow generally follow the topography of the basins, from high altitudes towards the drainages, and down valley towards Monterey Bay. Groundwater generally flows horizontally from south to north from the Upper Valley Subbasin to the Pressure Subbasin. Groundwater has historically flowed horizontally northward from the Pressure Subbasin to the East Side Subbasin due to low groundwater levels in the East Side Subbasin.[10] Changing irrigation practices such

---

[5] ibid
[6] Ibid
[7] Ibid
[8] Montgomery Watson. 1994. Salinas River Basin Water Resources Management Plan Task 1.09 Salinas Valley Groundwater Flow and Quality Model Report.
[9] Kennedy/Jenks Consultants. 2004. Hydrostratigraphic Analysis of the Northern Salinas Valley. Final Report Prepared for Monterey County Water Resources Agency.
[10] Monterey County Water Resources Agency. 2011. Lines of Equal Ground Water Elevation in the Pressure 180-Foot, East Side Shallow, Forebay and Upper Valley Aquifers,

as increased use of drip irrigation during the last 20 years[11] may have resulted in changes to the recharge volumes and nitrate loads for the different subbasins.

2.1.2 **Groundwater Inflows and Outflows**

Recharge in the Salinas Valley occurs primarily from infiltration from the Salinas River and Arroyo Seco, and deep percolation of irrigation water, except in the Langley Area Subbasin where recharge is primarily from precipitation. Flow in the Salinas River is seasonally controlled for recharging the groundwater system. Infiltration of water from the Salinas River is relatively constant from year to year, because river flows are regulated by Nacimiento and San Antonio reservoirs[12]. Durbin and others [13] reported that the Pressure Subbasin was recharged largely by irrigation and stream recharge in approximately equal volumes. The Forebay and Upper Valley subbasins receive recharge from irrigation return flows and infiltration from the Salinas River; the river is considered to provide approximately twice as much recharge as irrigation return flows. The East Side Subbasin does not receive recharge from the Salinas River; most of its recharge is from irrigation return water.

In 1994, there were about 504,000 acre-feet (AF) of inflow to the Basin; about 50% as stream recharge, 44% as deep percolation from agricultural return flows and precipitation, and 6% as subsurface inflow from adjacent groundwater basins[14]. Groundwater pumping is the sole basin outflow. **Table 1** shows the water budget components by subbasin from Brown and Caldwell[15].

In the Pressure Subbasin, in addition to recharge, groundwater flows into the subbasin from the Forebay Subbasin and secondarily there is inflow from seawater intrusion. In the East Side Subbasin, in addition to recharge, groundwater flows into the subbasin from the west side of the Gabilan Range and the Pressure and Forebay Subbasins. Declining groundwater levels in the East Side Subbasin have resulted in increasingly encroaching seawater intrusion into the Pressure Subbasin[16].

In addition to recharge, inflow to the Forebay Subbasin includes infiltration along Arroyo Seco, Reliz Creek, Salinas River and subsurface inflow from the Upper Valley Subbasin, and mountain front recharge along the eastern and western subbasin boundaries. Inflow to the Upper Valley Subbasin includes infiltration along the Salinas River and its tributaries, with lesser amounts from precipitation/irrigation

---

http://www.mcwra.co.monterey.ca.us/groundwater_elevation_contours/documents/GWLcontours%20Fall%202011%20Shallow.pdf

[11] Monterey County Water Resources Agency. 2011. 2010 Ground Water Summary Report, http://www.mcwra.co.monterey.ca.us/Agency_data/GEMS_Reports/2010%20Summary%20Report.pdf

[12] Salinas Valley Ground Water Basin Hydrology Conference. 1995. Hydrogeology and Water Supply of Salinas Valley, White Paper prepared for Monterey County Water Resources Agency

[13] Durbin, T.J. Kapple, G.W. & Freckleton, J.R. 1978. Two-Dimensional and Three-Dimensional Digital Flow Models for the Salinas Valley Ground Water Basin, California. pp. 78–113, United States Geological Survey Water Resources Investigations Report 78-113.

[14] Brown and Caldwell. 2014. State of the Salinas River Groundwater Basin Report

[15] ibid

[16] ibid

recharge and minor quantities entering via subsurface inflow from the Pancho Rico Formation to the east and along drainages tributary to the Salinas River.

Table 1. Groundwater Budget Components by Subbasin for the Salinas Valley Groundwater Basin in Acre-Feet per Year

Subbasin	Recharge (precipitation, River and irrigation return flow)	Subsurface Inflow	Groundwater Pumping (outflow)	Subsurface Outflow	2013 Groundwater Pumping from estimates by MCWRA
Pressure Subbasin	117,000	17,000	130,000	8,000	118,000
East Side Subbasin	41,000	17,000	86,000	0	98,000
Forebay Subbasin	154,000	31,000	160,000	20,000	148,000
Upper Valley Subbasin	165,000	7,000	153,000	17,000	145,000

Taghavi and Associates[17] calculated the components of recharge for Water Years 1958-1994 **(Table 2)**. The recharge values are summarized from the Integrated Ground and Surface Water Model developed by Montgomery Watson. The volumes reported by Taghavi and Associates were normalized by the area of each subbasin. The deep percolation rate is similar for the four subbasins and ranges from 0.60 to 0.74 ft/yr. However, the stream recharge varies considerably between subbasins. Stream recharge is highest in the Forebay and Upper Valley Subbasins (1.04 and 0.93 ft/yr, respectively) and lowest in the East Side Subbasin (0.03 ft/yr). The existence of confining layers in the Pressure Subbasin is likely the cause for reduced stream recharge compared to the Forebay and Upper Valley Subbasins. The Salinas River does not pass through the East Side Subbasin, therefore, stream recharge is low.

Table 2. Average Annual Recharge from Taghavi and Associates[18]

	Average Annual Recharge (ac-ft)			Average Annual Recharge (ft)		
	Water Years 1958-94			Water Years 1958-94		
Subbasin	Deep Percolation	Stream Recharge	Total	Deep Percolation	Stream Recharge	Total
Pressure	51,000	66,000	117,000	0.60	0.78	1.39
East Side	39,000	2,000	41,000	0.68	0.03	0.71
Forebay	56,000	98,000	154,000	0.60	1.04	1.64
Upper Valley	73,000	91,000	164,000	0.74	0.93	1.67

[17] Taghavi and Associates. 2000. Update of the Historical Benefits Analysis, Final Technical Memorandum
[18] ibid

The major land uses in the Salinas Valley floor are urban and agriculture. Pumped groundwater is the primary source of water for these land uses. Other sources of water for agricultural production include surface water diverted from the Arroyo Seco, recycled municipal waste water supplied by the Monterey County Water Recycling projects and surface water diverted from the Salinas River north of Marina as part of the Salinas Valley Water Project.

2.2 Previous Groundwater Quality Studies and Data

Previous studies of groundwater quality in the Salinas Valley demonstrate that concentrations of nitrate (as NO_3) in groundwater vary spatially. Primary sources of data include irrigation, public supply, and monitoring wells[19]. Concentrations of nitrate above the MCL of 45 mg/L and up to several hundred mg/L have been observed in all of the subbasins.

There are five primary programs that have involved groundwater sampling to assess groundwater nitrate concentrations in the Salinas Valley, including:

- Sampling of irrigation and monitoring wells by the MCWRA [152 wells sampled];
- Public water systems are required to systematically test their well water and the results are reported to Monterey County Health Department;
- Monterey County Health Department is responsible for sampling domestic water supply wells that serve 2 or more residences;
- Groundwater Ambient Monitoring and Assessment (GAMA) studies conducted by the California State Water Resources Control Board [39 within Salinas Valley] and USGS [46 wells within Salinas Valley - 21 wells with NO3 data] sampled domestic and public supply wells throughout the basin;
- Central Coast Ambient Monitoring Program – Groundwater Assessment and Protection (CCAMP-GAP) Domestic Well Project for the Salinas and Pajaro valleys sampled domestic wells in cooperation with the USGS [74 within Salinas Valley].

Since the 1940s, MCWRA has used a network of wells to monitor groundwater conditions in the Salinas Valley Groundwater Basin to provide information for managing and protecting groundwater resources and sustaining beneficial uses. MCWRA monitors over 300 wells for water quality. Most of the wells are used for irrigation. For several hundred wells sampled in 1993 and 2007, MCWRA[20] reported nitrate concentrations exceeding the MCL in 25% (1993) to 37% (2007) of the wells. Reported concentrations ranged from 1 to over 500 mg/L nitrate. Among the subbasins, the largest number of exceedances occurred in East Side and Forebay Subbasins.

[19] Boyle, D., King, A., Kourakos, G., Lockhart, K., Mayzelle, M., Fogg, G.E. & Harter, T. 2012. Groundwater Nitrate Occurrence. Technical Report 4 in: Addressing Nitrate in California's Drinking Water with a Focus on Tulare Lake Basin and Salinas Valley Groundwater. Report for the State Water Resources Control Board Report to the Legislature. Center for Watershed Sciences, University of California, Davis
Justin T. Kulongoski and Kenneth Belitz. 2005. Program Status and Understanding of Groundwater Quality in the Monterey Bay and Salinas Valley Basins, 2005: California GAMA Priority Basin Project, US Geological Investigations Report 2011 – 5058.

[20] Monterey County Water Resources Agency. 2010. Technical Memorandum – NITRATE Tasks 2.01, 2.02, 2.04-2b EPA Grant XP-96995301 – Groundwater Sampling, Reporting and Storage, Groundwater Sampling Data, QA/QC, Data Reduction and Representation

The Monterey County Health Department mandates that any water supply system with two connections or more must be tested annually. At the state level, systems with 15 or more connections (or serving more than 25 people for more than 60 days out of the year) are required to be tested annually. These data are stored in GeoTracker. GeoTracker is an online information system that provides access to groundwater quality information.

As part of the Groundwater Ambient Monitoring and Assessment (GAMA) Program, Kulongoski and Belitz[21] analyzed groundwater nitrate data for public supply wells throughout the Salinas Valley. They identified over a dozen public supply wells where nitrate concentrations were over the MCL. They used a non-parametric statistical analysis to examine the relationship between nitrate and potential explanatory factors including land use, well construction, groundwater age, and geochemical conditions. They reported that nitrate concentrations over the MCL were generally associated with shallow wells (less than 350 feet) and groundwater that was either of mixed pre-modern and modern or modern age[22].

The State Water Board sampled 38 domestic wells within the Salinas Valley and Pajaro Valley as part of the GAMA Program Domestic Well Project[23]. Nine wells had detections greater than the MCL, seven of which occurred in Salinas Valley. Additionally, stable water isotopes, nitrogen isotopes, and boron isotopes were collected at each well site. The wells that exceed the MCL had overlapping ranges of nitrate isotopic concentrations; therefore, nitrate sources could not be distinguished from nitrogen isotopes alone.

Most recently, Boyle and others[24] assessed nitrate concentrations in the Salinas Valley. They reported that the majority of the public supply wells in the Salinas Valley have concentrations below the MCL. A key reason for this is likely due to regulation by the Monterey County Health Department of water-supply wells with two or more connections. When the MCL of a particular contaminant is exceeded, wells are often abandoned, or use is discontinued and there is no further sampling. This can create biased statistics that the majority of wells sampled are below the MCL. They also reported that the higher average nitrate concentrations were located in wells in the northeastern, central, and southern portions of the Salinas Valley.

---

[21] Justin T. Kulongoski and Kenneth Belitz. 2005. Program Status and Understanding of Groundwater Quality in the Monterey Bay and Salinas Valley Basins. 2005: California GAMA Priority Basin Project, US Geological Survey Scientific Investigations Report 2011 – 5058.

[22] Modern water recharged during or after the 1950s.

[23] California Water Boards. 2011. State Water Board GAMA Program Domestic Well Project Monterey County Focus Area.

[24] Boyle, D., King, A., Kourakos, G., Lockhart, K., Mayzelle, M., Fogg, G.E. & Harter, T. 2012. Groundwater Nitrate Occurrence. Technical Report 4 in: Addressing Nitrate in California's Drinking Water with a Focus on Tulare Lake Basin and Salinas Valley Groundwater. Report for the State Water Resources Control Board Report to the Legislature. Center for Watershed Sciences, University of California, Davis.

Lawrence Livermore National Laboratory[25] (LLNL) used geochemical and physical data in attempt to understand processes affecting groundwater movement and nitrate concentrations. LLNL identified denitrification (transformation of dissolved nitrate to nitrogen or nitrous oxide gas) as an important process in reducing nitrate concentrations in groundwater near the Salinas River.

3 METHODS AND DATA SOURCING

3.1 Sampling of CCGC Member Wells

Between October 2013 and August 2014, groundwater nitrate data were obtained from 459 domestic and domestic/irrigation wells and 26 irrigation wells on L&G properties in Monterey, Santa Cruz, San Benito, and Santa Clara Counties on L&G properties sampled by HydroFocus, Inc. and Michael L. Johnson, LLC personnel. For MRP compliance any domestic source well falling on a CCGC parcel was sampled; however, this TM focuses only on the Salinas Valley Groundwater Basin. **Table 2** summarizes the wells sampled under the CCGC. There are six remaining domestic wells located on L&G parcels in which the leasee does not have access to the well, and therefore could not be sampled by the CCGC. These wells are owned by the land owners who are not members of the CCGC and did not allow the CCGC to sample their wells. The parcels on which these wells reside are in areas with at least 4 other sample points within 1 mi^2.

A total of 225 samples were collected under the CCGC characterization monitoring program in Salinas Valley. Ten samples were collected under the individual monitoring program, five for Fall 2013 monitoring and five for Spring 2014 monitoring. Three samples were collected because their original nitrate concentration was within 80% of the MCL. **Tables 3 and 4** summarize the sample counts by groundwater subbasin.

[25] Jean E. Moran, Bradley K. Esser, Darren Hillegonds, Marianne Holtz, Sarah K. Roberts, Michael J. Singleton, and Ate Visser. 2011. California GAMA Special Study: Nitrate Fate and Transport in the Salinas Valley. Lawrence Livermore National Laboratory LLNL-TR-484186.

Table 3. Wells Sampled Under the CCGC by Well Type

Groundwater Basin	Domestic and Domestic/Irrigation Wells	Irrigation Wells
Salinas Valley	**220**	**9**
Pressure Subbasin	63	1
East Side Subbasin	34	5
Langley Subbasin	2	--
Forebay Subbasin	92	2
Upper Valley Subbasin	25	1
Seaside Subbasin[a]	1	--
Corral de Tierra Subbasin[a]	1	--
Paso Robles Subbasin[a]	2	--
Lockwood Valley	**2**	**--**

a. Samples were collected from these subbasins; however, data from wells were not included in mapping of nitrate concentrations since these subbasins have very little agricultural lands and limited member parcels.

Table 4. Wells and Samples Collected by the CCGC

Groundwater Basin	Total Wells Sampled	Samples Collected				
		Characterization	Individual Monitoring Fall 2013	Individual Monitoring Spring 2014	Within 80% of the MCL Re-Sample	Additional Re-Sample
Salinas Valley	229	224	5	5	3	
Pressure Subbasin	64	64			2	
East Side Subbasin	39	37	2	2	1	
Langley Subbasin	2	1	1	1		
Forebay Subbasin	94	94				
Upper Valley Subbasin	26	24	2	2		
Seaside Subbasin[a]	1	1				
Corral de Tierra Subbasin[a]	1	1				
Paso Robles Subbasin[a]	2	2				
Lockwood Valley	2	2				
Outside groundwater basin boundary, but within northern counties area	12	8	3	4		
Grand Total	472	458	13	14	6	0

a. Samples were collected from these subbasins; however, data from wells were not included in mapping of nitrate concentrations since these subbasins have very little agricultural lands and limited member parcels.

Within the Salinas Valley, the most recently collected groundwater nitrate data were obtained from 221 domestic wells on L&G properties sampled by HydroFocus, Inc. and Michael L. Johnson, LLC personnel from October 2013 through August 2014. The results of this sampling are included in this report.

Upon arrival at the well and using electronic sounders accurate to the nearest 0.01 feet, field personnel measured the depth to groundwater in the well (if there was access), relative to the top (the highest point) of the well casing. The measuring point location and depth to groundwater were recorded on the field sheet.

Field parameters (pH, water temperature, specific conductance, oxidation-reduction potential (ORP) and dissolved oxygen (DO)) were measured at each well using a Yellow Springs Instruments Multimeter. Meters were calibrated for all parameters at least two times per day, once in the morning prior to beginning sampling and once in the afternoon. At each well, field parameters were measured upon arrival. If the preliminarily-measured field-parameter values were more than 20% outside of the range of calibration values, the meter was recalibrated. Meters were calibrated with standards close to or that bracketed the values for the well sample and standards were maintained at temperatures (in water baths) close to the temperature of the well water. The meter was checked with zero DO solution at the first site of the day, and more frequently if needed. The pH probe was calibrated using buffers bracketing the preliminary sample result. Oxidation-reduction potential (ORP) was calibrated using Zobell solution[26]. Personnel recorded calibration data on field sheets. After calibration, tubing was connected to the well outlet and directed the well discharge to a flow-through chamber. As well water was pumped from the well, field parameters were recorded approximately every 3 minutes.

To the extent possible, purging of the well occurred prior to sample collection in order to remove stagnant water from within the well casing and ensure that a representative sample was obtained. Stabilization of the field parameters was used as an indication that the sample water was representative of groundwater. Stability was defined as ± 0.1 for pH, ± 3% for conductivity, ± 10 mV for ORP and ± 10% for DO for at least two consecutive readings Sampling began as soon as possible after parameter stabilization.

Field personnel collected all samples using the dedicated pumps installed in the domestic wells. The sample was collected as close to the well head as possible. In most cases, the sample was collected through plastic tubing connected to a spigot at or near the well head. In rare cases, the sample was collected from an indoor or outdoor faucet. Well water flowed into a flow-through chamber and into a collection bucket for measuring volume of flow per unit time. Samples analyzed for dissolved constituents (including nitrate) were filtered in the field using 0.45-µm capsule filters certified to meet EPA standards for trace metal analysis. Sample bottles and sampling equipment were rinsed thoroughly three times with the water to be sampled prior to sample collection. Bottles pretreated with preservatives were not rinsed prior to sample collection. Samples collected for metals were preserved with nitric acid in the field. Test strips were used to verify that the pH was less than 2 in preserved samples.

Field personnel collected ten percent of the total samples for quality assurance and quality control (QA/QC) purposes (duplicate and field blank samples). Field duplicate samples were collected and processed in the field and analyzed to evaluate the heterogeneity of the matrices. The duplicate samples were submitted to the laboratory as semi-blind samples. Field blank samples were processed in the field identically as the other samples using deionized water as sample water. The blank samples were submitted to the laboratory as semi-blind samples.

All samples collected for the MRP constituents were placed immediately on ice and transported to Monterey Bay Analytical Services on the day of collection. Before leaving the field to deliver samples, sampling personnel checked the ice level to ensure the temperature of the ice chest would remain around 6° C, and added ice if necessary. Chain of Custody form(s) were completed for each sampling day.

---

[26] Nordstrom, D.K., 1977, Thermochemical redox equilibria of ZoBell's solution, Geochimica e Cosmochimica Acta, 41:1835-1841

3.2 Analytical Methods

3.2.1 Nitrate

Nitrate samples were analyzed by Monterey Bay Analytical Services using EPA method 300.0.

3.2.2 Major Ions and Total Dissolved Solids

All major ions and total dissolved solids were analyzed by Monterey Bay Analytical Services. Calcium, magnesium, potassium, and sodium were analyzed by EPA Method 200.7. Chloride and sulfate were analyzed by EPA method 300.0. Total dissolved solids were analyzed by EPA approved Standard Method 2540C.

3.3 Ancillary Sampling

At selected wells, samples were collected for supplemental data not required by the California Regional Water Quality Control Board Central Coast Region Order No. R3-2012-001 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (WDR). The CCGC submitted an Addendum to the Northern Counties Quality Assurance Project Plan (QAPP) which included the methods by which this data would be collected and analyzed (submitted November 15, 2013). As stated within the Addendum submittal, the QAPP did not need Regional Board approval since these data are not required. Within the Northern Counties, supplemental data were collected voluntarily by the CCGC according to methods outlined in the Addendum. The list of constituents analyzed for at selected wells is included in **Table 5**.

Table 5. Supplemental Constituents

Constituents	Function
N^{15} and O^{18} isotopes	Potential for denitrification
N^{15} and O^{18} isotopes; pharmaceuticals	Nitrogen source analysis
Tritium/He-4, chlorofluorocarbons	Age of water
Br, O^{18}, N^{15}, deuterium	Source of water

Note: Modified from Table 2 of CCGC Work Plan for Monterey, Santa Clara, Santa Cruz, and San Benito Counties, November 1, 2013.

The CCGC is not including these data with this report (**Appendix F**), but a summary of the methods used to collect and analyze the samples is included as requested by Regional Board staff. The following is a summary of the sampling methods employed to collect the supplemental data at selected wells after well purging and collection of the required constituents in the MRPs of the WDR.

3.3.1 Sampling Methods

Prior to collecting the tritium sample, sampling personnel removed any wristwatches. The unfiltered samples were collected by inserting the plastic tubing connected to the well connection into the tritium bottle. The tubing was inserted about 1/3 of the way into the bottle and was slowly removed as the bottle was filled.

Noble gases samples were collected in copper tubes. Prior to sample collection, copper tubes were placed on backing plates with two clamps, one on each end. Plastic tubing leading from the well hook up was attached to one tube end, and blank plastic tubing was attached to the other tube end. As water flowed through the tube, the line was inspected for any air bubbles. The copper tube was continuously tapped to ensure bubbles were not trapped inside. When there was certainty that no bubbles were present, the upper clamp was sealed followed by the lower clamp. Copper tubes were stored at room temperature and shipped to Lawrence Livermore National Laboratory under standard Chain of Custody procedures.

Chlorofluorocarbons (CFCs) were collected in laboratory provided glass bottles with aluminum foil lined caps. At each site, three samples were collected. Using Viton tubing leading into a bucket, three bottles and three caps were completely submerged in sample water. Each bottle was individually filled from the Viton tubing until it overflowed under water. Once submerged and filled, a cap was chosen, completely submerged, and tapped underwater to ensure no air bubbles were trapped. The Viton tubing was removed from the sample bottle and the cap was tightly screwed on under water. The bottle was removed and checked for any visible bubbles. If bubbles were present, the sampled process was repeated with a new cap. If no bubbles were present, electrical tape was used to secure the cap in a clockwise direction.

3.3.2 Analytical Methods

Water samples are chilled, heated, and chilled in cycles in which the headspace gases are pumped away. After five cycles, almost all the ^{3}He is removed. The sample then sits for 10 days, allowing the ^{3}He from tritium decay to accumulate. The gas is then analyzed using a mass spectrometer.

In the laboratory, samples are released from the copper tubes, tubes are heated, and then the water is frozen effectively trapping the dissolved gases in the headspace. Dissolved gases are measured by either mass spectrometer or a high-sensitivity capacitive manometer. The measured amounts of Ne, Ar, Kr, and Xe are used to determine the He present in the sample.

Selected groundwater samples were analyzed for CFC's using a purge-and-trap gas chromatography procedure with an electron capture detector (see http://water.usgs.gov/lab/chlorofluorocarbons/lab/analytical_procedures/) by the Tritium Laboratory at the University of Miami Rosenthiel of Marine and Atmospheric Science.

3.4 Other Sources of Nitrate Data

Using GeoTracker GAMA[27], all data were downloaded for the Salinas Valley. The GeoTracker GAMA database includes data from the California Department of Public Health, GAMA – SWRCB data collection efforts and Regulated Sites. Data were also downloaded from the USGS National Water Information System[28] for wells in the Salinas Valley which contain samples analyzed for nitrate. Data were also extracted from the GAMA special study carried out by LLNL[29].

The Central Coast Regional Board provided two sets of nitrate data including data uploaded as part of the individual well sampling (eNOI) process by L&Gs enrolled in the Irrigated Lands Regulatory Program and data collected by the USGS as part of the Regional Water Quality Control Board Central Coast Ambient Monitoring Program - Groundwater Assessment and Protection (CCAMP-GAP) Domestic Well Project for the Salinas and Pajaro Valleys. The MCWRA provided a Technical Memorandum[30] that contained historical nitrate values for monitoring wells in the Salinas Valley. Monterey County Health Department provided nitrate data from three CCGC member wells that are sampled under their Local Small Water Systems Program. Additionally, CCGC members were able to provide past laboratory results for nine wells.

3.5 Mapping of Nitrate Concentrations in Groundwater

Nitrate mapping for this project was based on the theory of regionalized variables, or geostatistics, to create maps of estimated groundwater nitrate concentrations in the Salinas Valley. The theory of regionalized variables relies on the assumption that data collected in geographic areas is randomly distributed[31]. Kriging, the process of interpolation from measured values of some variable z measured at N locations relies on the determination of the spatial covariance or semivariogram of the variable at points xi (Appendix A). The semivariance (γ) is defined as:

$$\gamma(h) = \frac{variance[z(x_i) - z(x_j)]}{2} \tag{3}$$

where:

h is the lag or average distance between data points and

z(x) is the groundwater nitrate concentration

---

27 http://geotracker.waterboards.ca.gov/gama/, accessed 2/6/2014

28 http://waterdata.usgs.gov/nwis, accessed 4/4/2013

29 Moran JE, Esser BK, Hillegonds D, Holtz M, Roberts SK, Singleton MJ, Visser A, 2011, California GAMA Special Study, Nitrate Fate and Transport in the Salinas Valley. Final Report for the California State Water Resources Control Board. GAMA Special Studies Task 10.5: Surface water-groundwater interaction and nitrate in Central Coast streams. LLNL-TR-484186.

30 Monterey County Water Resources Agency, Technical Memorandum – NITRATE Tasks 2.01, 2.02, 2.04.2b EPA Grant XP-96995301 – Ground Water Sampling, Reporting, and Storage, Ground Water Sampling, Data QA/QC, Data Reduction and Representation. To EPA Region IX, July 30, 2010.

31 David, M. 1977. Geostatistical ore reserve. New York (NY): Elsevier Scientific
Journel, A.G. and Ch. J. Huijbregts. 1978. Mining Geostatistics. San Diego (CA): Academic Press Harcourt Brace & Company, Publishers.
Matheron, G. 1963. Principles of Geostatistics. Economic Geology 58: 1246-1266.

The semivariogram was calculated to estimate the spatial covariance in the area of nitrate concentrations. Interpolation was done with kriging, which uses a linear combination of weighting factors and measured values of $z(x_j)$ that minimize the estimation variance. For Salinas Valley, subbasins were evaluated separately with regard to wells to include in the analysis, and then kriging was conducted on the Salinas Valley as a whole.

The objective of kriging for this study was to characterize the spatial distribution of the estimated nitrate concentrations in the Salinas Valley and provide a conservative estimate of where groundwater nitrate concentrations are likely to be above the MCL. Because of the high spatial variability and non-Gaussian nature of the distribution, the concentrations were transformed to logarithms of the concentrations and SURFER was used to calculate the semivariogram. Kriging was carried out using exact well locations (where available) and a grid of estimated values was generated. A 20 meter cell size was specified for development of maps showing the distribution of estimated groundwater nitrate concentrations.

Indicator kriging[32] was performed using Surfer to address uncertainty in estimated nitrate concentrations by developing a map that displays the probability that concentrations at a given location will exceed the MCL. For indicator kriging, the data are transformed into either zeroes or ones depending on whether they are above or below a specified threshold. The transformed data values are used as input to ordinary kriging and the indicator kriging prediction at a location is interpreted as the probability that the threshold is exceeded[33]. Indicator kriging does not provide any information on how far above or below the threshold the values might be, only the probability that they are above or below the threshold.

3.6 Mapping Assumptions

It was assumed that water quality data collected from 2000 to 2014 are representative of current conditions for the area. When drinking water supply wells are determined to contain nitrate concentrations above the MCL, use and sampling can be discontinued. Thus, a 14-year time period was used for data gathering in an attempt to capture wells where sampling may have been discontinued. Where there was more than one value for samples collected at different times from a well within this time frame, the maximum of all values was used.

[32] Indicator Kriging is an analysis that 1) transforms data into 0s and 1s based on a value being below or above a threshold, and 2) interpolates values using kriging at unknown locations with resulting values being between 0 and 1. The results can be interpreted as probabilities of concentrations at unsampled locations being above the chosen threshold. For example, when transforming the measured data, if the threshold chosen is 45 mg/L, a measured concentration of 10 mg/L at a particular location would be classified as 0, and a concentration of 70 mg/L at another location would be classified as 1. After indicator kriging is performed, if the calculated value is, for example, 0.73 at an unsampled location, there is a 73% probability that if this location was sampled the concentration would be at least 45 mg/L. Additional information can be found at the following link: http://help.arcgis.com/en/arcgisdesktop/10.0/help/index.html#00310000004n000000

[33] Konstantin Krivoruchko, 2011, Spatial Statistical Data Analysis for GIS Users, ESRI Press, 928 pp.

Data from supply wells downloaded from GeoTracker have obfuscated coordinates[34], which creates a dataset where multiple wells may plot at the same location. There are several limitations of the obfuscated and clustered data from GeoTracker. The obfuscated well locations are sometimes not accurate. Moreover, clustered data limited the ability to fully map areas where there is likely impairment of groundwater quality due to high nitrate. To provide a conservative map of where groundwater is likely over the MCL, the maximum of all concentrations was used at each of these "coincident" points for map creation. There were 336 coincident points in the Salinas Valley.

Analytical data downloaded from GeoTracker are reported as either nitrate or nitrate as nitrogen. It was generally assumed that this designation is correct. However, instances were identified where this designation was incorrectly assigned for some data downloaded from Monterey County. Seven wells were identified and GAMA and the L&G's eNOI data were successfully matched for identical wells where the eNOI concentrations were reported as nitrate and GAMA reported nitrate as nitrogen. This classification error can result in a large difference in data used for contouring since values differ by greater than 4 times. Therefore, it was assumed that the eNOI data classification was correct since analyses and values are uploaded directly from the laboratory. It was possible to match data for samples collected by the L&G and the CCGC for one well. CCGC values agreed with values (for the same well) reported in the eNOI, giving credibility to the assumption that the eNOI uses the correct nitrate classification. The GAMA nitrate values for these seven wells were corrected based on the eNOI data. Data from monitoring wells in reports referenced in GeoTracker were compared with values in the GeoTracker database and discrepancies found were also corrected in the project database.

Analytical data with non-detect values were re-assigned concentrations of half the detection limit for averaging and mapping. Where the detection limit was known, half that value was assigned. Where the detection limit was unknown, a detection limit of 1 mg/L was assumed. Some of the analytical data downloaded from GeoTracker had a "<" qualifier, but a large nitrate concentration, e.g., <32 mg/L. These data were excluded from averaging due to the large uncertainty in the actual concentration relative to the MCL. Excluded data are provided in **Appendix B**.

The CCAMP-GAP project samples were obtained from household faucets. Where applicable, the GAP sites were matched to USGS – NWIS sites. Where there were comparison samples, all nitrate concentrations for tap samples generally agreed well with concentrations obtained at the well head.

Consistent with the discussion in the Hydrogeologic Context section and the objectives of characterizing the domestic water supply and shallow groundwater and reasonably delineating areas where concentrations are likely to be over the MCL, it was assumed that the shallow aquifer used for domestic drinking water supply generally extends to a maximum depth of 400 feet throughout the Salinas Valley. Therefore, any wells with known depths greater than 400 feet were removed from the dataset for mapping, with a few exceptions. The exceptions include the wells listed in **Table 6**.

[34] These locations are accurate to within 1 square mile of the actual location.

Table 6. List of Wells Deeper than 400 feet included in the Nitrate Mapping Analysis

Well Name	Basin	Use	Well Depth	Source
AW1840_TASHIR1	East Side	Dom/Irrig	472	Field Visit
AW0713_BLAFGAB	East Side	Dom/Irrig	460	Field Visit; eNOI
San Jerardo deep PW	East Side	Unknown	440	LLNL
AW1656_KIRWLEM	Forebay	Dom/Irrig	410	Field Visit
USGS_361910121184801	Forebay	Domestic	410	USGS-GAP
AW1494_MFLCRSW	Forebay	Domestic	410	Field Visit

For mapping purposes, irrigation wells and domestic/irrigation wells[35] with unknown depths were included in the analysis. It was also assumed that wells with unknown depths having uses of Domestic, Public Supply (for Langley and Upper Valley Subbasins only), Observation, or unknown were all less than 400 feet deep. The rationale for inclusion of irrigation, domestic/irrigation, and a limited subset of Public Supply wells are discussed in a following section of this report.

It is recognized that the definition of shallow varies from within 400 feet in the northern Salinas Valley to within 250 feet in the Upper Valley as is described in the Hydrogeologic Context section. For this analysis, the depth interval that supplies drinking water was considered as the primary concern for mapping. As indicated by the well completion reports gathered and analyzed for the Salinas Valley and described below, the large majority of domestic wells are screened within 400 feet. Therefore, in the interest of striking a balance between characterizing the shallow aquifer and including as many domestic wells as possible, the 400 Foot depth was used for the entire Salinas Valley Groundwater Basin.

For creation of maps where CCGC domestic well locations are shown, locations were obfuscated as follows. For each pair of well-location coordinates, the location coordinate was altered using a random-number generation algorithm in Microsoft Excel. The coordinates were randomly altered in both the east-west and north-south directions to place the well location somewhere within 0.5 miles of the actual location. This resulted in plotting of the well location within a 1-square mile block centered over the actual well location. In some cases the obfuscated well location plotted outside of the L&G parcel.

3.7 Well Construction Information

In an attempt to learn about domestic well construction, available well completion reports from DWR were obtained for the Salinas Valley Groundwater Basin. From these reports, over 1,552 reports that designated wells as domestic use were identified and well construction information was extracted. Of these, 1,517 reports provided well depth information and 1,429 reports provided bottom of screen information for the Salinas Valley. Also, 75 well completion reports designated as public supply wells were extracted for the entire Salinas Valley. The data for well depth are summarized by township.

[35] These are wells that were originally installed as irrigation wells and then converted to use for domestic supply.

4 RESULTS AND DISCUSSION

Figure 1 shows the locations of wells and sources of data used in the analysis of the distribution of groundwater nitrate concentrations in the Salinas Valley. Data sources included GAMA, LLNL, MCWRA, Monterey County Health Department, USGS, the Central Coast Regional Water Quality Control Board and samples collected under the auspices of the CCGC groundwater program. The total number of wells used for mapping the distribution of estimated nitrate concentrations was 758. In the Salinas Valley, the total area of the member parcels equals 120,785 acres. Member parcels are present throughout most of the valley. However, the density of member parcels is lower in the Langley Subbasin, the northern Pressure Subbasin, and the southern Upper Valley Subbasin (**Figure 5**)[36].

4.1 Well Construction

The results of the analysis of over 5,000 DWR well completion reports show that the large majority of the domestic wells have depths within 400 feet of land surface; by subbasin – 82 % in the Langley Subbasin, 76 % in the Pressure Subbasin, 70 % in the East Side Subbasin, 80 % in the Forebay Subbasin, and 92 % in the Upper Valley Subbasin. In light of a primary objective to characterize domestic groundwater quality, this study focused on wells that were designated shallower than 400 feet. Statistics on domestic well total depth and depth to screen bottom by subbasin are summarized in **Table 7**. Of the 5,090 well completion reports, 628 reports (or 12%) indicated the wells had been destroyed.

[36] The locations of CCGC member wells were obfuscated to protect member privacy. The locations of CCGC member wells shown on Figure 5 were randomly adjusted up to 0.5 miles in both the east-west and north-south directions. The wells are plotted within a 1 mi^2 block centered over the actual well location. Therefore, the wells may not be shown on the member parcels on which they are actually located.

Table 7. Summary Statistics for Domestic Depth and Screen Bottom Reported on Well Completion Reports by Subbasin

	Langley Subbasin	Pressure Subbasin	East Side Subbasin	Forebay Subbasin	Upper Valley Subbasin
Well Depth					
Average	302	318	332	272	204
Median	300	295	300	200	153
Minimum	48	40	58.5	75	75
Maximum	720	1488	983	900	560
Number of wells	481	577	320	103	36
Screen Bottom					
Average	295	309	329	260	194
Median	299	288	299	185	140
Minimum	44	13	72	70	70
Maximum	700	1448	963	900	560
Number of wells	466	537	292	99	35
Percentage of wells depths within 400 feet of land surface	81.5%	76.4%	70.3%	79.6%	91.7%

4.1.1 Langley Area Subbasin

In the Langley Subbasin, the average depth to the bottom of the well screens from available domestic well completion reports is 295 feet. Seventy-three (73) well completion reports (16%) reported that the bottom of the well screen was greater than 400 feet. Therefore, based on the DWR well completion reports, for any domestic well there is 84% likelihood that the well screen intercepts water from less than 400 feet. The average well depth was 302 feet. Eighty-nine (89) well completion reports (19%) reported that the bottom of the well was greater than 400 feet.

4.1.2 <u>**Pressure Subbasin**</u>

In the Pressure Subbasin, the average depth to the bottom of the well screens from available domestic well completion reports is 309 feet. One hundred fourteen (114) well completion reports (21%) stated that the bottom of the well screen was greater than 400 feet. For any domestic well therefore, there is 79% likelihood that the well screen intercepts water from less than 400 feet. The average well depth was 332 feet. One hundred thirty-six (136) well completion reports (24%) reported that the bottom of the well was greater than 400 feet.

4.1.3 <u>**East Side Subbasin**</u>

In the East Side Subbasin, the average depth to the bottom of the well screens from available domestic well completion reports is 328 feet. Eighty-three (83) well completion reports (28%) reported that the bottom of the well screen was greater than 400 feet. Therefore, for any domestic well there is 72% likelihood that the well screen intercepts water from less than 400 feet. The average well depth was 332 feet. Ninety-five (95) well completion reports (30%) reported that the bottom of the well was greater than 400 feet.

4.1.4 <u>**Forebay Subbasin**</u>

In the Forebay Subbasin, the average depth to the bottom of the well screens from available domestic well completion reports is 260 feet. Seventeen (17) well completion reports (17%) stated that the bottom of the well screen was greater than 400 feet. Therefore, for any domestic well there is 83% likelihood that the well screen intercepts water from less than 400 feet. The average well depth was 272 feet. Twenty-one (21) well completion reports (20%) reported that the bottom of the well was greater than 400 feet.

4.1.5 <u>**Upper Valley Subbasin**</u>

In the Upper Valley Subbasin, the average depth to the bottom of the well screens from available domestic well completion reports is 194 feet. Two (2) well completion reports (6%) reported that the bottom of the well screen was greater than 400 feet. Therefore, for any domestic well there is 94% likelihood that the well screen intercepts water from less than 400 feet. The average well depth was 204 feet. Three (3) well completion reports (8%) reported that the bottom of the well was greater than 400 feet.

Figure 6 shows the distribution of average domestic well depths by township for the Salinas Valley and vicinity. **Figure 6** shows that the average domestic well depth ranges from 109 to 386 feet. The average well depth generally decreases from the lower Salinas Valley to the Upper Valley. For a subset of the 227 wells sampled on Coalition L&Gs' properties in the Salinas Valley, well completion reports or well construction information received from L&Gs were able to be matched to specific wells. Well depths and screened interval data were able to be obtained for some non-CCGC wells used in the analysis. In total, well depth information was obtained for 195 wells. **Figure 7** shows the distribution of well depths[37]. Well depths vary substantially from 10 to 1,364 feet. Most wells (72%) were shallower than 400 feet. Where well depth and screened interval information was available, wells deeper than 400 feet were generally excluded for purposes of developing maps of nitrate concentrations. However, a few wells with well depths slightly in excess of 400 feet were retained for the analysis (**Table 6**), based on the assumption that the majority or the entire screen interval was less than 400 feet. Many wells have a 20-foot sump below the screen interval that does not contribute flow to the well, but does add to the total well depth.

Figure 8 shows the distribution of average public supply well depths by section for the Salinas Valley. These well depths were extracted from available DWR well completion reports with the designation of either Public Supply or Municipal well. Most public supply wells in the northern half of the Salinas Valley are deeper than 400 feet; however there are some sections, especially toward the valley margins that have shallower well depths. Four sections in the lower half of the Salinas Valley have average public supply wells with depths that are less than 400 feet deep.

Well depth statistics in **Table 8** show that the average depth for Public Supply wells is generally deeper than 400 feet. Twenty-five percent of the wells were completed within 400 feet. **Table 8** also indicates that the deepest screen interval is generally about 30 feet shallower than the stated well depth (likely due in part to use of sumps (blank well casing) beneath the lowest screen interval in most wells. **Table 9** provides Public Supply well depth statistics by subbasin, and shows that Public Supply wells are generally shallower and less than 400 feet deep in the Langley and Upper Valley Subbasins. Public Supply wells depths are generally much greater than 400 feet in the Pressure, East Side, and Forebay Subbasins. Based on these data, Public Supply wells were included in the nitrate mapping for the Langley Area and Upper Valley subbasins, and excluded in the Pressure, East Side, and Forebay Subbasins.

Relatively few well logs (75) in the DWR well log database are classified as Public Supply compared with the extensive public supply wells designated in GeoTracker GAMA. In Salinas Valley over 415 wells downloaded from GeoTracker are listed as CDPH supply wells, 398 of which have nitrate data collected since the year 2000. Therefore, it is possible that many wells in the CDPH database are classified as other sources, such as domestic, on the DWR well completion reports. As discussed above, most domestic well depths are shallower than 400 feet. The CDPH well dataset includes any public water system that supplies water to either 15 service connections or 25 people at least 60 days of the year. Such well uses can include a well serving a campground, a rural school or an agricultural facility to sources that serve a large community[38]. Therefore, excluding the CDPH supply well data in the nitrate mapping dataset for three subbasins (Pressure, East Side, and Forebay) may exclude some shallow water sources. However, further review of nitrate concentrations by subbasin and well type (as described below) combined with the well log depth data (described above) indicate the exclusion of Public Supply wells in these three subbasins is warranted.

---

[37] The locations of CCGC member wells were obfuscated to protect member privacy. The locations of CCGC member wells shown on were randomly adjusted up to 0.5 miles in both the east-west and north-south directions. The wells are plotted within a 1 mi^2 block centered over the actual well location.

[38] Personal communication with Jan Sweigert, District Engineer of SWRCB Division of Drinking Water, 12/5/2014.

Table 8. Summary Statistics for Public Supply Wells - Well Depth and Screen Bottom Reported on DWR Well Completion Reports

	Well Depth (feet)	Screen Bottom (feet)
Average	558	530
Median	575	543
Minimum	130	124
Maximum	1,500	1,080
Number of wells	75	74

Table 9. Summary Well Depth Statistics for Public Supply Wells by Subbasin

Subbasin	Number of Well Logs	Well Depth Min (ft)	Well Depth Max (ft)	Well Depth Average (ft)	Well Depth Median (ft)
Langley Area	6	280	575	435	435
Pressure	33	175	1,500	593	600
East Side	22	250	900	583	636
Forebay	12	150	935	542	585
Upper Valley	2	130	227	179	179
All Subbasins	75	130	1,500	558	

Nitrate concentration statistics by well type and subbasin are summarized in **Table 10**. These data were used to help evaluate domestic/irrigation and irrigation wells for inclusion in nitrate mapping. These data indicate that domestic/irrigation and irrigation well depths are likely similar to domestic wells based on their similar average nitrate concentrations. This trend is particularly apparent in the East Side and Forebay Subbasins, where Public Supply wells are generally screened deeper than 400 feet and have relatively low nitrate concentrations. Domestic/irrigation and irrigation wells in the East Side and Forebay Subbasins have nitrate concentrations more similar to those of domestic wells as compared to Public Supply wells, which have much lower nitrate concentrations that are likely due to their deeper depths. Therefore, domestic/irrigation and irrigation wells were included in the nitrate mapping analysis in the East Side and Forebay Subbasins, except where they had known depths in excess of 400 feet. Domestic/irrigation and irrigation wells with unknown depths were also included in the nitrate mapping analysis for the Langley and Upper Valley Subbasins due to overall shallower Public Supply well depths in those subbasins.

Table 10. Average Nitrate Concentrations by Subbasin and Well Type

Salinas	Count	Nitrate Concentration mg/L NO3-NO3			
		Min (mg/L)	Max (mg/L)	Average (mg/L)	Median (mg/L)
East Side	**230**	**0.2**	**690**	**88**	**8**
Dom/Irrig	8	17.0	317	155	173
Domestic	51	0.5	614	153	114
Irrigation	31	2.9	690	101	56
Observation	39	0.2	115	27	8
Public Supply	68	1.0	402	50	29
Unknown	33	0.5	555	110	41
Forebay	**302**	**0.4**	**511**	**82**	**9**
Dom/Irrig	22	7.0	379	100	69
Domestic	134	0.8	511	115	85
Irrigation	81	0.5	323	60	40
Observation	1	0.5	0.5	0.5	0.0
Public Supply	46	0.4	119	28	16
Unknown	18	0.8	230	64	9
Langley	**238**	**0.1**	**284**	**20**	**3**
Dom/Irrig	1	8.0	8	8	0
Domestic	27	0.2	97	17	8
Irrigation	3	0.2	31	11	3
Observation	54	0.5	284	19	7
Public Supply	134	0.3	80	23	17
Unknown	19	0.1	27	7	7
Pressure	**399**	**0.1**	**259**	**26**	**1**
Dom/Irrig	22	0.5	174	14	2
Domestic	98	0.1	259	35	9
Irrigation	73	0.1	167	28	10
Observation	46	0.2	100	12	1
Public Supply	128	0.3	190	24	13
Unknown	32	0.1	167	30	8
Upper Valley	**125**	**0.1**	**482**	**56**	**2**
Dom/Irrig	2	20.0	61	41	41
Domestic	46	0.1	482	91	57
Irrigation	40	1.8	199	42	23
Observation	11	0.4	135	30	2
Public Supply	22	0.5	143	32	16
Unknown	4	1.4	5	4	4
Grand Total	**1,294**	**0.1**	**690**	**52**	**1**

4.2 Distribution of Groundwater Nitrate Concentrations

Results from 758 wells were used to map the distribution of estimated groundwater nitrate (as NO_3) concentrations in shallow groundwater. The wells included in the nitrate mapping analysis and definition of shallow groundwater (generally, depths of less than 400 feet) are described in previous sections of this TM. For wells with multiple sample dates from 2000 to 2014, the maximum nitrate concentrations for each well were used in the analysis.

Summary statistics for nitrate concentrations used in the mapping analysis are shown in **Table 11**. The mean concentration was 68 mg/L as NO_3. The median was 26 mg/L as NO_3. Values ranged from less than the detection limit of 0.09 mg/L to 614 mg/L. A total of 309 wells (41%) out of the 758 included in the analysis had maximum concentrations over the MCL of 45 mg/L. In the five subbasins, the mean nitrate concentration ranged from a low of 19 mg/L (median of 8 mg/L) in the Langley Subbasin to 105 mg/L (median of 50 mg/L) in the East Side Subbasin. The percent of wells with maximum nitrate concentrations exceeding the MCL ranged from 13% in the Langley Subbasin to 58% in the Forebay Subbasin.

Table 11. Summary Statistics for Maximum Groundwater Nitrate Concentrations in Shallow Groundwater

	Entire Salinas Valley	Langley Subbasin	Pressure Subbasin	East Side Subbasin	Forebay Subbasin	Upper Valley Subbasin
Mean (mg/L)	68	19	29	105	94	60
Median (mg/L)	26	8	7	50	59	24
Minimum (mg/L)	0.1	0.2	0.1	0.2	0.5	0.1
Maximum (mg/L)	614	284	259	614	511	482
Number of Wells	758	108	150	149	239	112
Number of Wells (Percent) With Max Concentration above MCL	309 (41%)	14 (13%)	34 (23%)	78 (52%)	138 (58%)	45 (40%)
Total Area Mapped (Acres)	320,408	15,342	82,136	56,590	90,708	75,632
Percent of area mapped as over the MCL	34%	7%	14%	58%	44%	31%

Table 12 shows the summary statistics for wells sampled on CCGC parcels. The mean concentration from domestic wells was 100 mg/L and the median was 55.5 mg/L. Concentrations ranged from less than the detection limit to 614 mg/L. See **Appendix B** for all well exclusions. The QA/QC results for groundwater sampling conducted by CCGC are provided in **Appendix C**, well information and results are presented in **Appendix D**, and the Exceedance Notification follow-up report is in **Appendix E**.

Table 12. Summary Statistics for Groundwater Nitrate Concentrations Sampled by the CCGC

	Domestic and Domestic/Irrigation	Irrigation
Mean (mg/L)	100	127
Median (mg/L)	54	15.5
Minimum (mg/L)	0.4	6
Maximum (mg/L)	614	690
Number of wells	221	6
Number of wells (percentage) with concentrations over the MCL	121 (55 %)	1 (17 %)

Two hundred and twenty one (221) domestic supply wells were sampled by the CCGC in the Salinas Valley. From the 1,517 DWR domestic well completion reports with well depth information in Salinas Valley, 1,173 have well depths less than 400 feet. These data indicate that the CCGC sampled about 15% of domestic wells for which DWR well completion reports exist in the Salinas Valley. A total of 341 known domestic wells were used in the analysis which would indicate a representation of 22% of domestic wells for which DWR well completion reports exist in the Salinas Valley. It is uncertain how many of these wells remain in operation. **Figure 9** shows the known domestic well locations based on the wells sampled by the CCGC and data obtained from other sources and sections with DWR domestic well completion reports. **Figure 9** indicates that the domestic well data used for this report adequately represents the areas where, based on DWR well completion reports, domestic wells have been installed.

Boxplots **(Figure 10)** show the range and median of maximum groundwater nitrate concentrations for the five subbasins. In the Pressure Subbasin, groundwater nitrate concentrations are generally below the MCL but there are some wells with concentrations that exceed the MCL ranging up to about 300 mg/L. Similarly in the Langley Subbasin, the majority of the values fall below the MCL but a number of wells had concentrations exceeding the MCL, ranging up to 100 mg/L (with one outlier at approximately 300 mg/L). The median (of the maximum) nitrate concentrations for the East Side Subbasin is just above the MCL, and there is very large variability in the nitrate concentrations. Some outlier wells contain nitrate concentrations exceeding 600 mg/L in the East Side Subbasin. In the Forebay Subbasin, the median exceeds the MCL, and outlier well concentrations range up to about 500 mg/L. The Upper Valley Subbasin has a median below the MCL, with maximum outlier concentrations between 200 and 300 mg/L.

Figures 11a through 11e show boxplots of nitrate concentrations by depth for the Langley Subbasin, Pressure Subbasin, East Side Subbasin, Forebay Subbasin, and Upper Valley Subbasin. In the Langley Subbasin, nitrate concentrations are generally less than the MCL. Only one point, from a depth interval of 251-300 feet, exceeded the MCL. In the East Side Subbasin, median nitrate concentrations above the MCL were observed in depth ranges of 151-200, 401-450, and 451-500 feet. In the Pressure Subbasin, median nitrate concentrations exceed the MCL in the shallow depths from 51 to 100 feet. The median nitrate concentrations from greater depths are all less than the MCL; however, there are sample points that exceed the MCL at most depth intervals. In the Forebay Subbasin, median nitrate concentrations exceeded the MCL in depth ranges from 101 to 350 feet. In the Upper Valley Subbasin, median nitrate concentrations at all depth intervals were less than the MCL. However, some wells had concentrations greater than the MCL at depths from 51 to 200 feet. The six sample points greater than 200 feet are all well below the MCL. For the entire Salinas Valley, wells greater than 400 feet deep generally have lower nitrate concentrations (with the exception of the 400 to 500 foot interval in East Side Subbasin).

Results from 758 wells were used to determine the areal distribution of groundwater nitrate (as NO_3) concentrations. **Figure 12** shows areal distribution of estimated groundwater nitrate concentrations based on kriging results in the Salinas Valley[39], which provides an estimate of nitrate levels at unsampled locations. It should be noted that the nitrate concentrations contours are only an estimate and are based on nearby measured values. Mapping of estimated nitrate concentrations was limited to areas within 1.5 miles of the data points.

Mapped groundwater nitrate concentrations in the Pressure Subbasin are generally less than one-half of the MCL due to widespread distribution of a large number of low nitrate concentrations. Exceptions include areas of concentrations over the MCL northwest and southwest of Chualar. In the Langley Subbasin, mapped groundwater nitrate concentrations are generally less than one-half of the MCL. Exceptions include small areas in the northern parts of the subbasin.

In contrast, there are large areas in the East Side Subbasin where groundwater nitrate concentrations are mapped as greater than the MCL. These include areas north, east, and southeast of Salinas, areas north, east, and southeast of Chualar, and north and east of Gonzales.

Fifty-eight percent (58%) of the area within the Forebay Subbasin is mapped as having nitrate concentrations of nitrate in groundwater greater than the MCL. The large area mapped as greater than the MCL is influenced by the preponderance of high values spatially distributed throughout the subbasin. For example, in the area northwest of Soledad **(Figure 12)**, the majority of the wells have concentrations that are over the MCL. Similarly, large numbers of values close to or over the MCL have a dominant influence on the areas around Greenfield.

In the Upper Valley Subbasin there are a relatively small number of sample points. The spatial distribution of high nitrate values results in clustered areas where concentrations are over the MCL near King City and along the eastern boundary both north and south of San Ardo.

The density of wells included in the nitrate mapping analysis varies by subbasin. Well density in the Langley Subbasin was 1 well per 142 acres (4.5 wells per square mile). In the East Side and Forebay Subbasins, the spatial density of wells was 1 well per 380 acres (1.7 wells per square mile). In the Pressure and Upper Valley Subbasins, the density was 1 well per 548 and 675 acres (about 1 well per square mile), respectively.

---

[39] The locations of CCGC member wells were obfuscated to protect member privacy. The locations of CCGC member wells shown were randomly adjusted up to 0.5 miles in both the east-west and north-south directions. The wells are plotted within a 1 mi^2 block centered over the actual well location. The actual locations were used when kriging the nitrate concentration surface.

Figure 13 shows the locations of CCGC member parcels overlain on the mapped areas of varying concentration ranges shown in **Figure 12**. Member parcels are generally evenly distributed throughout the Salinas Valley and overlay all concentration ranges. However, the density of parcels in the northern Pressure Subbasin and Langley Subbasin is low. Member parcels are also relatively sparse in the Upper Valley Subbasin.

Figure 14 shows the probability of exceeding a 45 mg/L nitrate concentration based on the indicator kriging results. For indicator kriging, the data were transformed into either zeroes or ones depending on whether they are above or below a specified threshold. The transformed data values are used as input to ordinary kriging and the indicator kriging prediction at a location is interpreted as the probability that the threshold is exceeded. The probability map provides an analysis to address the uncertainty of nitrate concentrations at unsampled locations by providing a probability of exceeding the MCL. In areas where nearby wells have measured concentrations above the nitrate MCL, higher probabilities of exceeding the MCL are calculated at unsampled locations. Conversely, in areas where nearby wells have measured concentrations below the MCL, lower probabilities of exceeding the MCL are calculated at unsampled locations.

The majority of the areas within the Pressure and Langley Subbasins have a probability of less than 50% for nitrate concentrations exceeding the nitrate MCL, except for areas south and northwest of Chualar and some areas northwest of Salinas where the probability of exceeding the nitrate MCL is greater than 50%. Most of the area in the East Side Subbasin has a greater than 50% probability of exceeding the nitrate MCL. Within the Forebay Subbasin, relatively large areas around Soledad and Greenfield have a greater than 50% probability of exceeding the nitrate MCL. In the Upper Valley Subbasin, areas around King City and San Ardo have greater than 50% probability of exceeding the nitrate MCL.

Appendix A presents kriging methods and parameter values used for the analysis, and the related kriging statistics.

4.3 Factors Affecting the Distribution of Nitrate Concentrations

Data related to major ions, nitrate, field parameters, percent sand in soil, and hydrogeology were used to understand factors and processes affecting groundwater nitrate concentrations.

4.3.1 Major Ions and Piper Diagrams

Piper diagrams provide a graphic way of viewing the relative concentrations of major ions in groundwater (calcium, magnesium, sodium, potassium, chloride, sulfate, bicarbonate and carbonate). **Figures 15 to 19** show the Piper diagrams for the samples collected by the CCGC in the Salinas Valley for the four subbasins.

Boyle and others[40] hypothesized that variation in major-ion chemistry in Salinas Valley groundwater result from geochemical processes occurring along groundwater flow paths. Specifically, relatively high concentrations of calcium and magnesium are associated with more recently recharged water. Calcium and magnesium can move from groundwater to clays and displace sodium which tends to increase in concentration as groundwater moves along its flow path. Additionally, groundwater tends to continuously dissolve carbonate minerals found naturally in geological materials as it travels through the subsurface which results in higher concentrations of bicarbonate in older waters. Lee[41] also demonstrated this geochemical evolution in the southeastern United States.

Specifically, points representing groundwater samples collected in the four subbasins may indicate a general chemical shift from the calcium-magnesium/chloride-sulfate waters to sodium/potassium bicarbonate waters (see **Figure 15** for groundwater chemical characteristics). Groundwater generally flows horizontally from south to north in the Salinas Valley from the Upper Valley to the Pressure Subbasins. Groundwater has historically flowed horizontally northward from the Pressure to the East Side Subbasins due to low groundwater levels in the East Side Subbasin[42]. The majority of the points on the Upper Valley Piper diagram fall in the calcium/magnesium-chloride/sulfate sector in the central diamond **(Figure 16)**. The anion triangle (lower right) may indicate a chemical shift from primarily sulfate to bicarbonate/carbonate dominance. The points on the cation triangle (lower left) indicate a shift towards sodium from calcium dominance.

In the Forebay Subbasin, a similar pattern is evident in which points representing calcium/magnesium-chloride/sulfate groundwater transition to points representing calcium/magnesium-bicarbonate/carbonate groundwater **(Figure 17)**. Points in the anion triangle similarly indicate a shift from chloride and sulfate to bicarbonate/carbonate dominance. Points in the cation triangle indicate a shift from calcium towards sodium dominance.

In the Pressure Subbasin, there is a greater presence of sodium/bicarbonate-carbonate groundwater and less presence of calcium/magnesium-chloride/sulfate groundwater **(Figure 18)**. The anion and cation triangles indicate a general shift from chloride and sulfate to bicarbonate/carbonate dominance and calcium to sodium dominance, respectively. A similar groundwater geochemical evolution pattern is evident in the East Side Subbasin Piper diagram; general shifts from calcium/magnesium-chloride/sulfate groundwater to sodium/bicarbonate-carbonate groundwater in the central diamond

[40] Boyle, Dylan, King, Aaron, Kourakos, Giorgos, Lockhart, Katherine, Mayzelle, Megan, Fogg, Graham E. and Harter, Thomas, 2012, Addressing Nitrate in California's Drinking Water With a Focus on Tulare Lake Basin and Salinas Valley Groundwater Report for the State Water Resources Control Board Report to the Legislature, Technical Report 4

[41] Lee, R.W., 1985, Geochemistry of Groundwater in Cretaceous Sediments of the Southeastern Coastal Plain of Eastern Mississippi and Western Alabama, Water Resources Research, 21, 1451 - 1556

[42] Monterey County Water Resources Agency,2011, Lines of Equal Ground Water Elevation in the Pressure 180-Foot, East Side Shallow, Forebay and Upper Valley Aquifers, http://www.mcwra.co.monterey.ca.us/groundwater_elevation_contours/documents/GWLcontours%20Fall%202011%20Shallow.pdf

and from calcium towards sodium and chloride towards bicarbonate water in the cation and anion triangles, respectively **(Figure 19)**.

Available well depths posted on the Piper diagrams **(Figures 16 – 19)** show generally increasing well depths from south to north. In the Upper Valley Subbasin, all posted well depths are 100 feet. In the Forebay Subbasin diagram, well depths are deeper than in the Upper Valley Subbasin and range from 120 to 410 feet. The well depths in the East Side Subbasin are generally deeper than the in the Forebay and Upper Valley Subbasins and range from 180 to over 660 feet. In the Forebay, East Side and Upper Valley subbasins, there is no apparent relation of water type to well depth. In the Pressure Subbasin, wells are generally deeper than in the Upper Valley and Forebay subbasins and range from 176 to 1,010 feet. The deepest wells may be associated with more geochemically evolved groundwater in the calcium/magnesium-bicarbonate/carbonate sector of the central diamond.

The geochemical evolution of groundwater therefore varies by horizontal position within the Salinas Valley Groundwater Basin and well depth. Deeper wells in the East Side and Pressure subbasins collect water that is more geochemically evolved. Shallower well depths in the Forebay and Upper Valley subbasins may be associated with less geochemically evolved water.

4.3.2 Nitrate Concentrations and Oxidation-Reduction Potential and Dissolved Oxygen Concentrations

Figure 20 indicates an oxidation-reduction potential (ORP) influence on nitrate concentrations and speciation. Higher nitrate concentrations were generally associated with less reducing conditions over about 75 mV. The line delineating an ORP value of 75 mV indicates the theoretical redox potential below which nitrate is denitrified[43]. Where ORP values below 75 mV were measured, nitrate concentrations were generally lower than where ORP values were above 75 mV. Dissolved oxygen concentrations varied from 0.03 to 13.5 mg/L. There was no apparent relation between dissolved oxygen and nitrate concentrations.

4.3.3 Relation of Nitrate Concentrations to Spatially Variable Soil Texture

In some areas of the Salinas Valley, soil texture appears to influence groundwater nitrate concentrations; greater soil percent sand may result in increased nitrate movement to groundwater **(Figure 21)**. In the Pressure and East Side Subbasins, relatively higher nitrate concentrations above the MCL are associated with greater sand contents in soils in the East Side and southern Pressure Subbasins **(Figure 22)**. Concentrations below the MCL are associated with soil sand percentages less than 50% in the northwestern Pressure Subbasin.

In the Forebay Subbasin, there is no discernable relation of nitrate concentrations to soil texture except where there are very high percent sands associated with native and riparian vegetation along the Salinas River and Arroyo Seco **(Figure 23)**. There are generally decreasing concentrations associated with high

[43] Stumm W. and Morgan, J.J., 1981, *Aquatic Chemistry*, John Wiley and Sons, New York

sand percentages in the Forebay Subbasin. In the Upper Valley Subbasin where there are available data and member parcels (see **Figure 5**), there is no discernable relation between nitrate concentrations and soil texture **(Figure 24)**. Average concentrations in the Upper Valley Subbasin are lower than in the Forebay Subbasin. This may be the result of infiltration from the Salinas River.

Based on review of nitrate data and various factors as described above, there are likely several factors that influence nitrate concentrations in any given area.

5 SUMMARY AND CONCLUSIONS

This section provides a summary of the primary study objectives, findings, and data gaps. The summary includes the conclusions derived from the collection, analysis, and mapping of groundwater nitrate concentration data for wells that represent the domestic supply aquifers in the Salinas Valley.

5.1 Study Objectives

- Characterize shallow groundwater aquifers with focus on domestic drinking water supply.
- Prepare estimated nitrate concentration maps of Salinas Valley covering areas with sufficient data.
- Identify data gaps and study limitations.

5.2 General Findings

- Based on the examination of about 6,000 well completion reports for the Salinas Valley, 1,552 well completion reports were designated as being associated with domestic wells. Analysis of the well completion reports indicated that the large majority of domestic wells in the Salinas Valley are screened within 400 feet of land surface.
- Additionally, a small portion of the well completion reports provided by DWR (75 reports) were designated as Public Supply wells. These wells are generally completed at deeper depths than the domestic wells. However, Public Supply well depths varied significantly by subbasin.
- The coincidence of locations of wells sampled and locations of available well completion reports demonstrate that the CCGC sampling and inclusion of sampling results from other agencies generally adequately represent the locations where domestic wells have been installed.
- Two hundred and twenty-one wells on CCGC properties were sampled in the following subbasins:
    - Langley - 2;
    - Pressure - 65;
    - East Side - 35
    - Forebay - 93;
    - Upper Valley - 26.
- Depths for all the CCGC wells sampled ranged from 60 to 1010 feet. Domestic well depths ranged from 60 to 660 feet.
- For 758 wells with nitrate concentrations in the Salinas Valley, 41% had maximum concentrations over the MCL.
- Within the five subbasins, the percentage of wells exceeding the MCL varied from 13% in the Langley Subbasin to 58% in the Forebay Subbasin.

- Within the Salinas Valley, 34% of the area was mapped as having nitrate concentrations over the MCL.
- Within the five subbasins, the percentage of the area mapped as having high nitrate concentrations varied from 7% in the Langley Subbasin to 14%, 58%, 44% and 31% in the Pressure, East Side, Forebay and Upper Valley Subbasins, respectively.
- For the domestic wells sampled on CCGC properties, 55% had concentrations exceeding the MCL. All available domestic wells on CCGC properties were sampled.
- The distribution of nitrate concentrations with depth demonstrates that in general, concentrations decrease with depth below about 400 feet (except in East Side Subbasin). Specifically:
  - In the Langley Subbasin, only one point, from a depth interval of 251-300 feet, exceeded the MCL;
  - In the East Side Subbasin, median nitrate concentrations above the MCL were observed in depth ranges 151-200, 401-450, and 451-500 feet;
  - In the Pressure Subbasin, median nitrate concentrations exceed the MCL in the shallow depths from 51 to 100 feet and the median nitrate concentrations from greater depths were all less than the MCL; however, there are sample points that exceed the MCL at most depth intervals;
  - In the Forebay Subbasin, median nitrate concentrations exceeded the MCL in depth ranges from 101 to 350 feet;
  - In the Upper Valley Subbasin, median nitrate concentrations were less than the MCL at all depth intervals, but some wells shallower than 200 feet were above the MCL and the six sample points greater than 200 feet were all well below the MCL.
- Maps depicting estimated nitrate concentrations generally indicate concentrations below the MCL in the Pressure and Langley Subbasins. Concentrations above the MCL prevail throughout most of the East Side Subbasin. The Forebay and Upper Valley Subbasins each have significant areas with nitrate concentrations both above and below the MCL.
- Uncertainty was addressed using indicator kriging to develop a map of the probability of exceeding the nitrate MCL throughout Salinas Valley. The results generally indicate the majority of the areas within the Pressure and Langley Subbasins have a probability of less than 50% for nitrate concentrations exceeding the nitrate MCL, most of the area in the East Side Subbasin has a greater than 50% probability of exceeding the nitrate MCL, areas around Soledad and Greenfield in the Forebay Subbasin have a greater than 50% probability of exceeding the nitrate MCL, and areas around King City and San Ardo in the Upper Valley Subbasin have greater than 50% probability of exceeding the nitrate MCL.
- The density of wells varied by subbasin.
  - In the Langley Subbasin, the well density was 4.5 wells per square mile.
  - In the East Side and Forebay Subbasins, the spatial density of wells was 1.7 wells per square mile.
  - In the Pressure and Upper Valley Subbasins, the density was about one well per square mile.
  - These well density values appear generally sufficient for mapping of areas where groundwater is likely to be over the MCL.
- Where ORP values below 75 mV were measured, nitrate concentrations were generally lower than where ORP values were above 75 mV.

- Groundwater samples collected in the four subbasins indicate there may be a general geochemical shift from calcium-magnesium/chloride-sulfate waters to sodium/potassium bicarbonate waters.
- The relationship between nitrate concentrations and soil texture varies by subbasin.

Based on review of nitrate data and various factors as described above, there are likely several factors that influence nitrate concentrations in any given area.

5.3 Data Gaps

- There are several areas where additional data will be beneficial for the characterization of groundwater quality. These include areas where there are large data gaps such as the Upper Valley Subbasin and smaller areas without data points primarily in the Pressure and East Side Subbasins and less so in the Forebay Subbasin.
- Future inclusion of data collected by the USGS and Monterey County Health Department will improve the characterization of groundwater quality for human consumption.

FIGURES

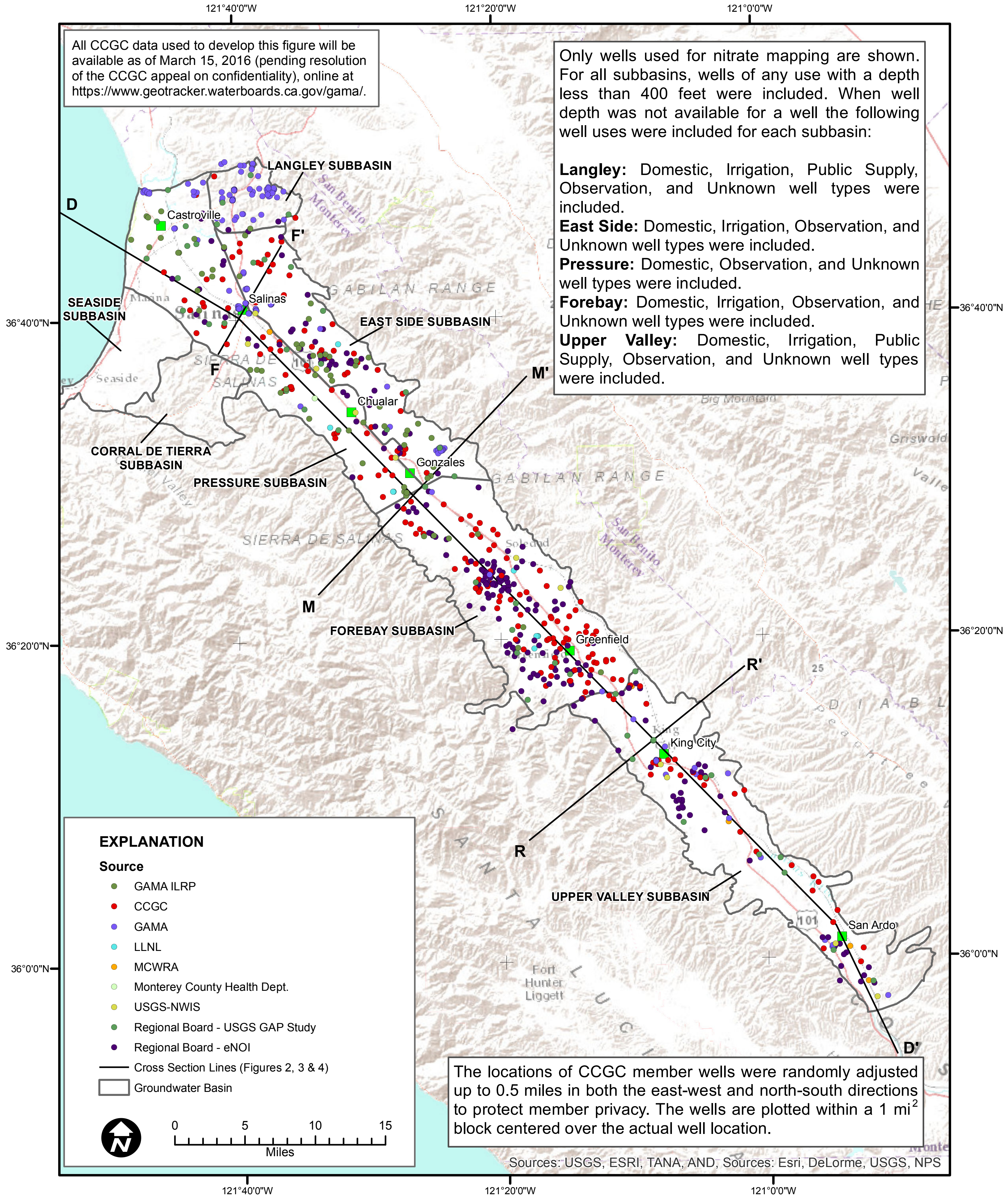


Figure 1. Subbasins and Locations of Wells used for Mapping of Nitrate Concentrations

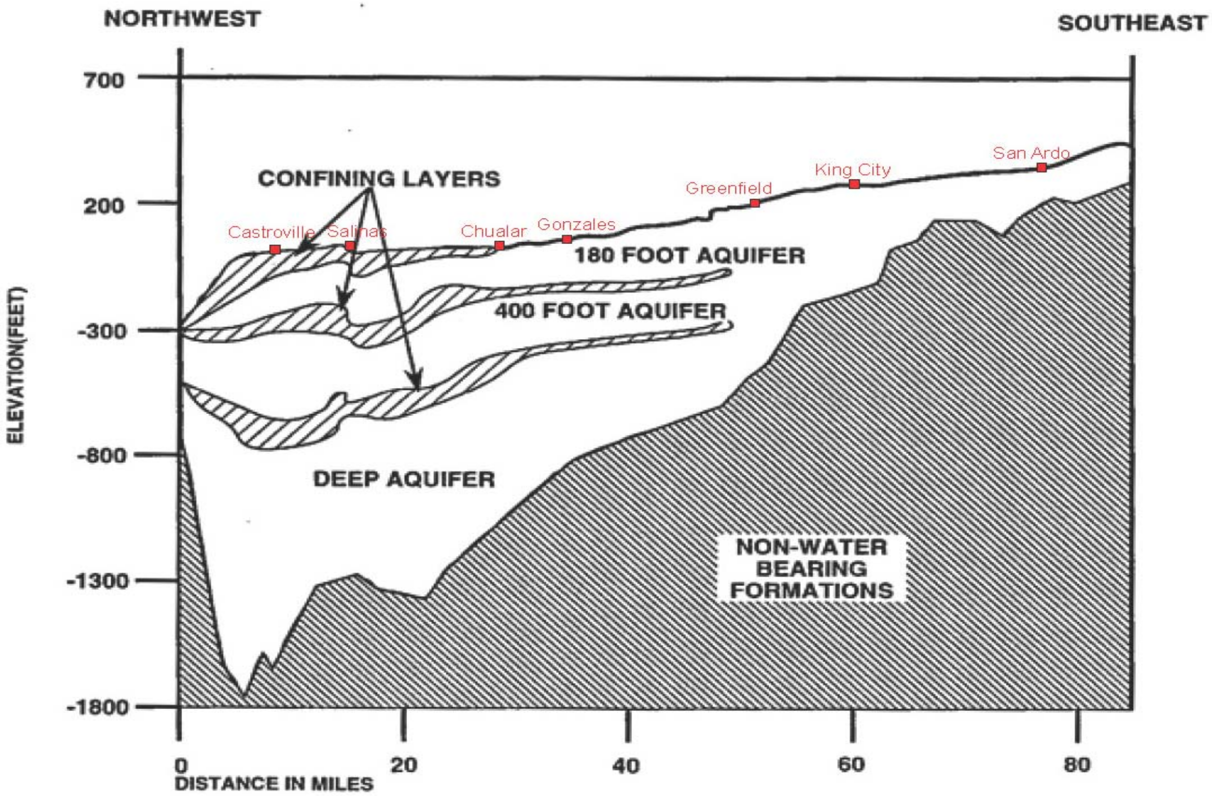


Figure 2. Conceptual Geologic Cross Section, Northwest to Southeast (down valley)

Note: Modified from Montgomery Watson, 1994, Salinas River Basin Water Resources Management Plan Task 1.09 Salinas Valley Groundwater Flow and Quality Model Report.

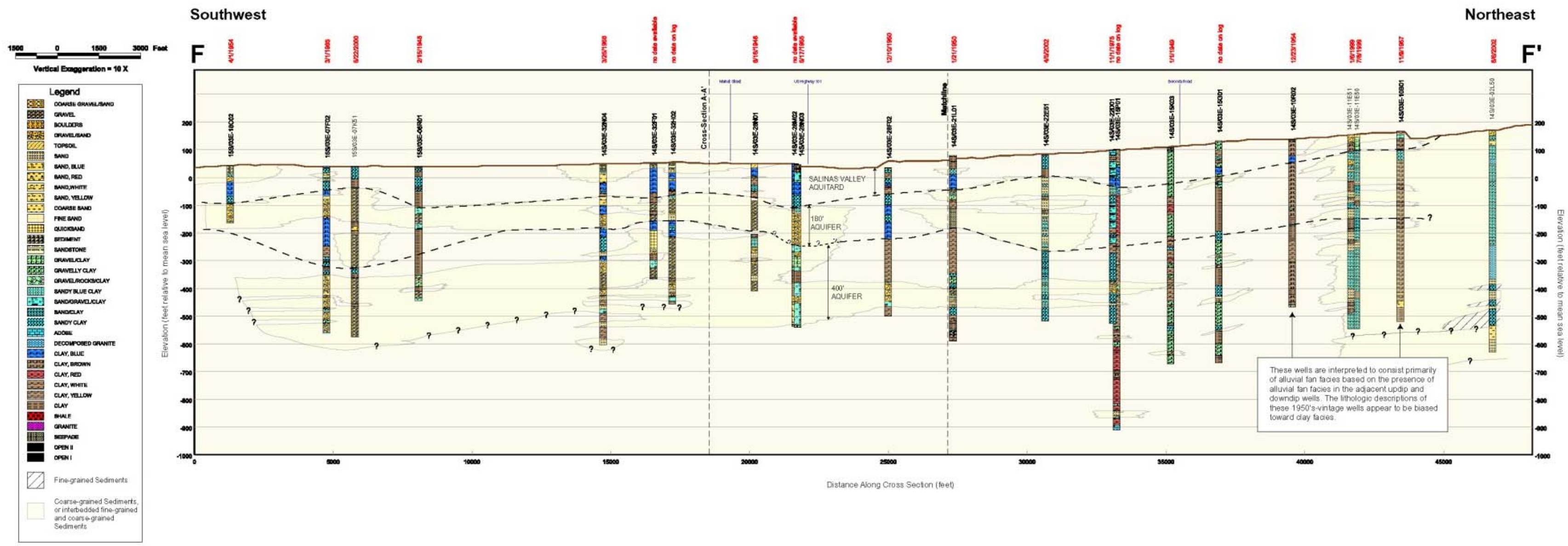


Figure 3. Geologic Cross Section, Southwest to Northeast (cross Valley) near Salinas

b2ůŜ a2ŘĦŜŘ from Kennedy/Jenks Consultants, 2004, Hydrostratigraphic Analysis of the Northern Salinas Valley. Final Report Prepared for Monterey County Water Resources Agency.

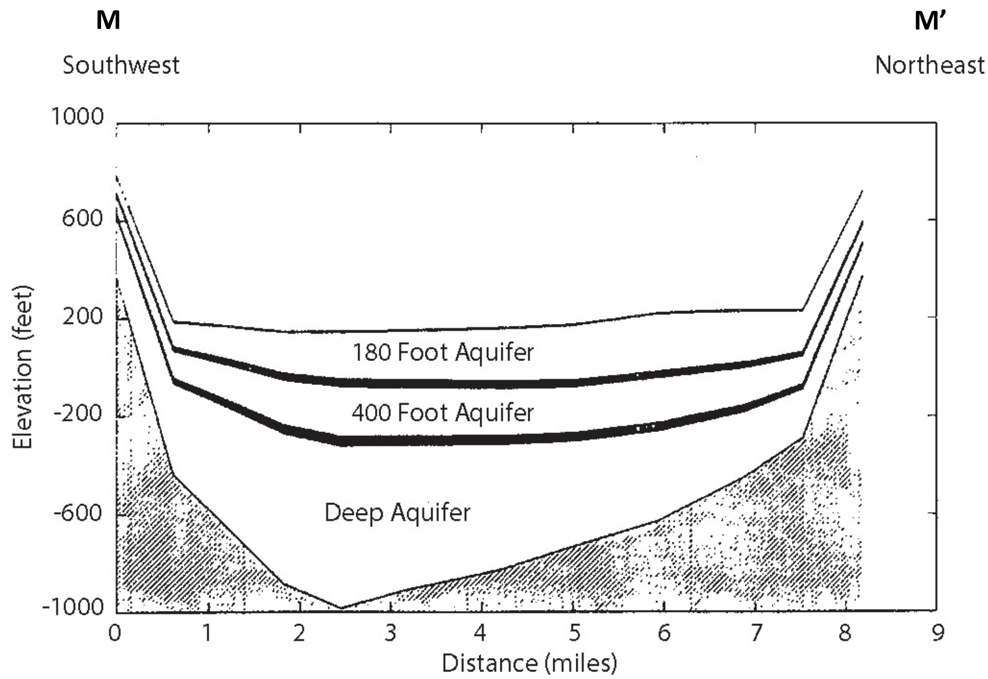


Figure 4a. Conceptual Aquifer Cross Section, Southwest to Northeast (cross Valley) near Gonzales.

Note: Modified from Montgomery Watson. 1994, Salinas River Basin Water Resources Management Plan Task 1.09 Salinas Valley Groundwater Flow and Quality Model Report.

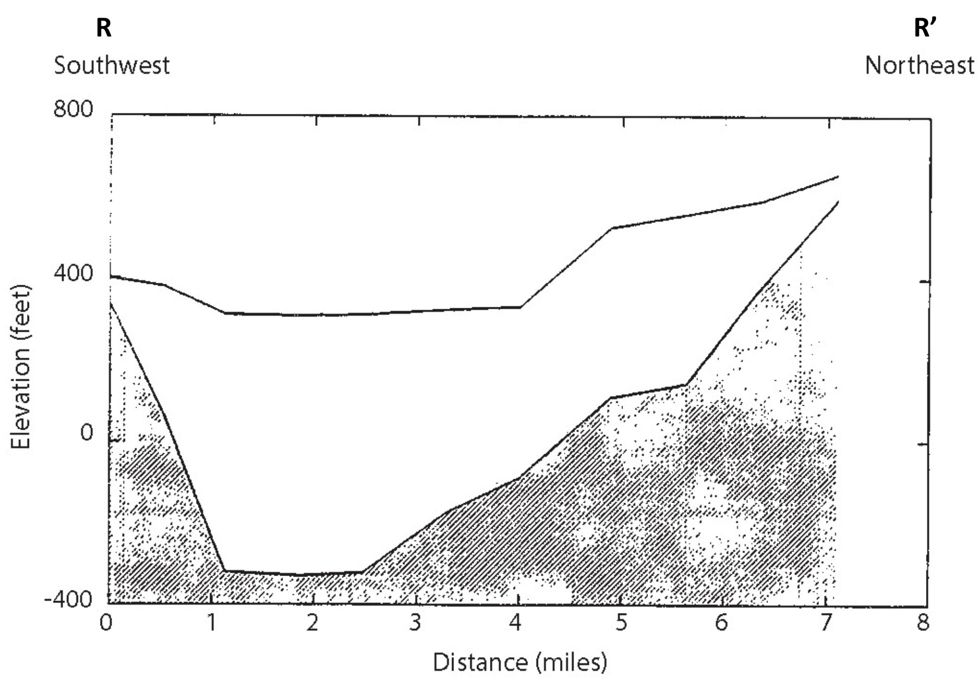


Figure 4b. Conceptual Aquifer Cross Section, Southwest to Northeast (crossValley) near King City.

Note: Modified from Montgomery Watson. 1994. Salinas River Basin Water Resources Management Plan Task 1.09 Salinas Valley Groundwater Flow and Quality Model Report.

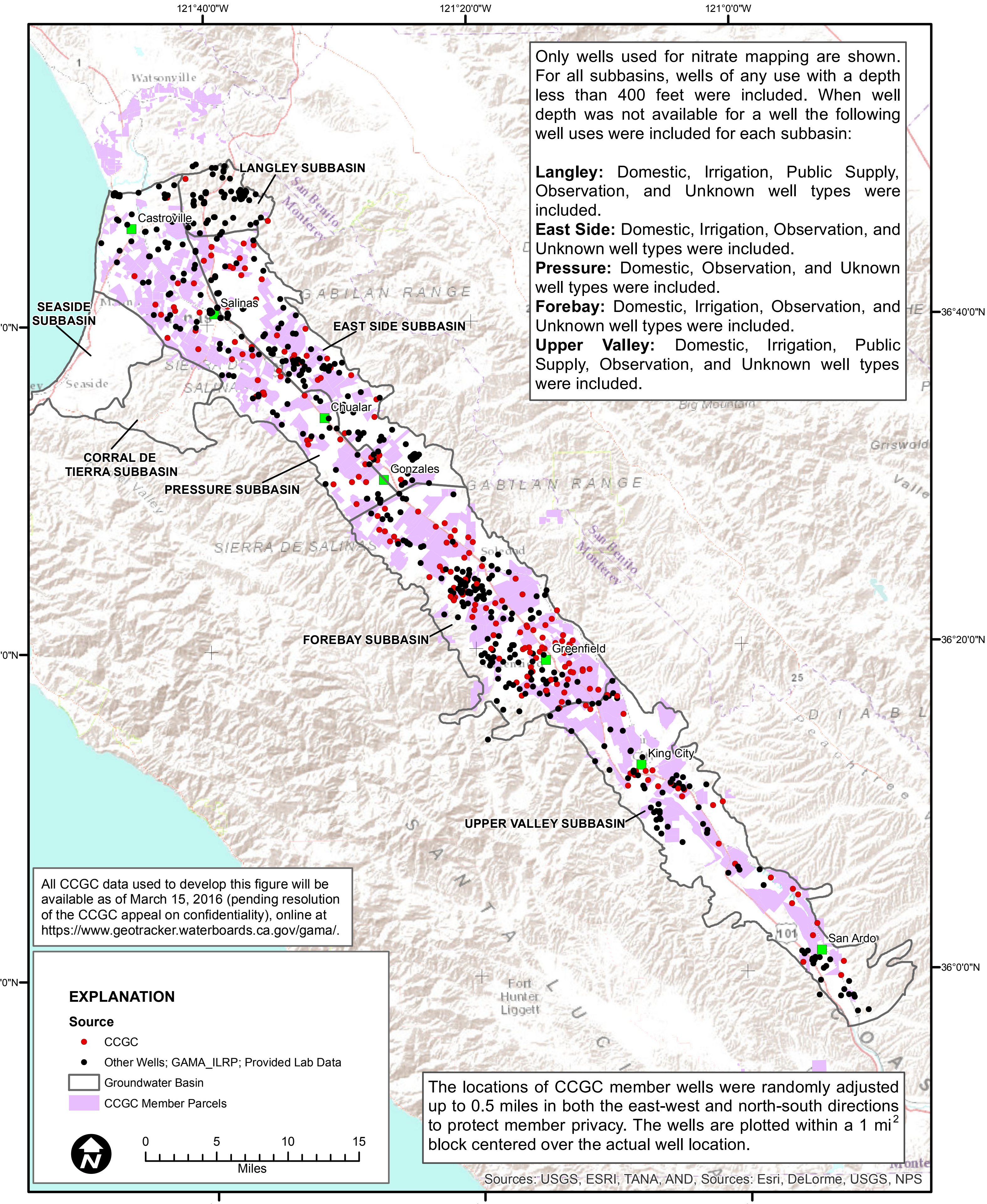


Figure 5. Locations of CCGC Member Parcels

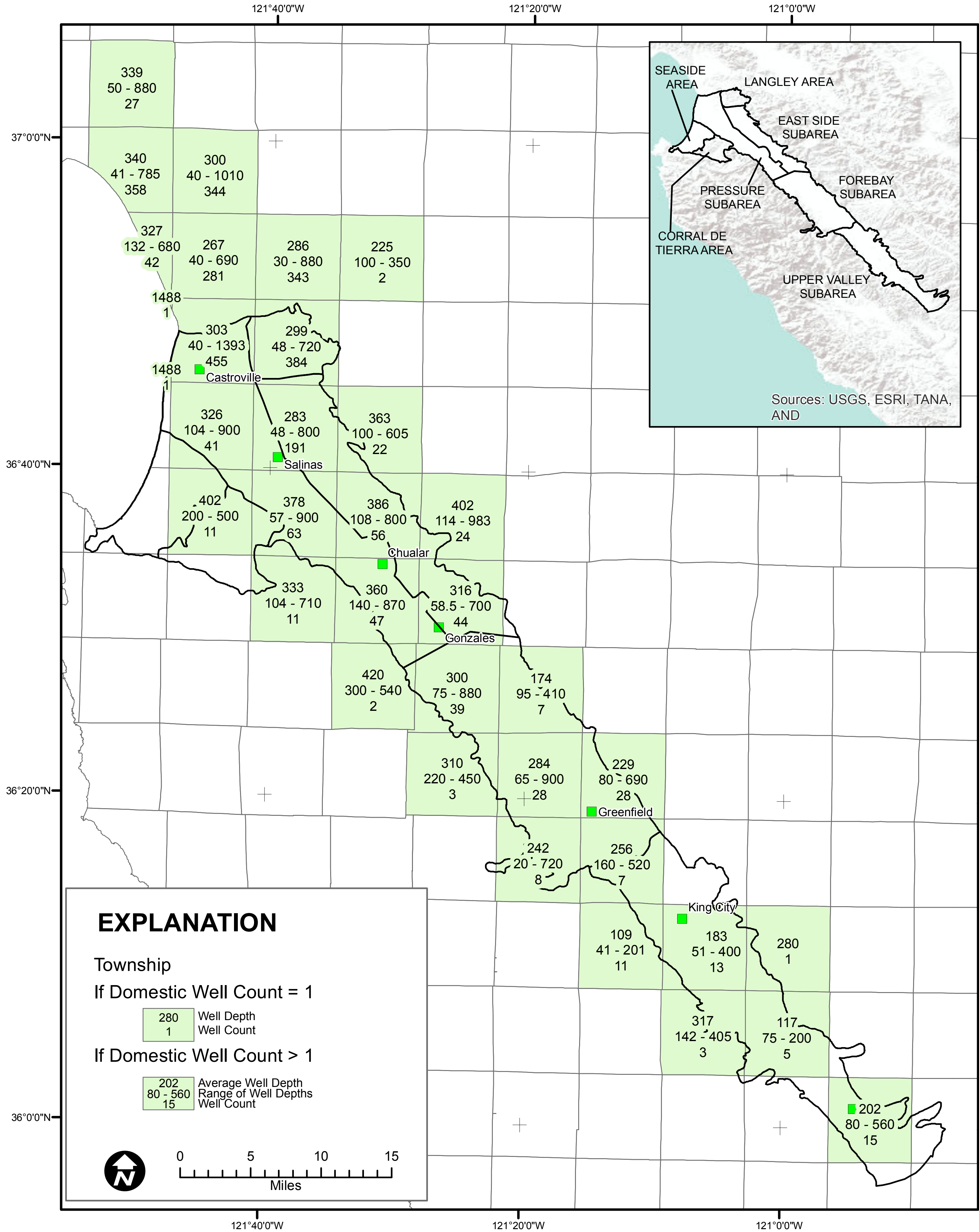


Figure 6. Average and Range of Domestic Well Depths by Township

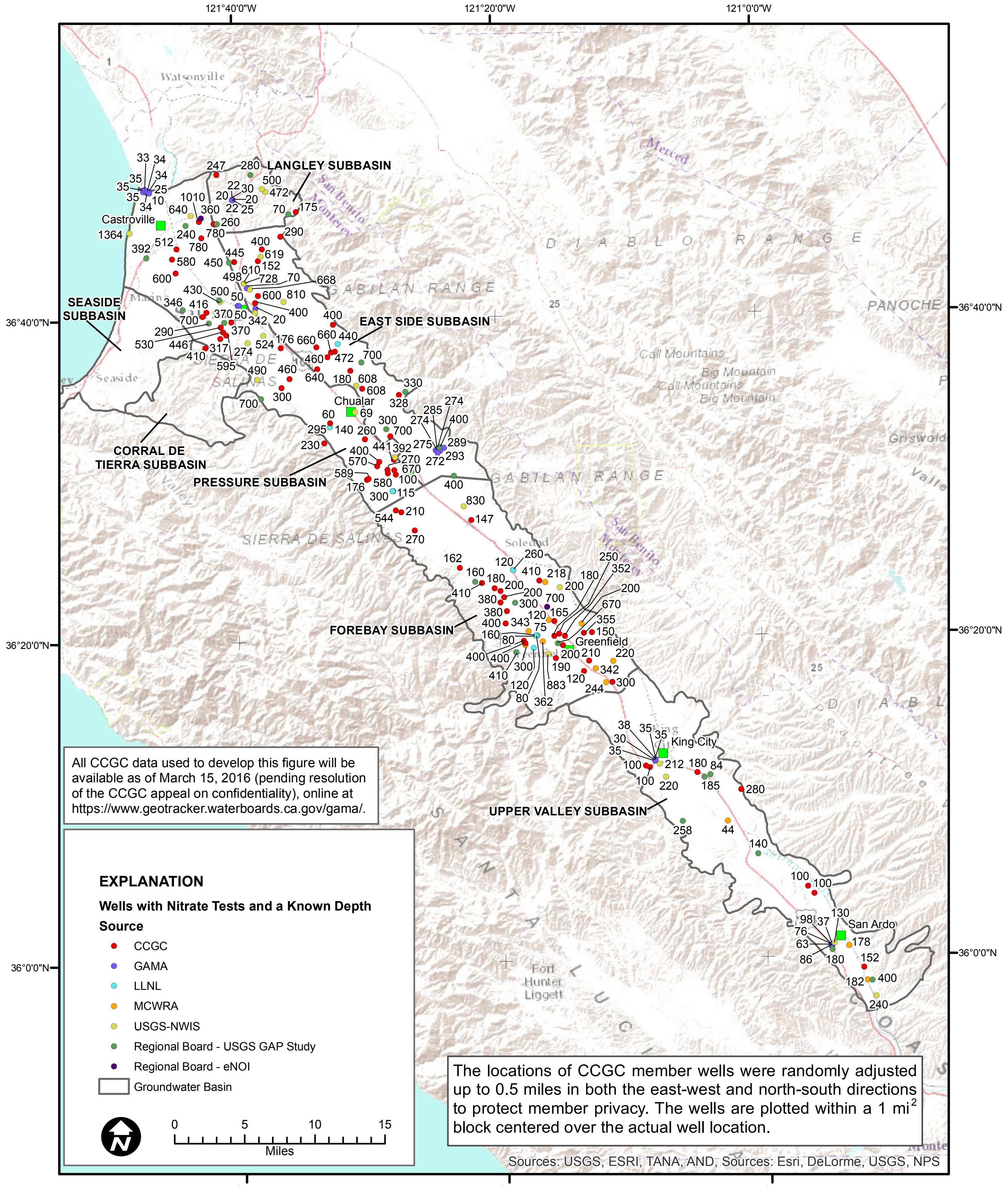


Figure 7. Distribution of Known Well Depths

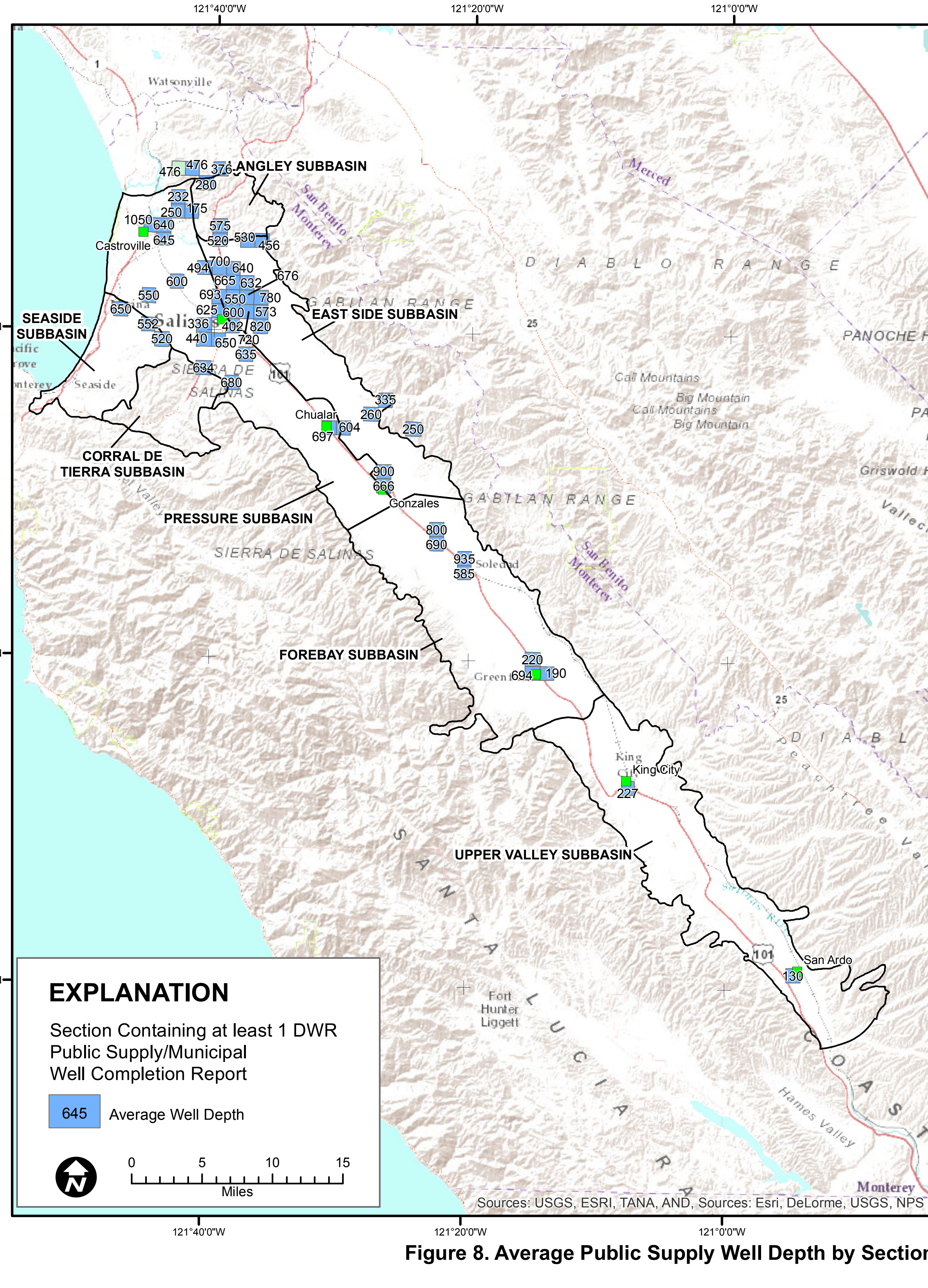


Figure 8. Average Public Supply Well Depth by Section

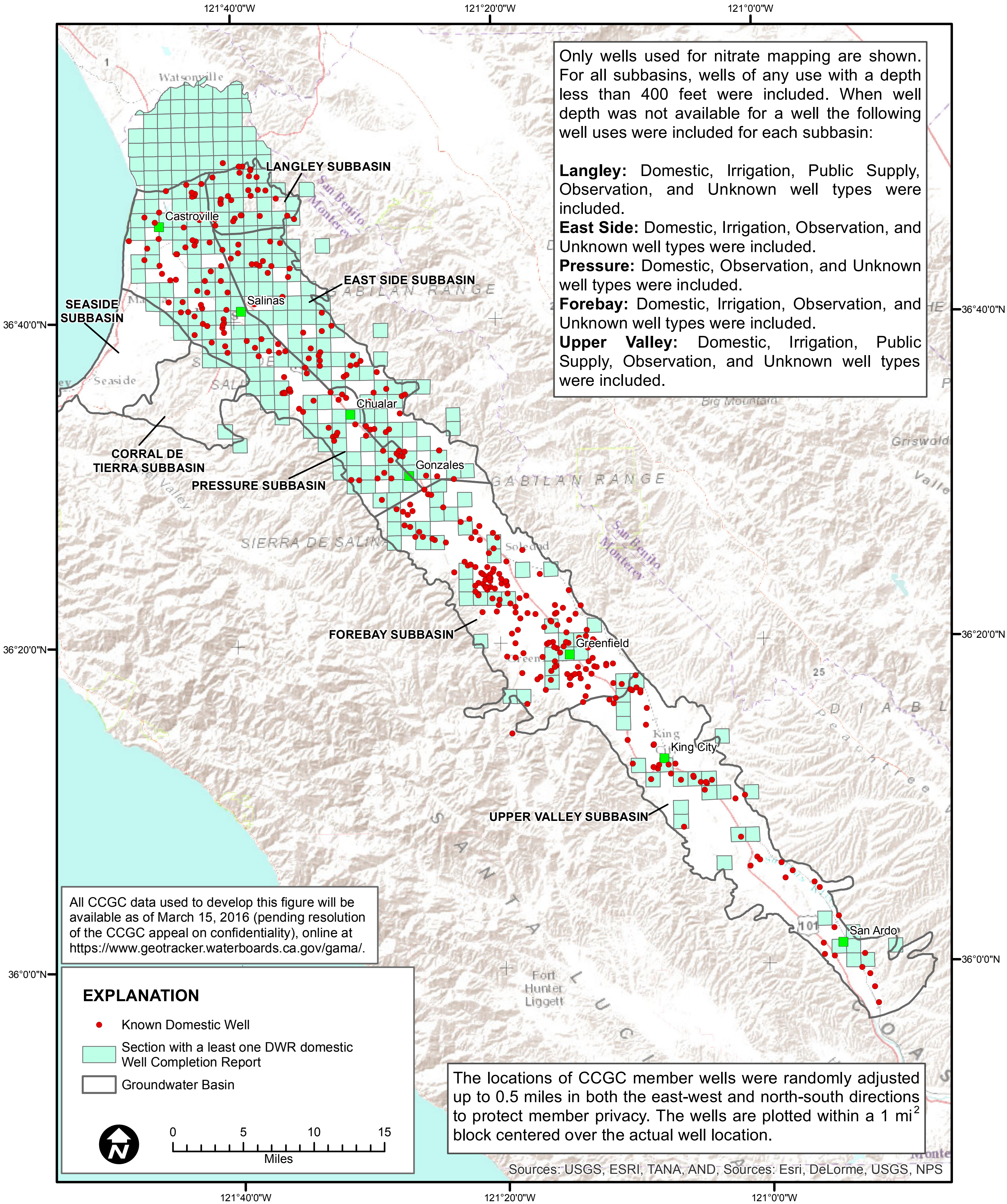


Figure 9. Domestic Wells and Sections with at least one DWR Domestic Well Completion Report

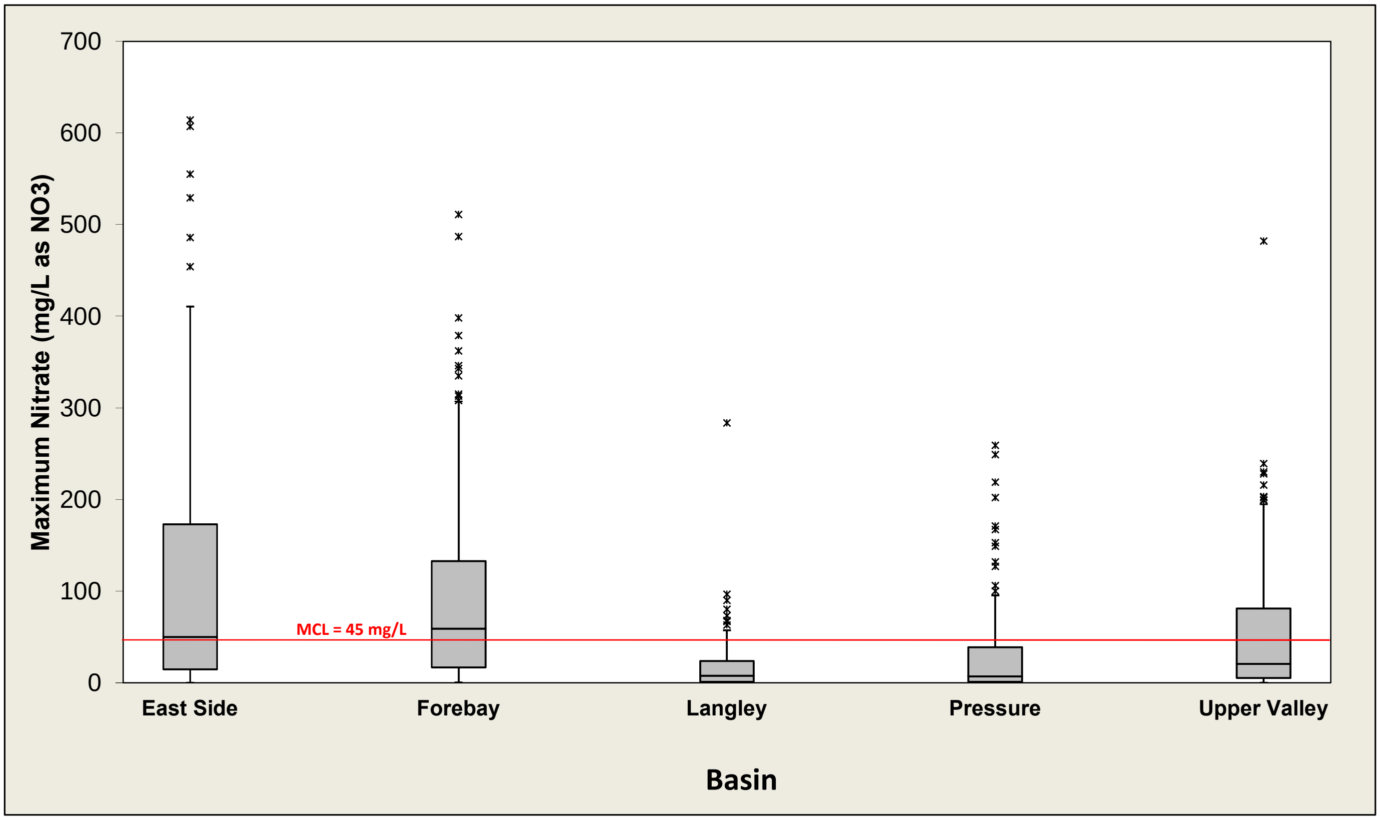
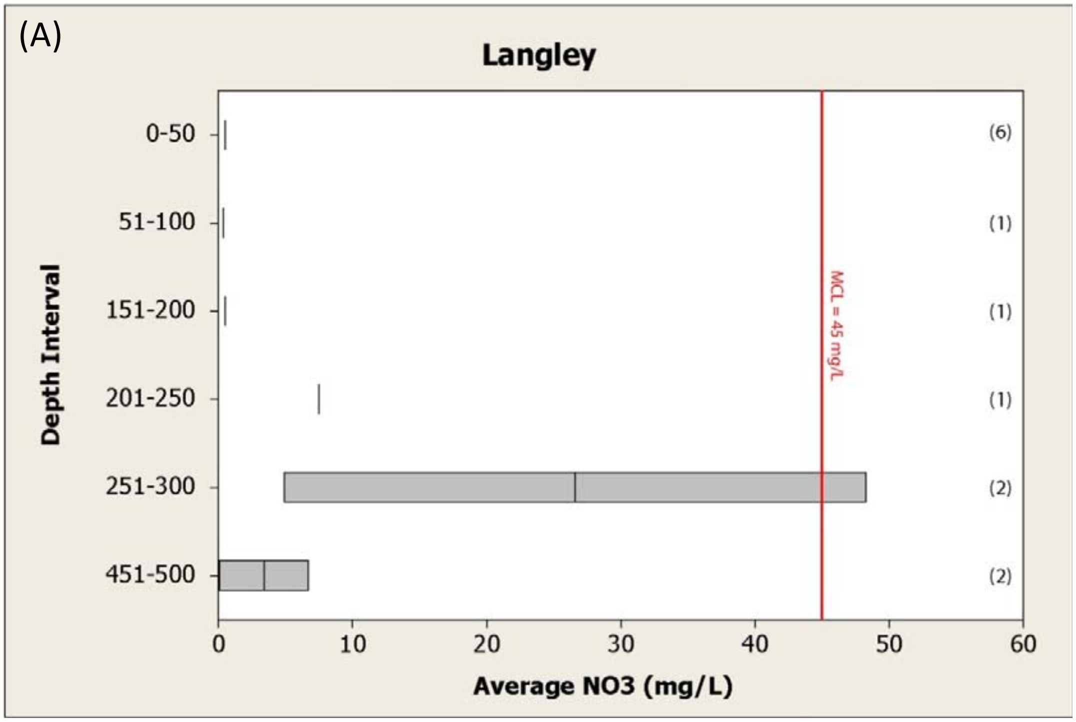


Figure 10. Boxplots Showing Medians and Ranges for Maximum Nitrate Concentrations used in Nitrate Mapping Analysis

Note: The grey rectangle represents the inner quartile range of the data. The horizontal line in the rectangle represents the median. Vertical lines represent the range of 90 % of the data. Asterisks represent concentrations beyond the range of 90 % of the data. The numbers in parentheses provide the well count.



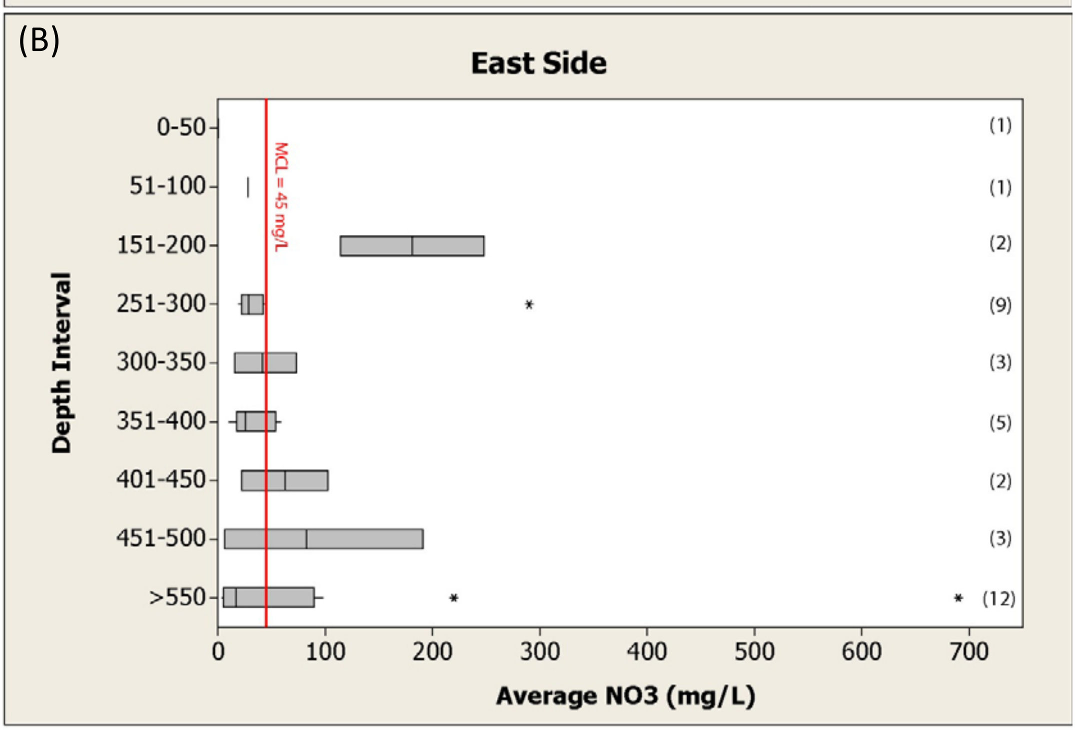
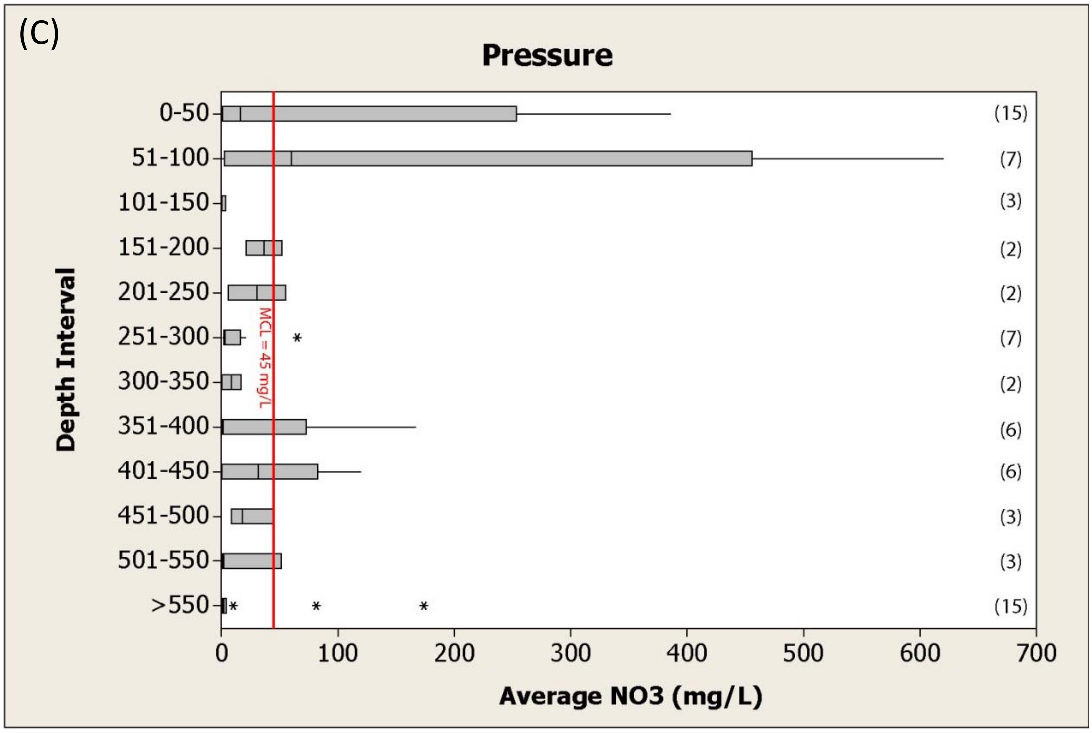


Figure 11. Boxplots showing medians and ranges for average nitrate concentrations for the Langley (a), East Side (b), Pressure (c), Forebay (d), and Upper Valley (e) subbasins by depth

Note: The grey rectangle represents the inner quartile range of the data. The horizontal line in the rectangle represents the median. Vertical lines represent the range of 90 % of the data. Asterisks represent concentrations beyond the range of 90 % of the data. The numbers in parentheses provide the well count.



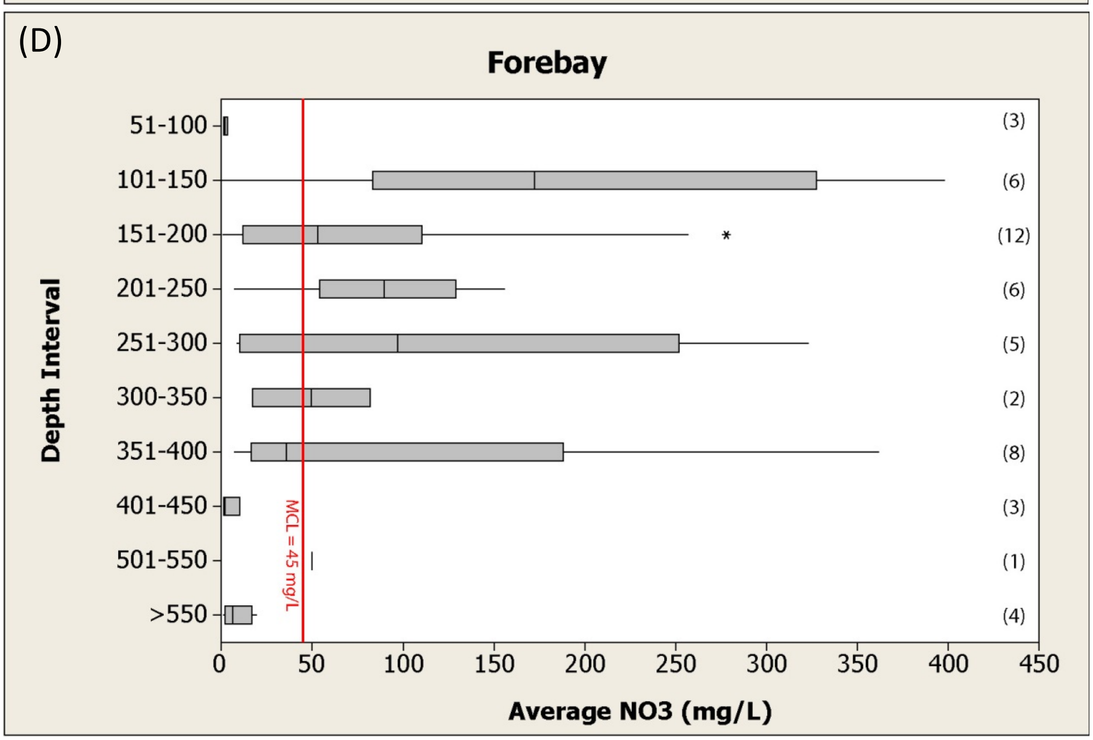


Figure 11 (continued). Boxplots showing medians and ranges for average nitrate concentrations for the Langley (a), East Side (b), Pressure (c), Forebay (d), and Upper Valley (e) subbasins by depth

Note: The grey rectangle represents the inner quartile range of the data. The horizontal line in the rectangle represents the median. Vertical lines represent the range of 90 % of the data. Asterisks represent concentrations beyond the range of 90 % of the data. The numbers in parentheses provide the well count

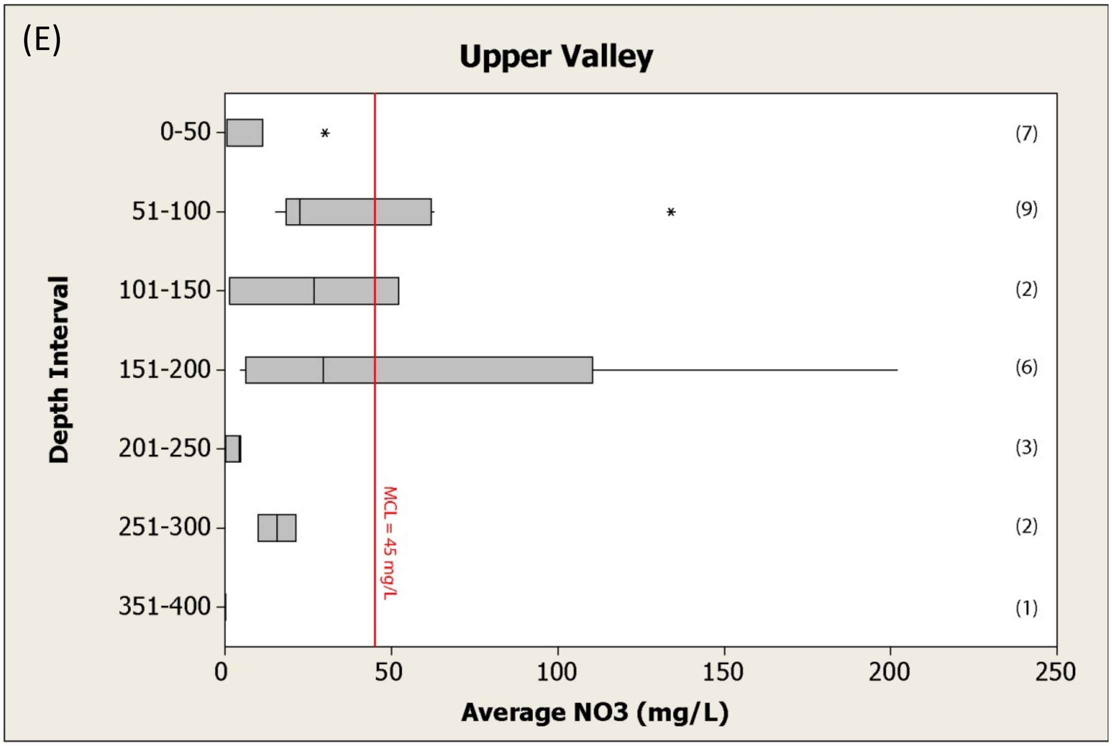


Figure 11 (continued). Boxplots showing medians and ranges for average nitrate concentrations for the Langley (a), East Side (b), Pressure (c), Forebay (d), and Upper Valley (e) subbasins by depth

Note: The grey rectangle represents the inner quartile range of the data. The horizontal line in the rectangle represents the median. Vertical lines represent the range of 90 % of the data. Asterisks represent concentrations beyond the range of 90 % of the data. The numbers in parentheses provide the well count.

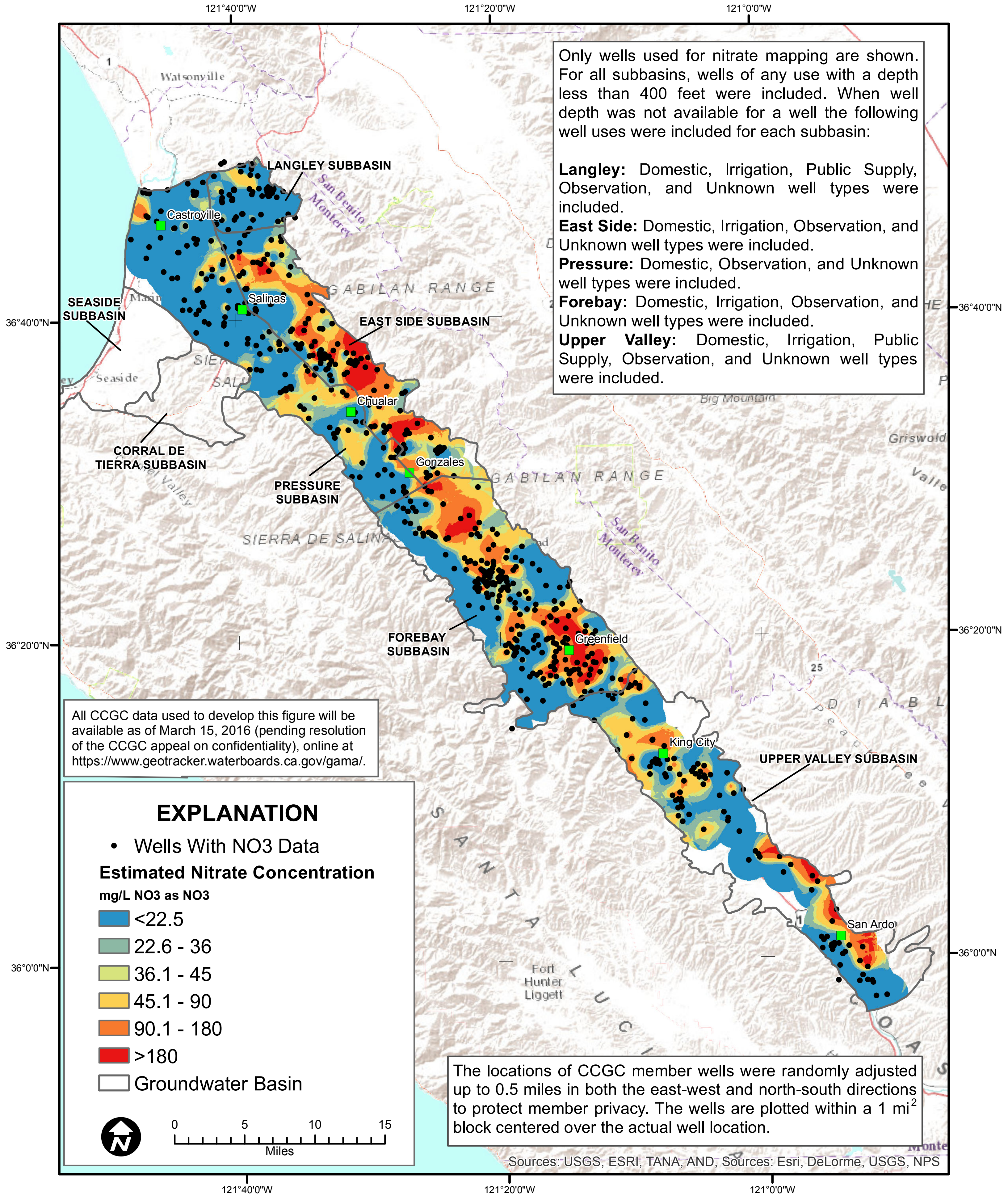


Figure 12a. Kriged Nitrate Concentrations in Salinas Valley Basin

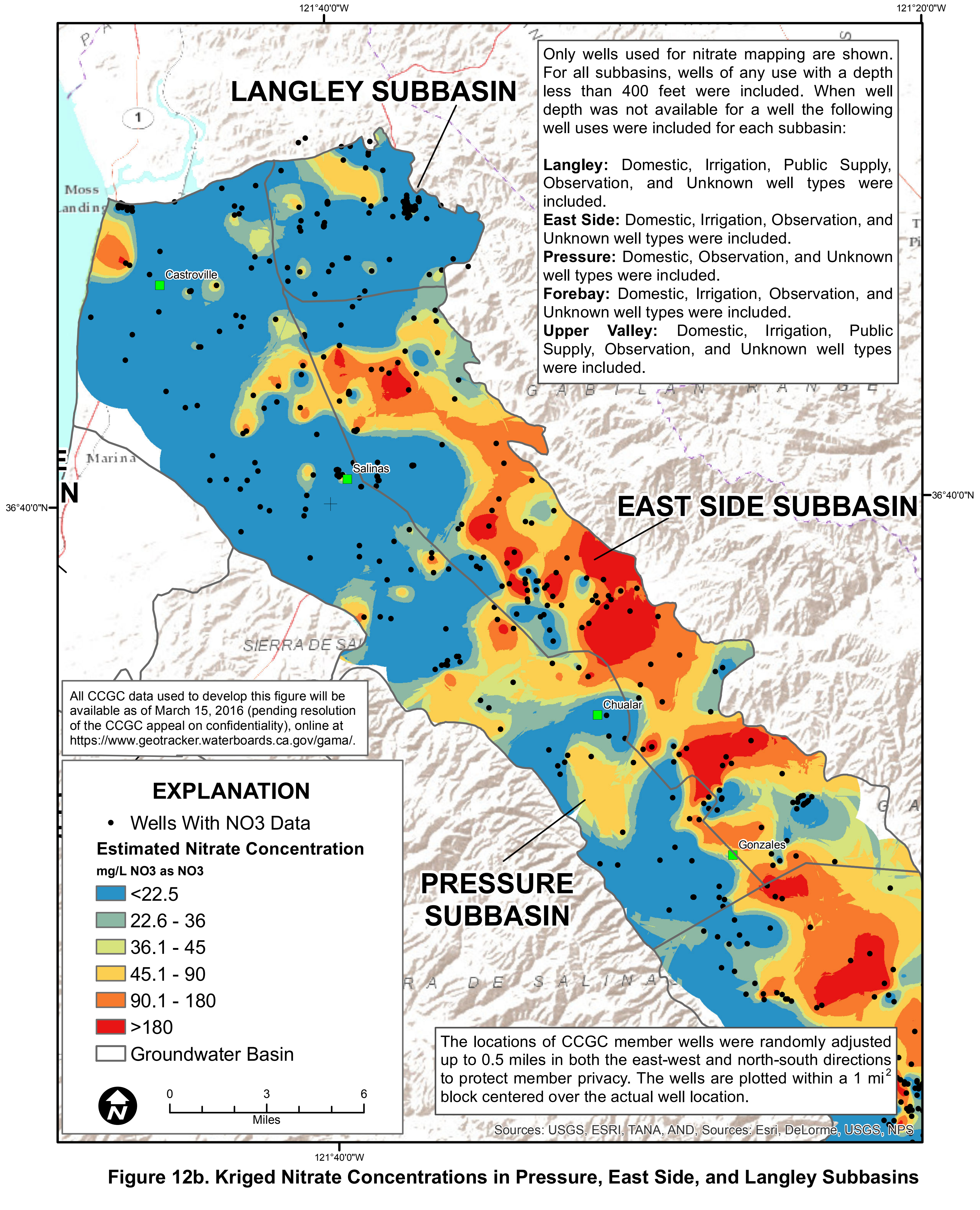


Figure 12b. Kriged Nitrate Concentrations in Pressure, East Side, and Langley Subbasins

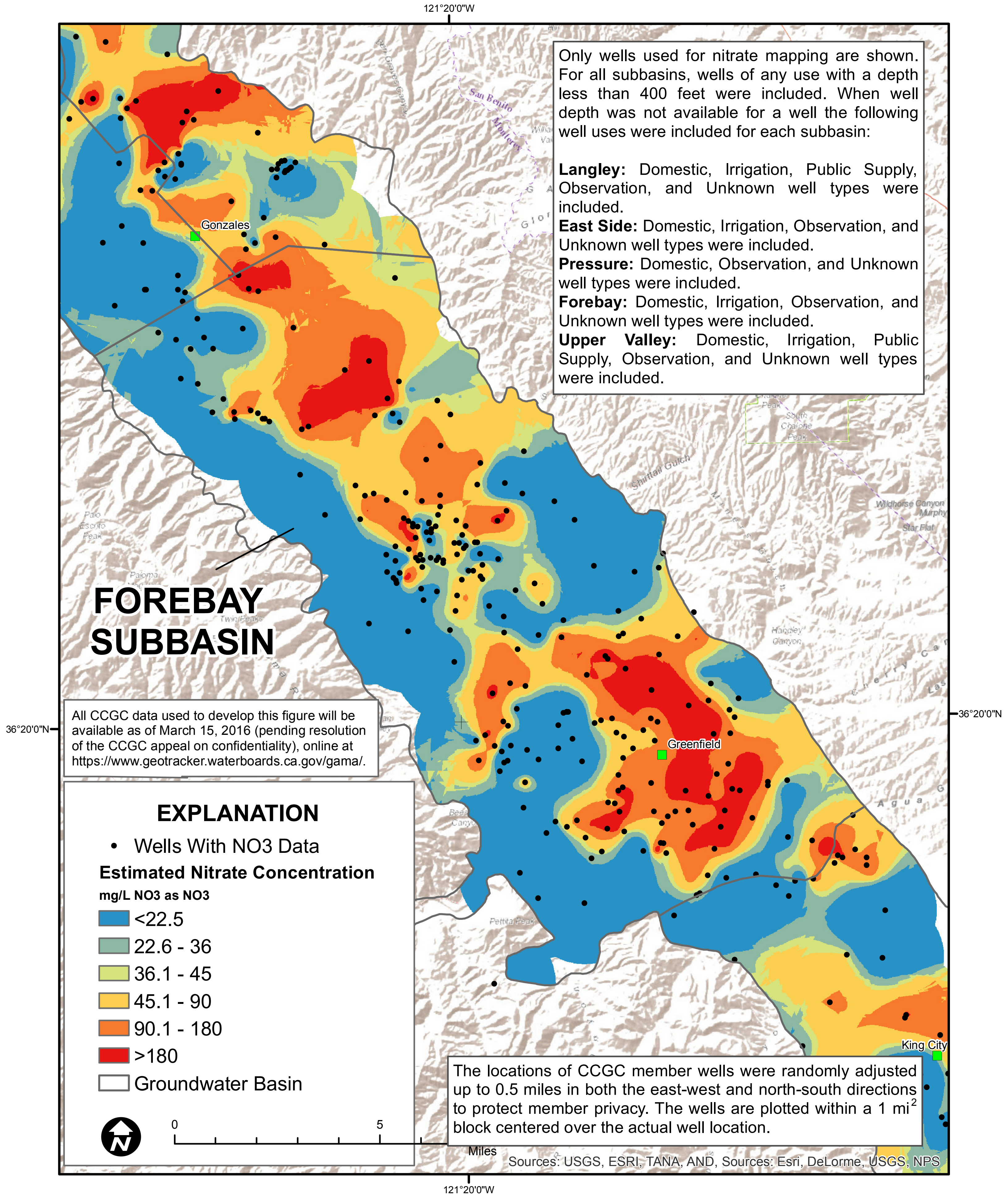


Figure 12c. Kriged Nitrate Concentrations in Forebay Subbasin

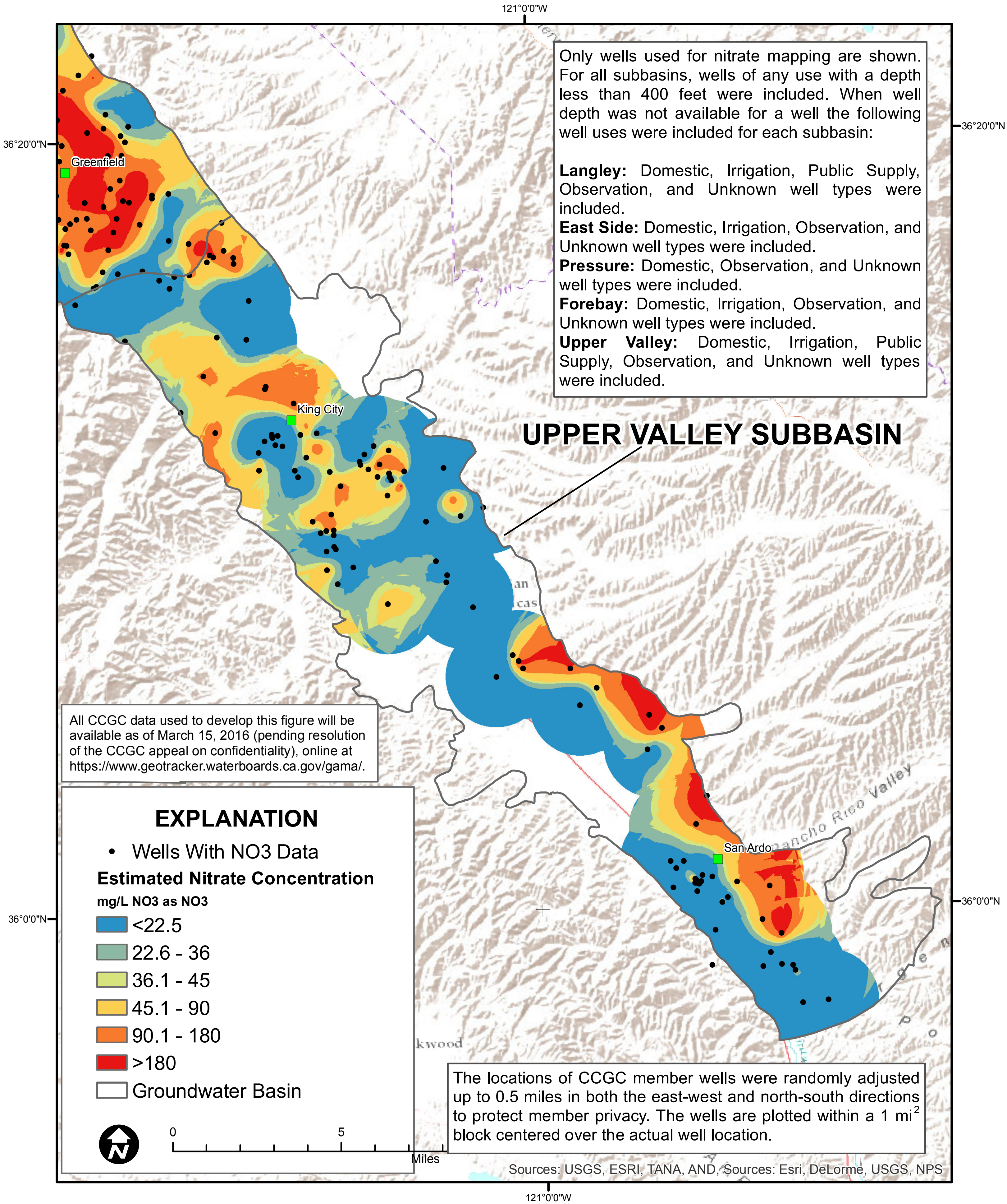


Figure 12d. Kriged Nitrate Concentrations in Upper Valley Subbasin

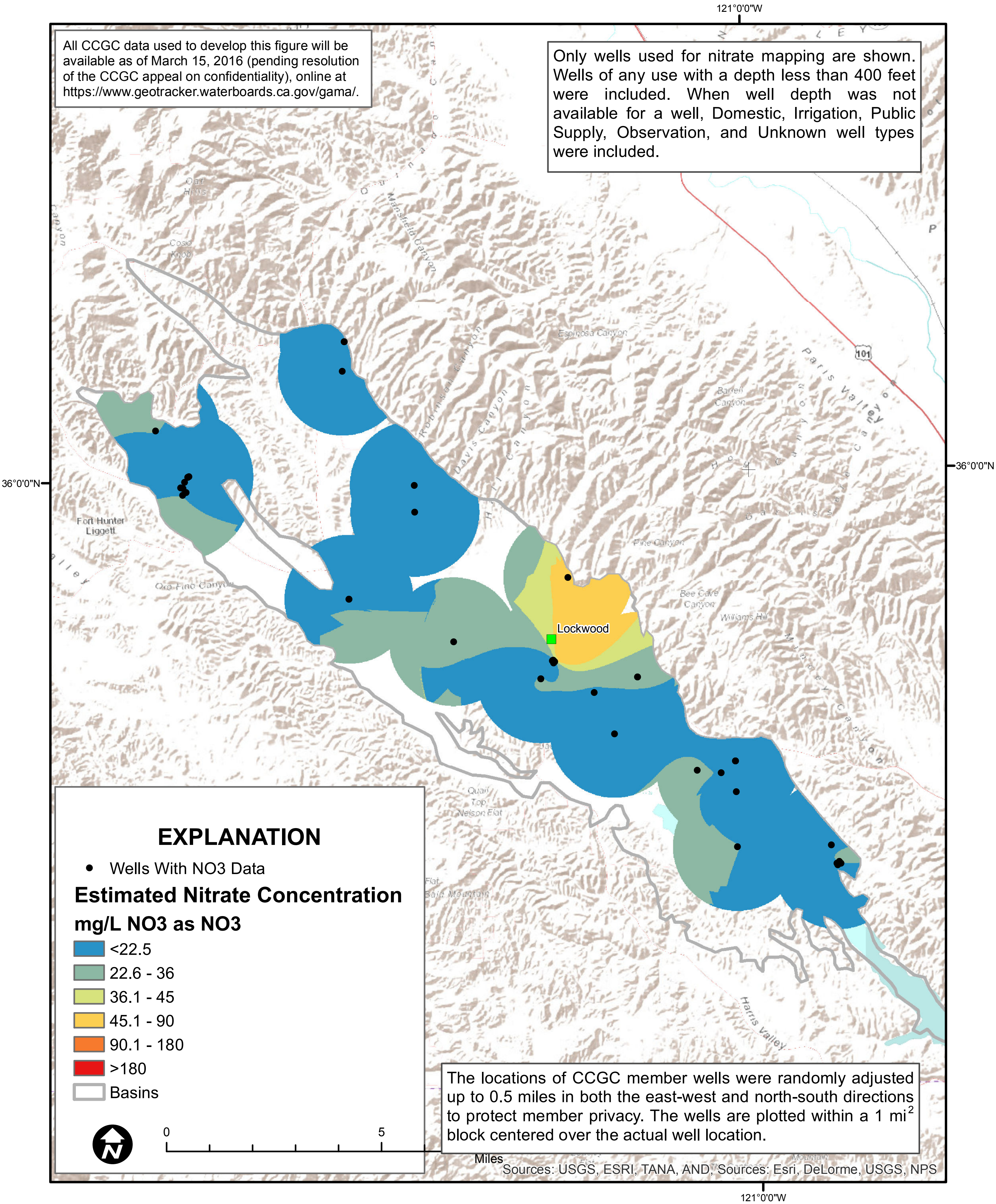


Figure 12e. Kriged Nitrate Concentrations in Lockwood Basin

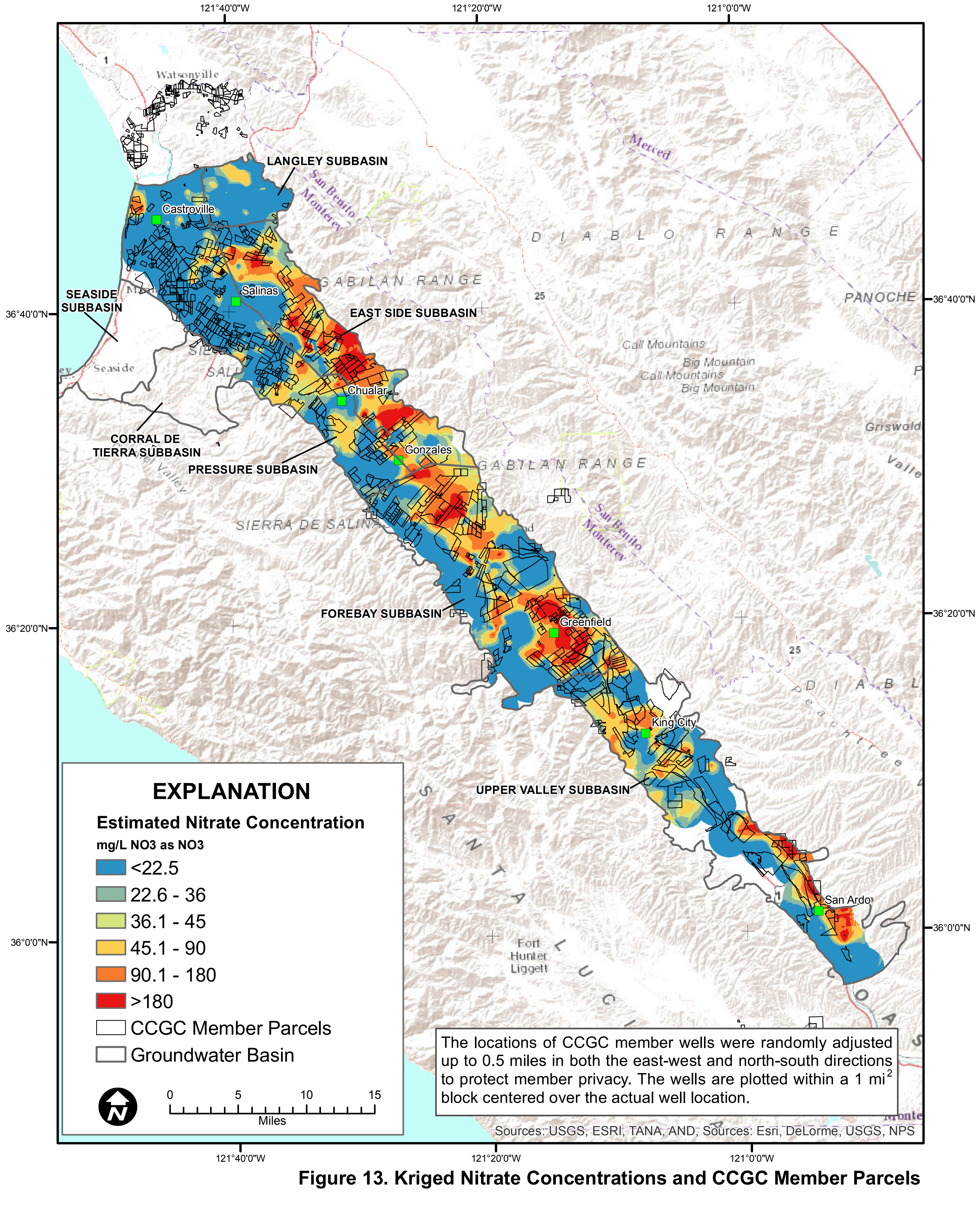


Figure 13. Kriged Nitrate Concentrations and CCGC Member Parcels

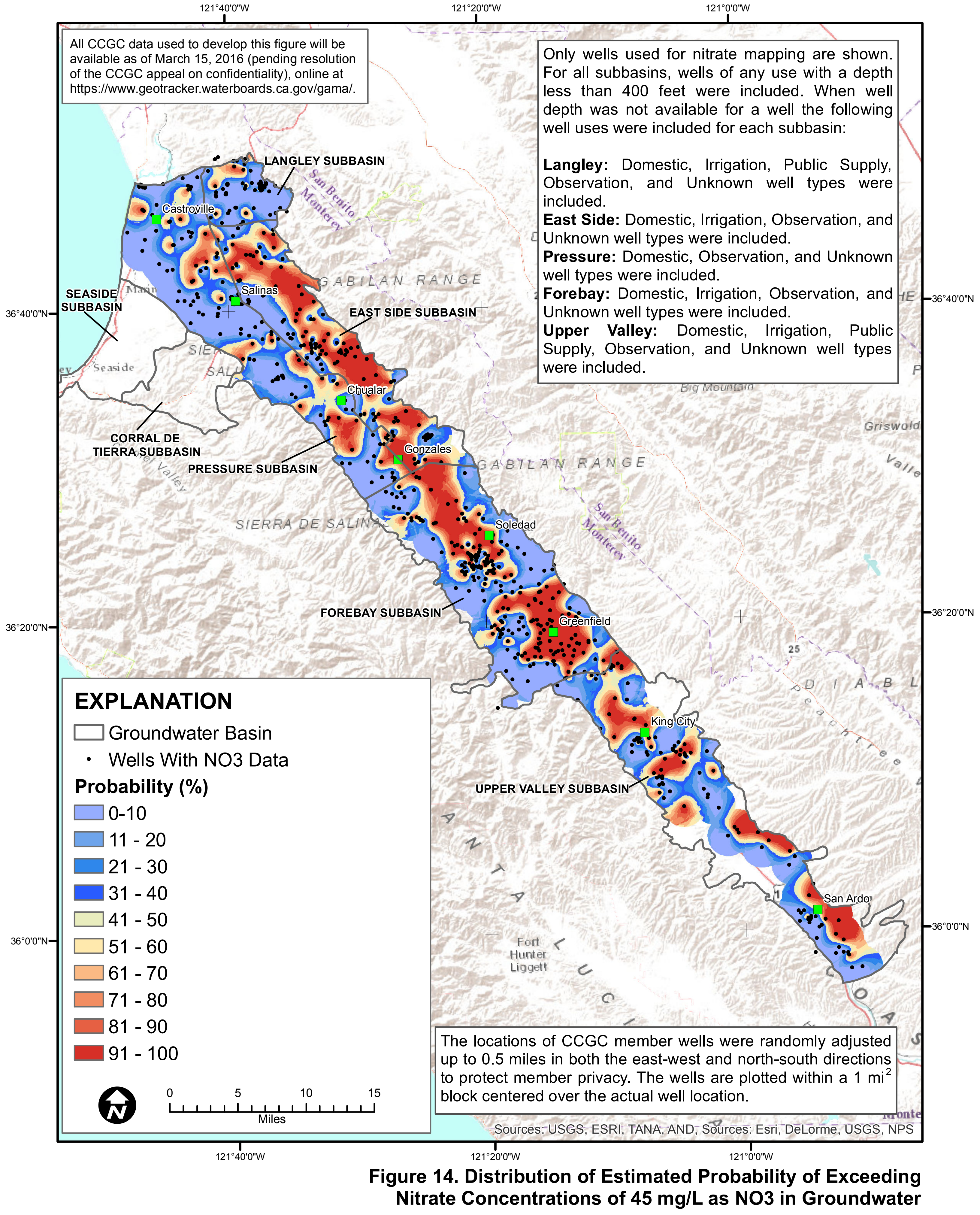


Figure 14. Distribution of Estimated Probability of Exceeding Nitrate Concentrations of 45 mg/L as NO3 in Groundwater

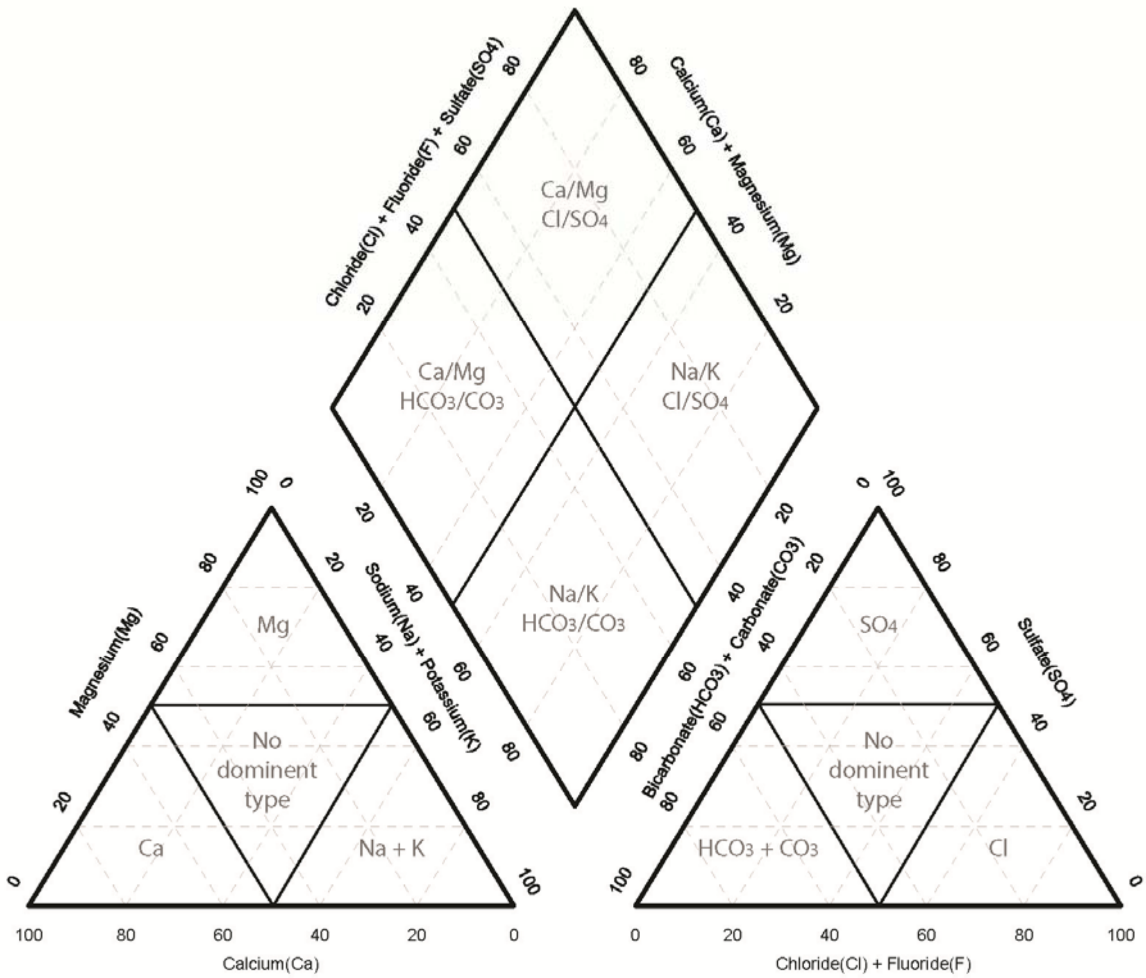
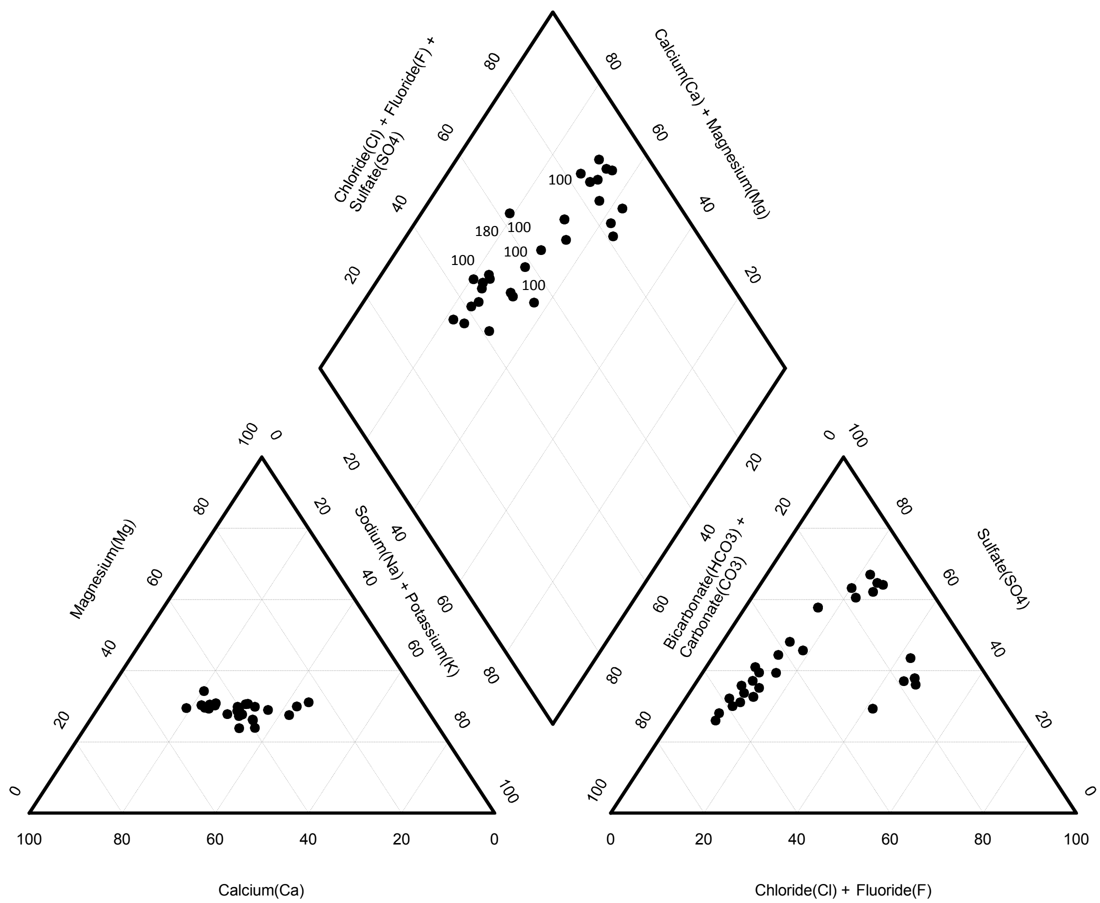
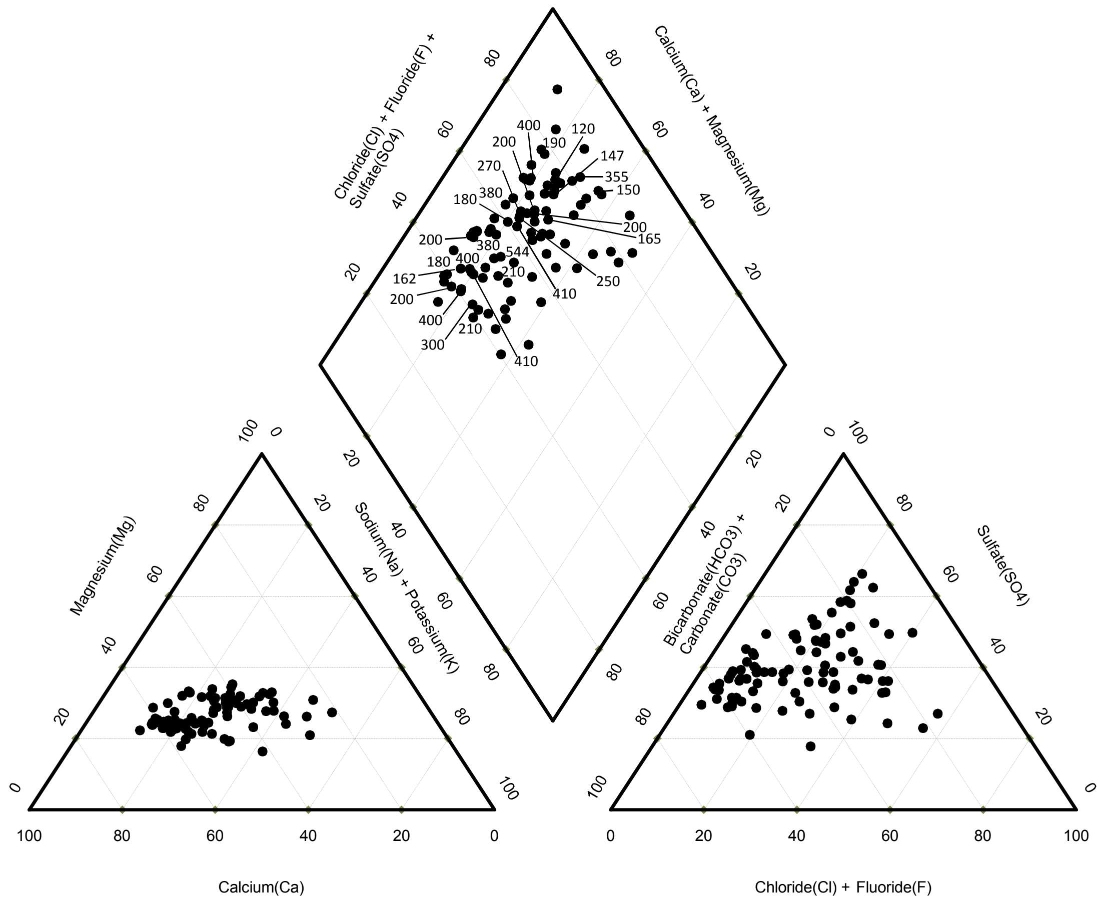


Figure 15. Chemical characteristics and areas of ionic dominance represented by the Piper diagram



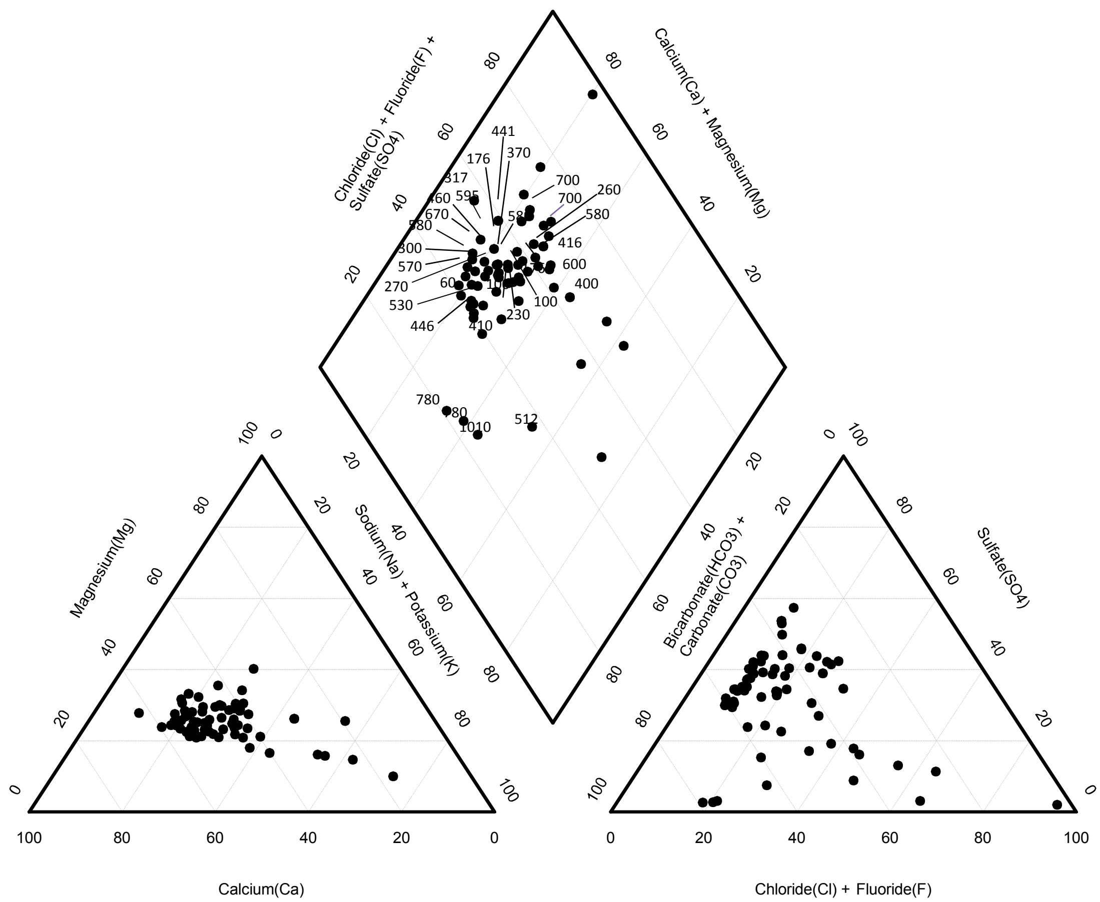
Note: Well depths indicated when available.

Figure 16. Piper Plot of Upper Valley Subbasin Wells Sampled by the CCGC



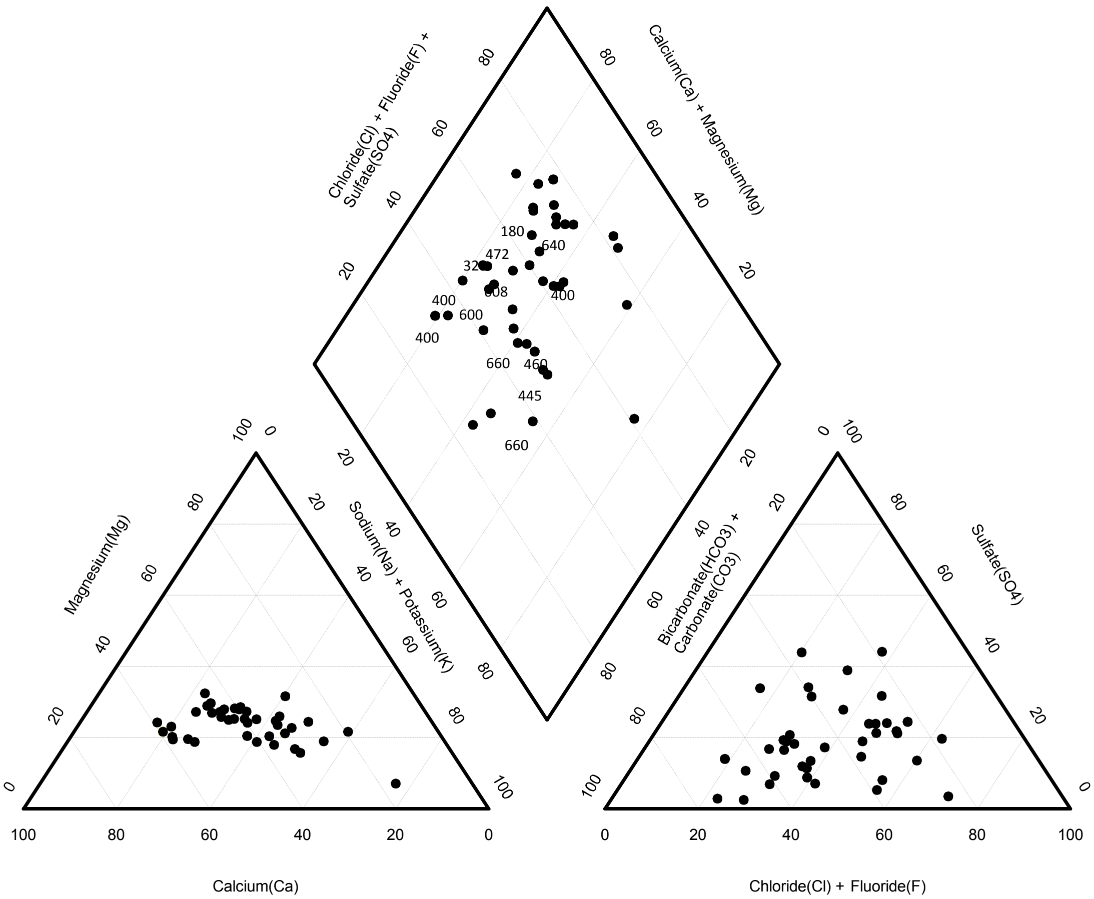
Note: Well depths indicated when available.

Figure 17. Piper Plot of Forebay Subbasin Wells Sampled by the CCGC



Note: Well depths indicated when available.

Figure 18. Piper Plot of Pressure Subbasin Wells Sampled by the CCGC



Note: Well depths indicated when available.

Figure 19. Piper Plot of East Side Subbasin Wells Sampled by the CCGC

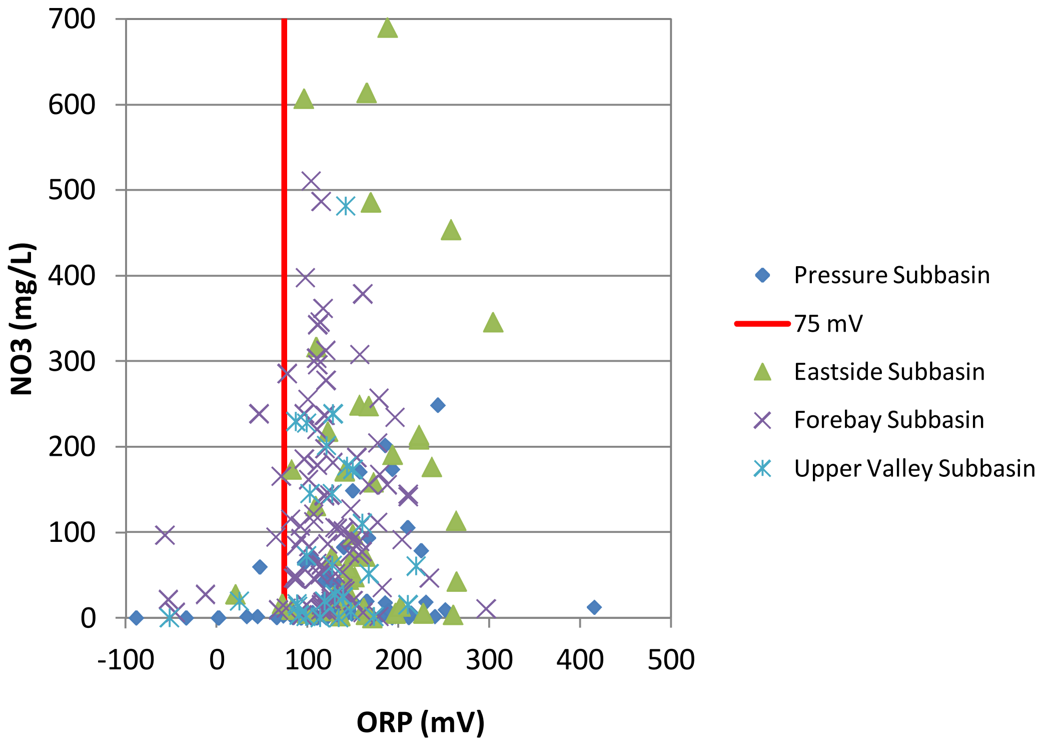


Figure 20. Relation of groundwater nitrate concentrations to oxidation-reduction potential for CCGC samples

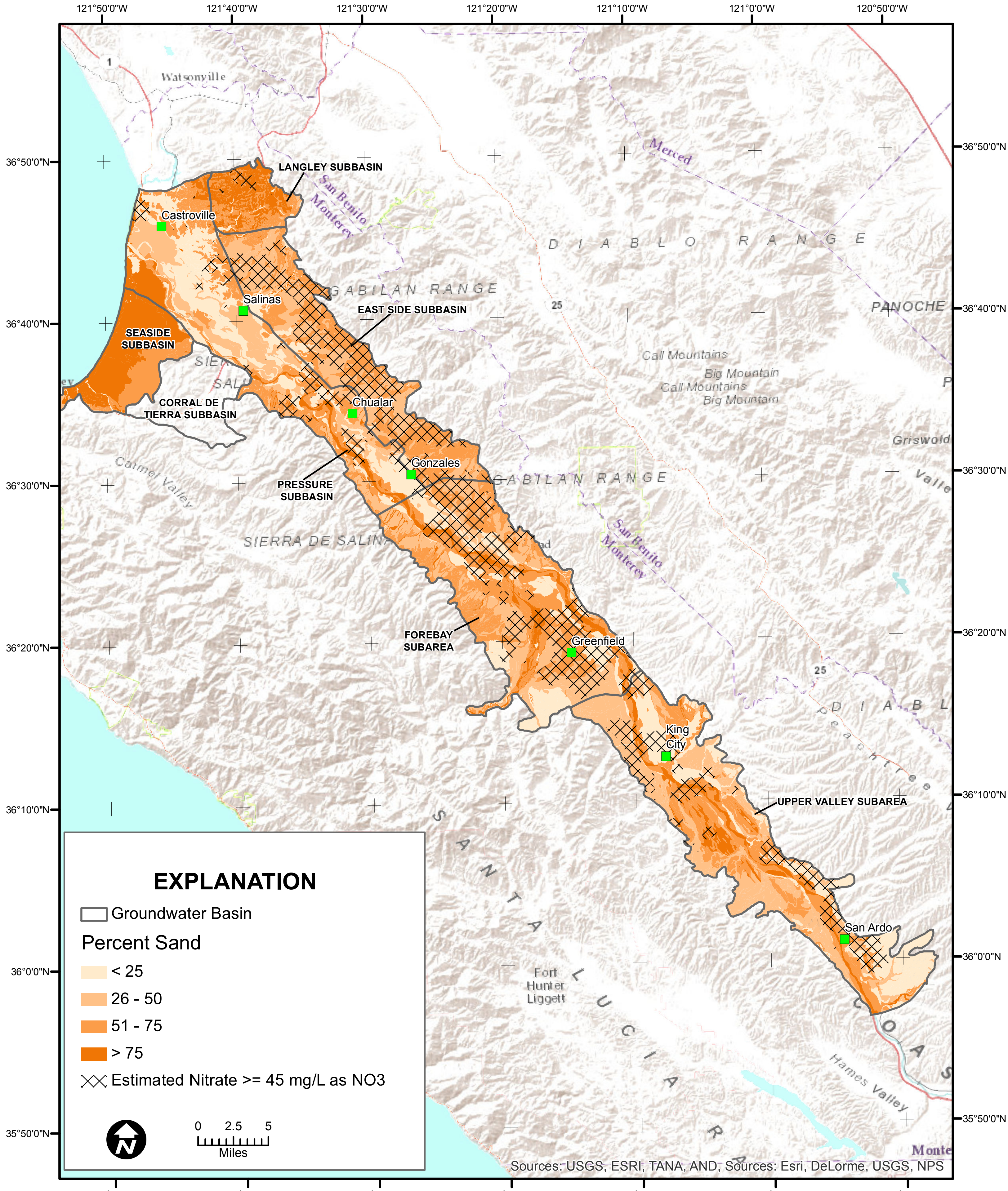


Figure 21. Distribution of Soil Percent Sand and Groundwater Nitrate Concentration Contours above the MCL in the Salinas Valley

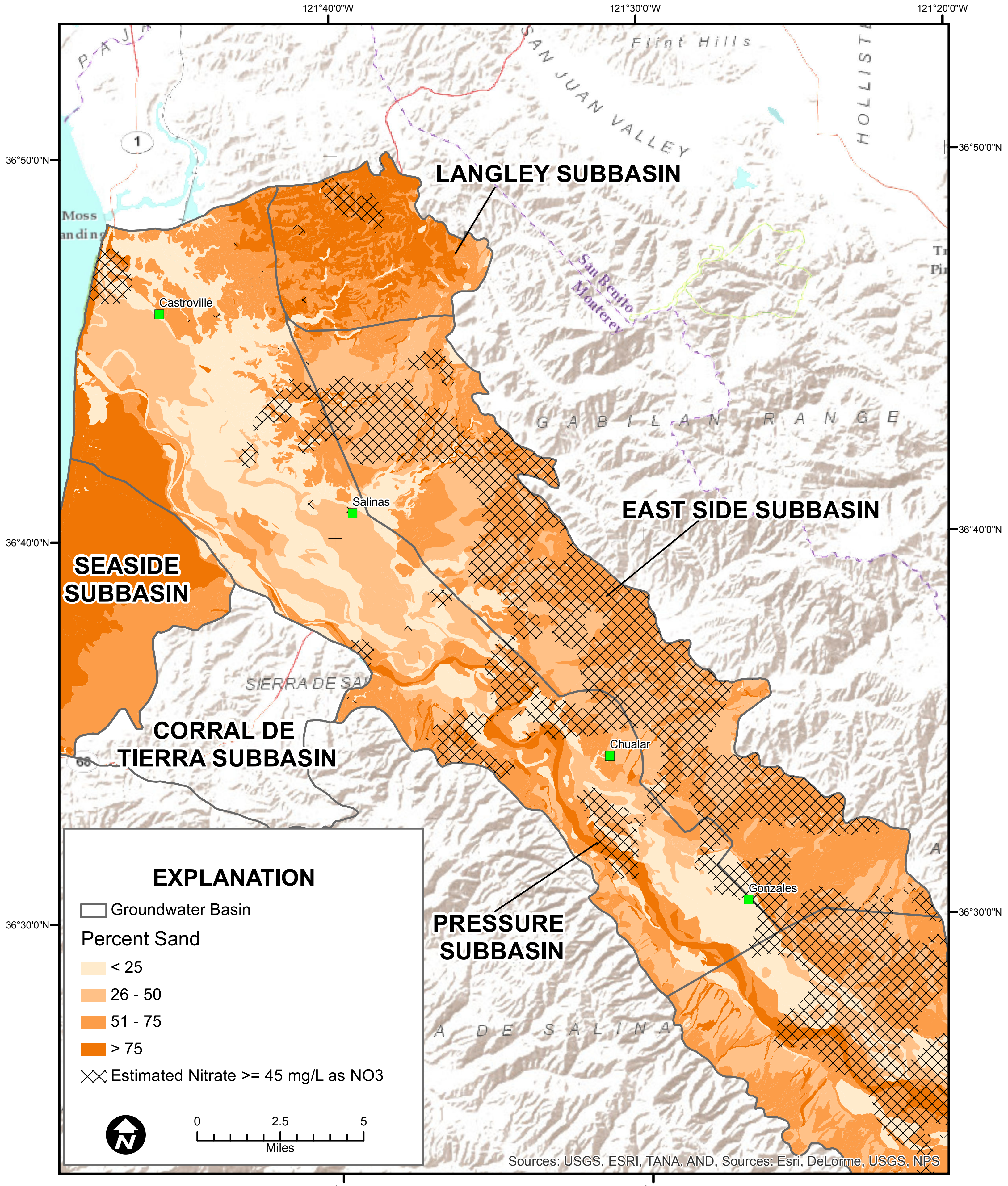


Figure 22. Distribution of Soil Percent Sand and Groundwater Nitrate Concentration Contours above the MCL in the Pressure, East Side, and Langley Subbasins

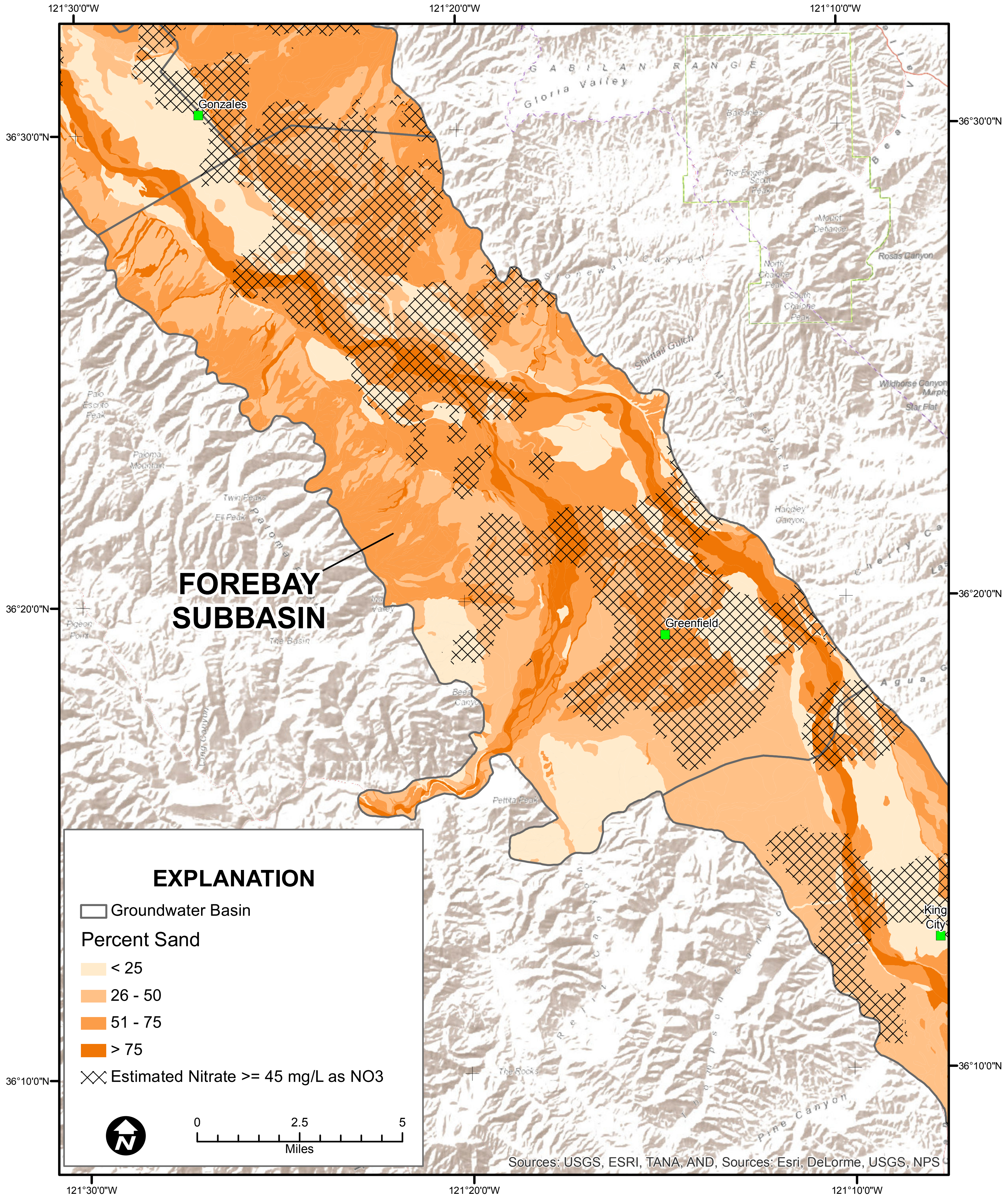


Figure 23. Distribution of Soil Percent Sand and Groundwater Nitrate Concentration Contours above the MCL in the Forebay Subbasin

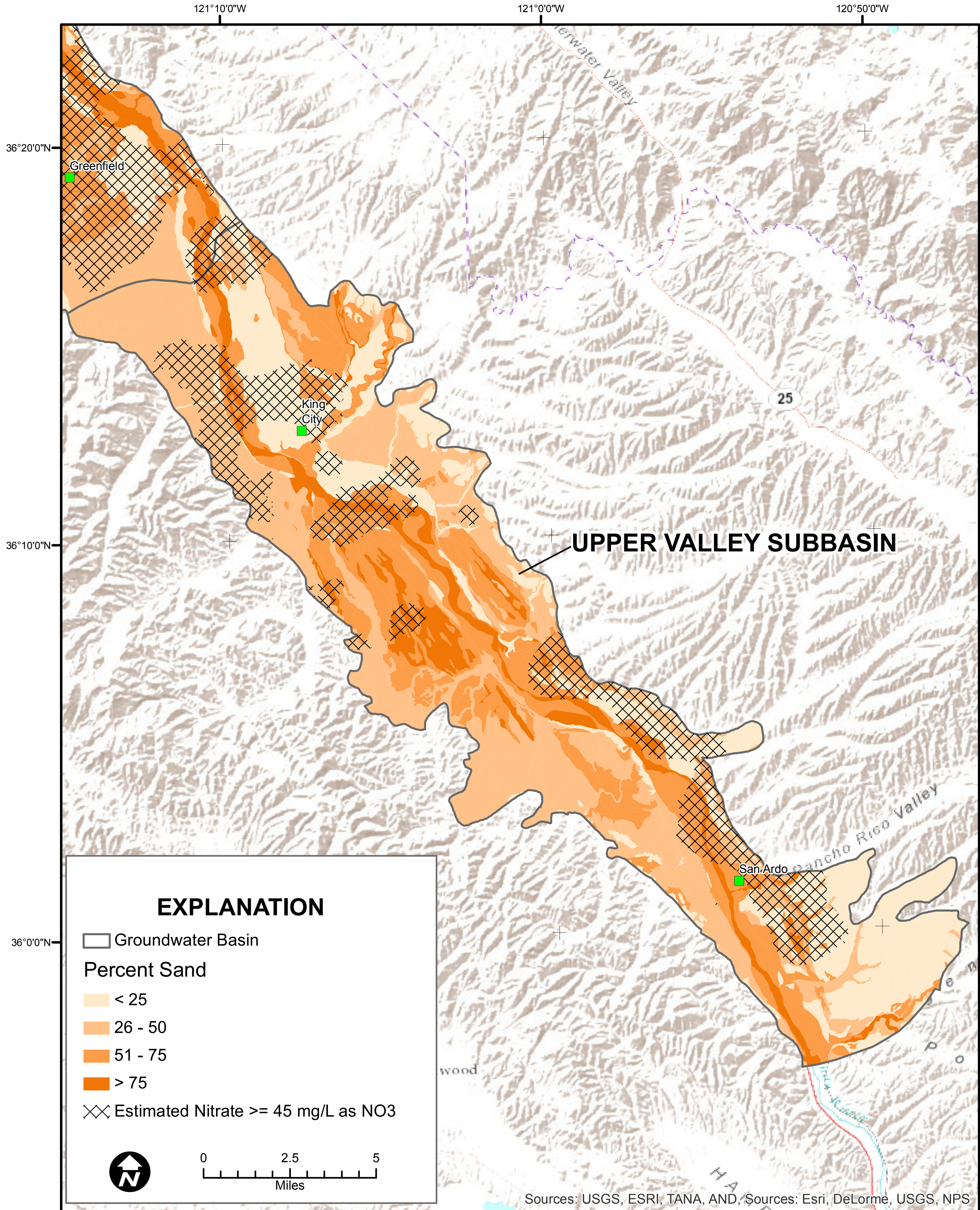


Figure 24. Distribution of Soil Percent Sand and Groundwater Nitrate Concentration Contours above the MCL in the Upper Valley Subbasin

APPENDICES

APPENDIX A-1

KRIGING AND DEVELOPMENT OF VARIOGRAM MODELS FOR THE NORTHERN COUNTIES

Kriging was used to produce contours of estimated nitrate concentrations for the Salinas Valley, Pajaro Valley, and Gilroy-Hollister Valley Groundwater Basins. Kriging is a method which estimates values at unknown locations and utilizes a variogram model that is modeled off the available data and describes the spatial variance of data as a function of distance from known data points. For more background on kriging see Journal and Huijbregts (1978). Kriging was performed using Surfer® 12 (Golden Software, LLC).

Salinas Valley

The histogram of nitrate data for the Salinas Valley **(Figure A1-1)** does not following a normal distribution. Kriging can be problematic with distributions that are highly skewed, and transformations are often used to transform data into a distribution that is closer to a normal distribution (Journal and Huijbregts, 1978). By taking the natural log of given nitrate data, the resulting histogram **(Figure A1-2)** is closer to a normal distribution. Statistics of the transformed data are summarized in **Table A1-1**.

Table A1-1: Statistics of Natural Log of Nitrate Data

Basin	No. of data	Min, mg/l	Max, mg/l	Mean, mg/l	Variance, $(mg/l)^2$	Range, mg/l
Salinas	758	-2.408	6.42	2.956	3.892	8.828

A spherical variogram model was used in the Salinas Valley **(Figure A1-3)** to fit to the nitrate data using a sill equal to 3.8 mg^2/l^2, which is close to the variance of the natural log of nitrate data. The range, which is a correlation length, is set to equal to 5000 meters (m). The nugget was set to zero. The domain was discretized to 5000 rows with 5000 columns and that gives approximately 20 meter grid cells. **Table A1-2** summarizes the of variogram characteristics.

Table A1-2: Variogram Model Characteristics

Basin	Model Type	Scale (mg/l)	Range (m)	Search Radius (m)	Grid size (rows x column)	X Spacing (m)	Y Spacing (m)
Salinas	Spherical	3.8	5000	5000	5000 x 5000	19	20.7

The kriging output is analyzed graphically and with related statistics. The first evaluation is based on an observed versus estimated plot. The resulting estimated nitrate concentrations at the observation locations are compared to the observed values and this is illustrated as a scatter plot, which shows the results by subbasin (Pressure, East Side, Forebay, Langley, and Upper Valley) **(Figure A1-4)** and compared to a line with a slope of 1:1. The line is where on which the data should ideally fall when estimated values would equal observed values exactly. The majority of data fits very closely to the 1:1 line. **Figure A1-5** shows a scatter plot similar to **Figure A1-4** but is shown in two categories: CCGC sampled wells, and the rest of the data sources. The correlation coefficient, R, is calculated and equal to 0.998; this indicates that the trends in the estimated values very closely match those of the actual observations. The R for the CCGC data category is equal to 0.9995 and the R for the other data category is equal to 0.995. The correlation coefficient is defined to be the covariance between the measured and estimated nitrate normalized by multiplication of standard deviations of both measured and estimated nitrate data. The correlation coefficient is calculated using the following equation:

$$R = \frac{\sum_i^{nw}(z_i - m_z)(z'_i - m_{z'})}{\sqrt{\sum_i^{nw}(z_i - m_z)^2}\sqrt{\sum_i^{nw}(z'_i - m_{z'})^2}}$$

Where:

z_i Is the observed (measured) value of nitrate [mg/l];

z'_i Is the estimated (kriged) value of nitrate [mg/l];

m_z Is the mean of observed concentration values [mg/l];

$m_{z'}$ Is the mean of estimated concentration values [mg/l];

nw Is number of observations and that is equal to number of wells [mg/l];

A plot of residuals versus estimated values is shown on **Figure A1-6**. The residual quantity is defined to be the difference between estimated and observed nitrate concentration at measured locations and this can be positive or negative. The residuals are scattered around zero. This plot shows larger residuals in the Pressure and Langley Subbasins, especially for small concentrations where the estimated values are underestimating the observed values for the Pressure and Langley Subbasins. This is likely due to clustering in the data and large variations of observed nitrate concentrations within small distances. **Figure A1-7** shows a plot similar to **Figure A1-6**, but the scatter is categorized based on two data sources (CCGC sampled wells and other sources). The other data sources exhibit larger residuals compared with CCGC data.

Figure A1-8 provides a histogram plot of the normalized residual showing relative error as a percentage. In general, approximately 81% of Salinas Valley Groundwater Basin data were honored with +/- 5% relative error. With respect to the two data sources, 92% of the CCGC well data are honored within +/- 5% relative error and 76 % of the other well data are honored within +/- 5% relative error.

References

Journel, A.G., and Huijbregts, C. (1978), Mining Geostatistics, Academic Press, 600 pp.

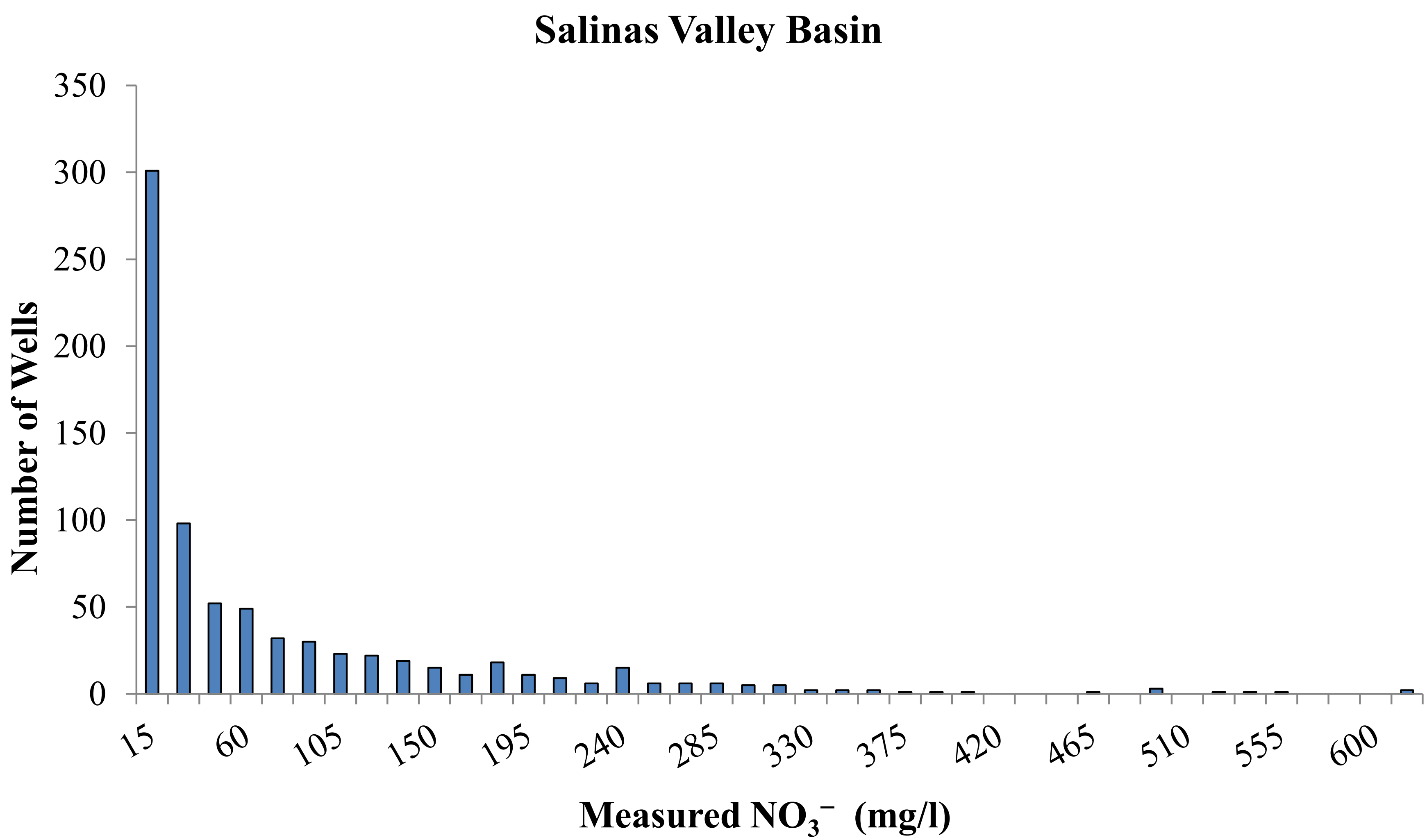


Figure A1-1: Histogram of the nitrate data

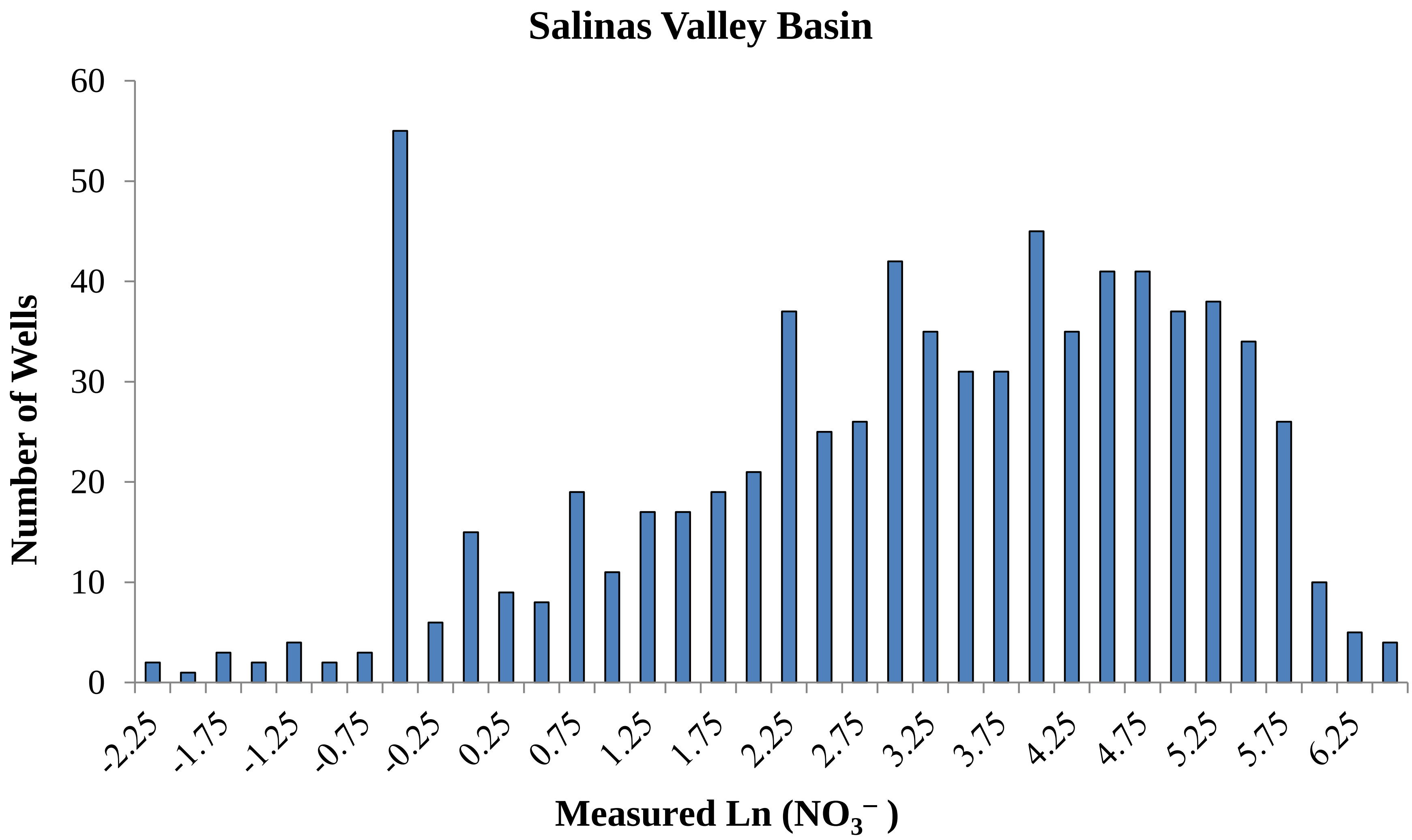


Figure A1-2: Histogram of the natural log of nitrate data

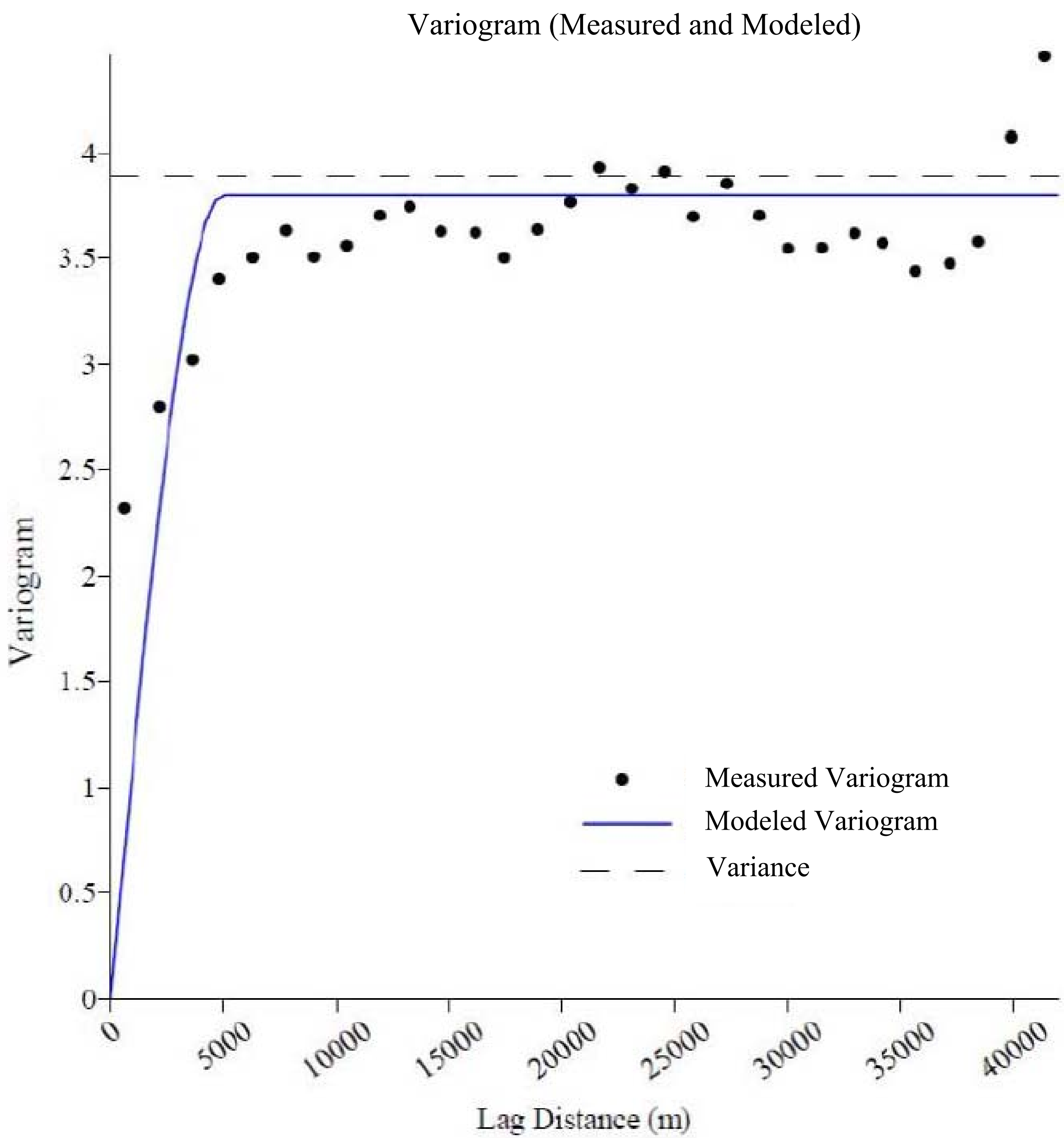


Figure A1-3:Variogram and its fit based on natural log of nitrate data

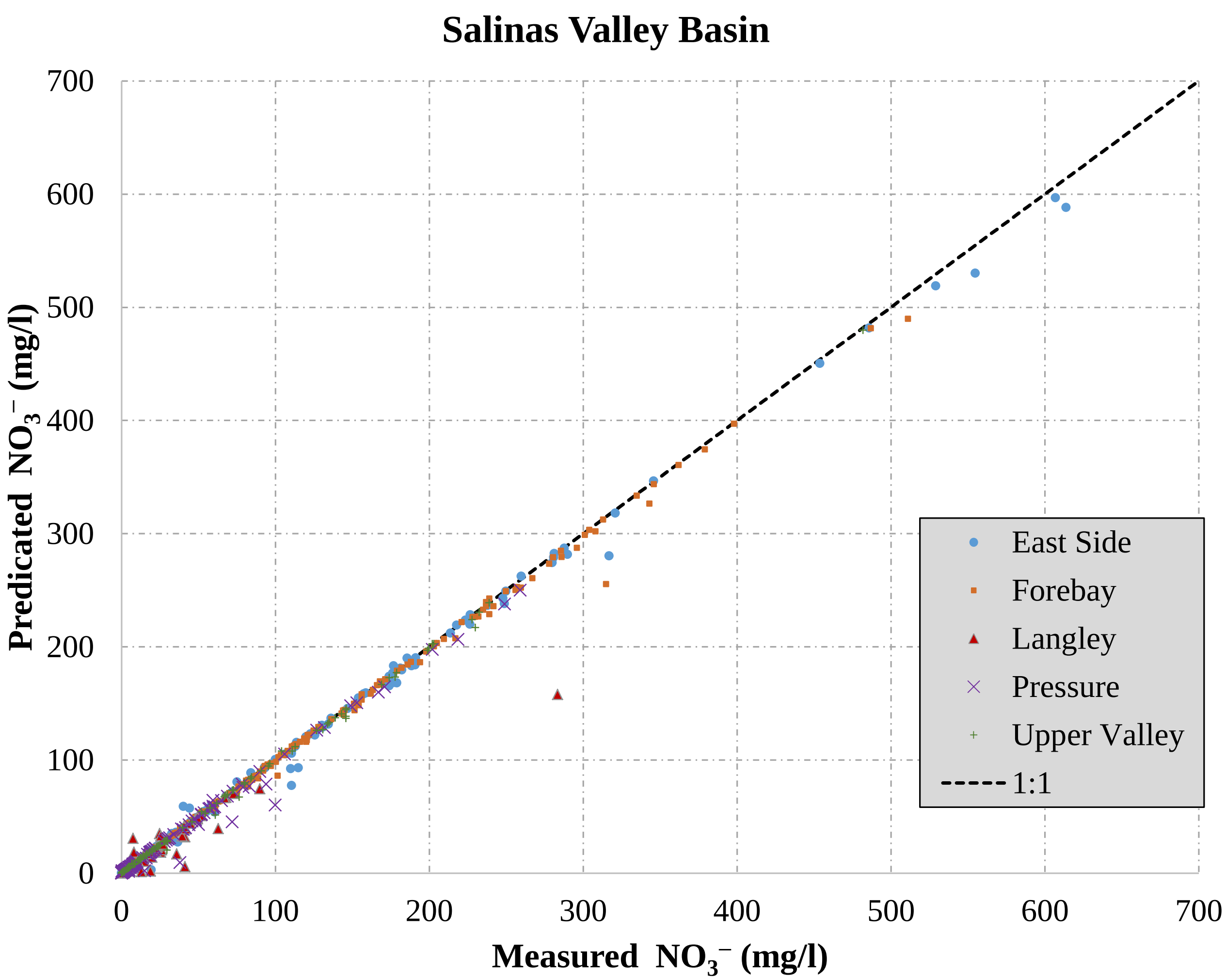


Figure A1-4: Scatter plot of measured and estimated nitrate categorized based on subbasins data

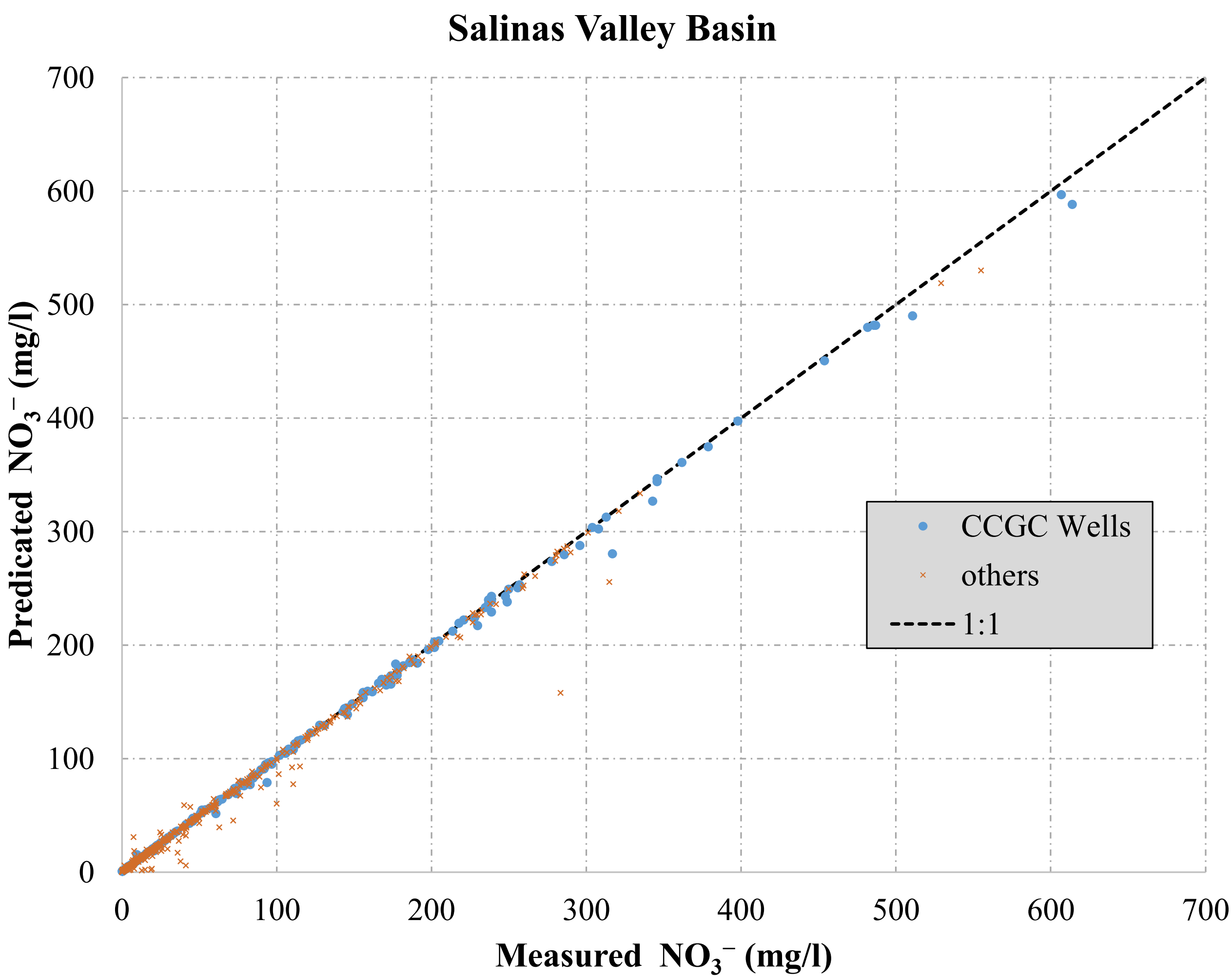


Figure A1-5: Scatter plot of measured and estimated nitrate categorized based on data sources

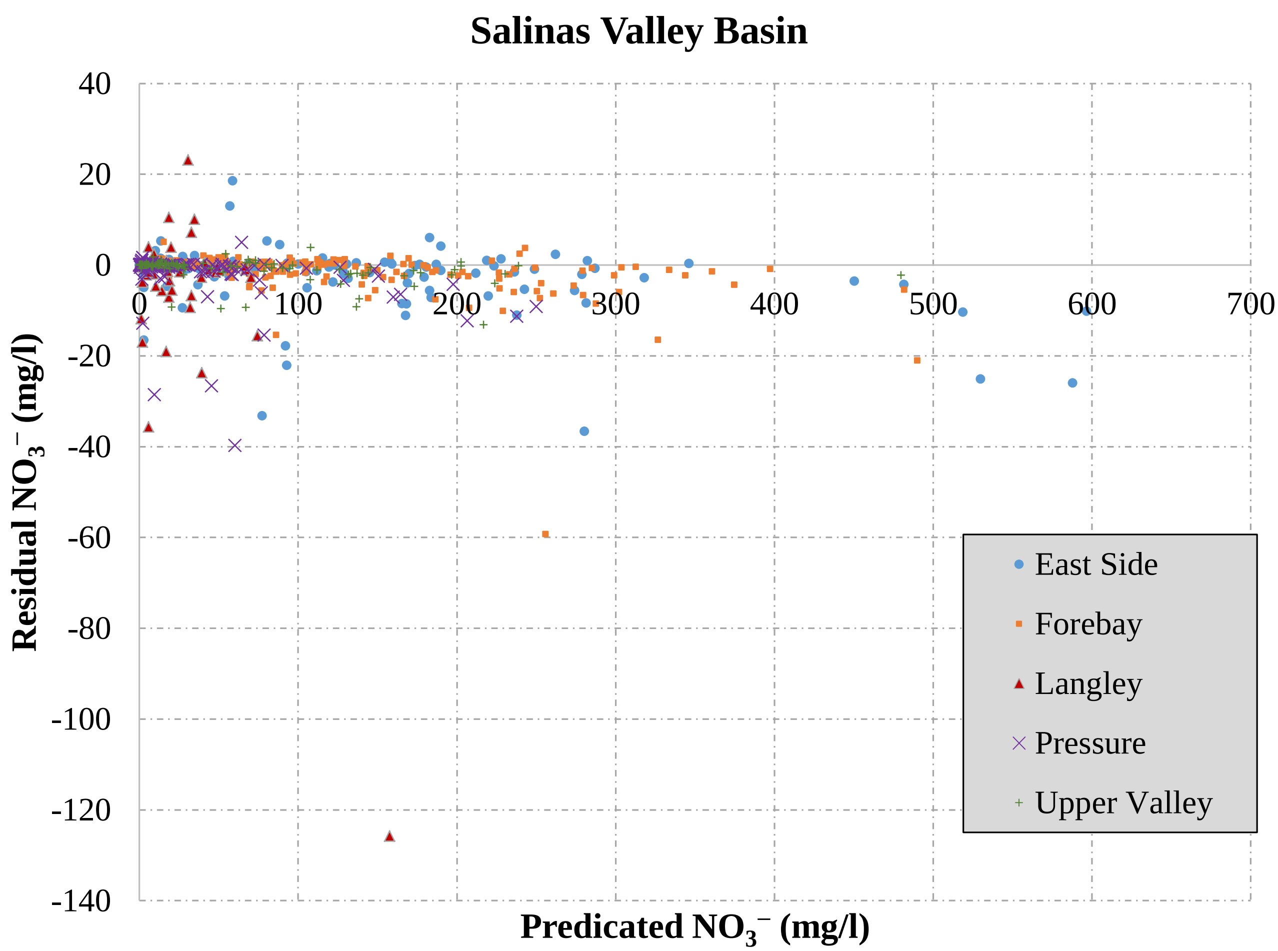


Figure A1-6: Residual versus estimated nitrate concentartion based on subbasins data

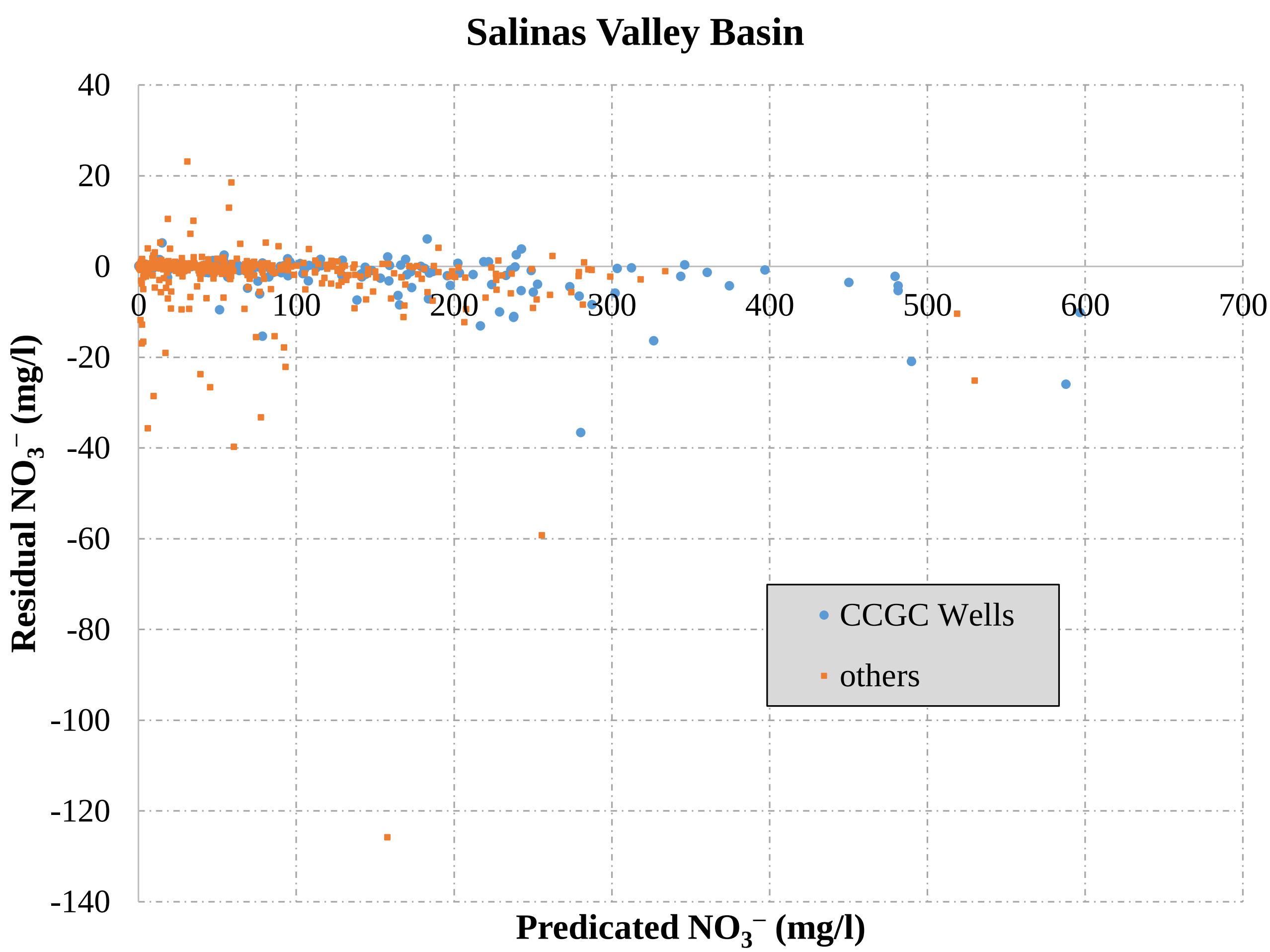


Figure A1-7: Residual versus estimated nitrate concentartion based on data sources

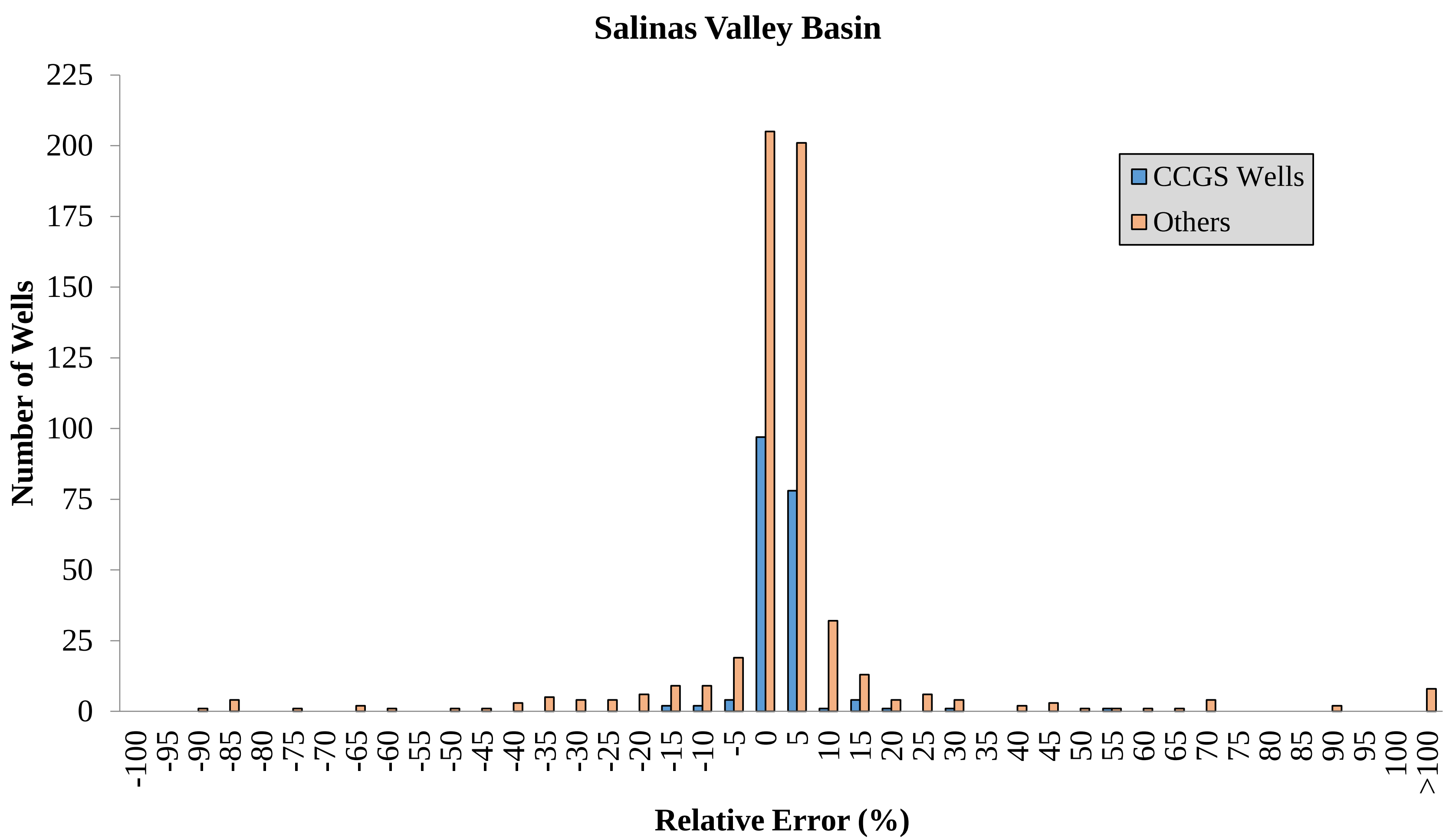


Figure A1-8: Relative error histogram categorized based on data sources

APPENDIX A-2

KRIGING AND DEVELOPMENT OF VARIOGRAM MODELS FOR THE NORTHERN COUNTIES

Lockwood Valley Basin

The histogram of nitrate data for the Lockwood Valley **(Figure A2-1)** does not following a normal distribution. Kriging can be problematic with distributions that are highly skewed, and transformations are often used to transform data into a distribution that is closer to a normal distribution (Journal and Huijbregts, 1978). By taking the natural log of the nitrate data, the resulting histogram **(Figure A2-2)** is closer to a normal distribution. Statistics of the transformed data are provided in **Table A2-1**.

Table A2-1: Statistics of Natural Log of Nitrate Data

Basin	No. of data	Min, mg/l	Max, mg/l	Mean, mg/l	Variance, $(mg/l)^2$	Range, mg/l
Lockwood Valley	39	-0.693	3.859	2.072	2.021	4.552

Insufficient data were present in the Lockwood Valley Basin to develop a variogram. Therefore, a simple linear variogram model was used in the Lockwood Valley Basin **(Figure A2-3)** to fit to the nitrate data, with slope equal to 0.0002532 $mg^2/l^2/m$. The range (correlation length) is set to equal 5,000 meters. The nugget was set to zero. The domain was discretized to 1380 rows with 1684 columns with approximately 20 meter grid cells. The variogram characteristics are summarized in **Table A2-2**.

Table A2-2: Variogram Model Characteristics

Basin	Model Type	Search Radius (m)	Grid size (rows x column)	X Spacing (m)	Y Spacing (m)	Variogram Slope
Lockwood Valley	Linear	5000	1380 x 1684	20	20	0.0002532

The kriging output is analyzed graphically and with related statistics. The first evaluation is based on an observed versus estimated plot. The estimated nitrate concentrations at the observation locations are compared to the observed values and this is illustrated as a scatter plot that shows CCGC wells and other data sources **(Figure A2-4)**. The scatter plot shows the data points compared to a line with a 1:1 slope, which is the line on which the data should ideally fall when estimated values equal observed values exactly. The majority of data fits very well to the 1:1 line. The correlation coefficient, R, is calculated to be 0.931; this indicates that the trends in the estimated values closely match those of observations. The R for CCGC data category is equal to 1, and the R for the other data is equal to 0.930.

The correlation coefficient is defined to be the covariance between the measured and estimated nitrate normalized by multiplication of standard deviations of both measured and estimated nitrate using the following equation:

$$R = \frac{\sum_{i}^{nw}(z_i - m_z)(z'_i - m_{z'})}{\sqrt{\sum_{i}^{nw}(z_i - m_z)^2}\sqrt{\sum_{i}^{nw}(z'_i - m_{z'})^2}}$$

Where:

z_i Is the observed (measured) value of nitrate [mg/l];

z'_i Is the estimated (kriged) value of nitrate [mg/l];

m_z Is the mean of observed concentration values [mg/l];

$m_{z'}$ Is the mean of estimated concentration values [mg/l];

nw Is number of observations and that is equal to number of wells [mg/l];

A plot of residual versus estimated nitrate concentration is shown on **Figure A2-5**. The residual quantity is defined to be the difference between estimated and observed nitrate concentration at measured locations and this can be positive or negative. The other data sources exhibit larger residuals compared with CCGC data (only two points) with three locations underestimating the nitrate concentration.

Figure A2-6 is a histogram of the normalized residuals showing relative error as a percentage. In general, around 70% of the Lockwood Valley Basin data were honored with +/- 5% relative error. With respect to the data categories, 100% of the CCGC well data are honored within 5% relative error and 68% of the other well data are honored within +/- 5% relative error.

References

Journel, A.G., and Huijbregts, C. (1978), Mining Geostatistics, Academic Press, 600 pp.

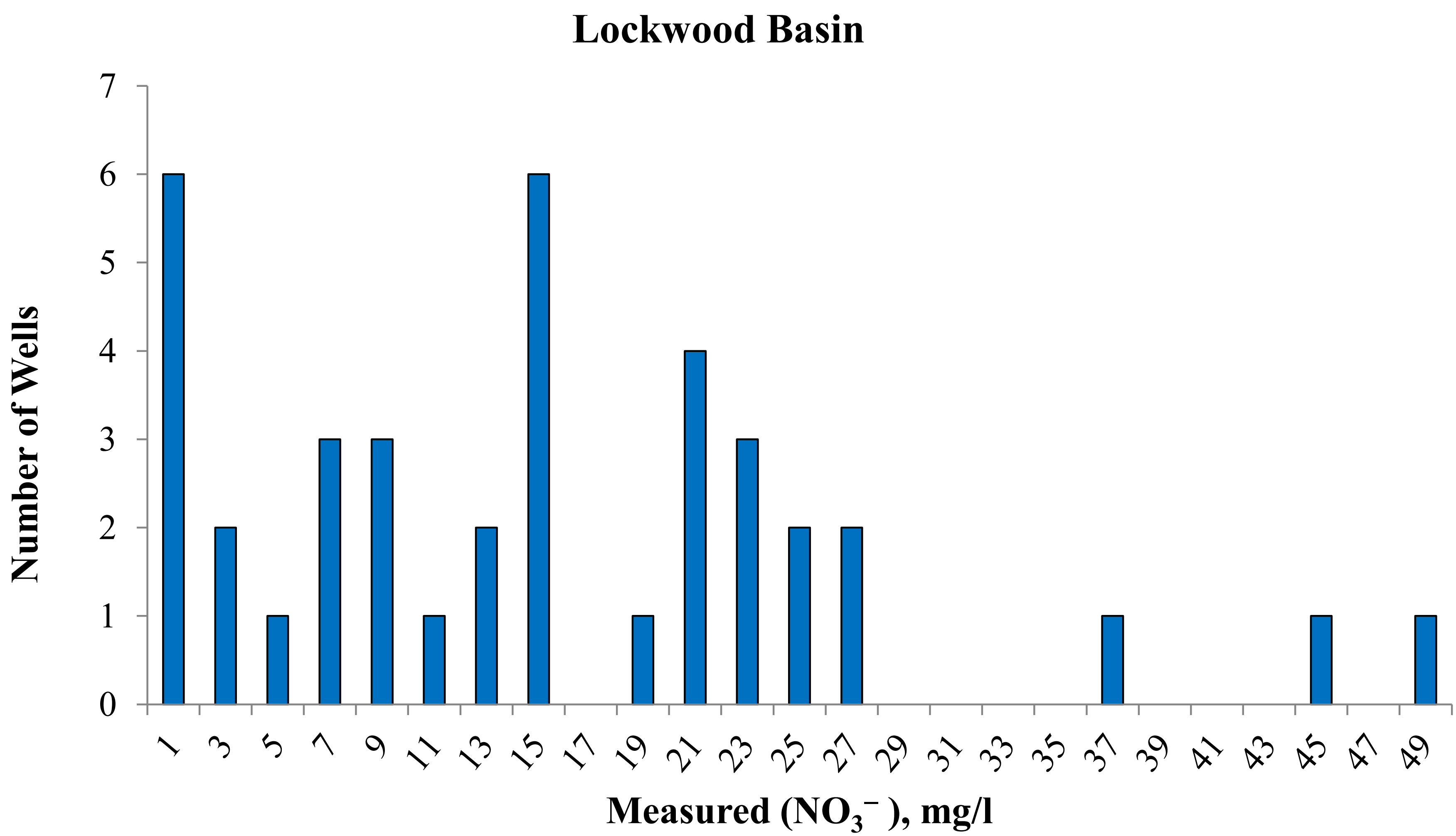


Figure A2-1: Histogram of the nitrate data

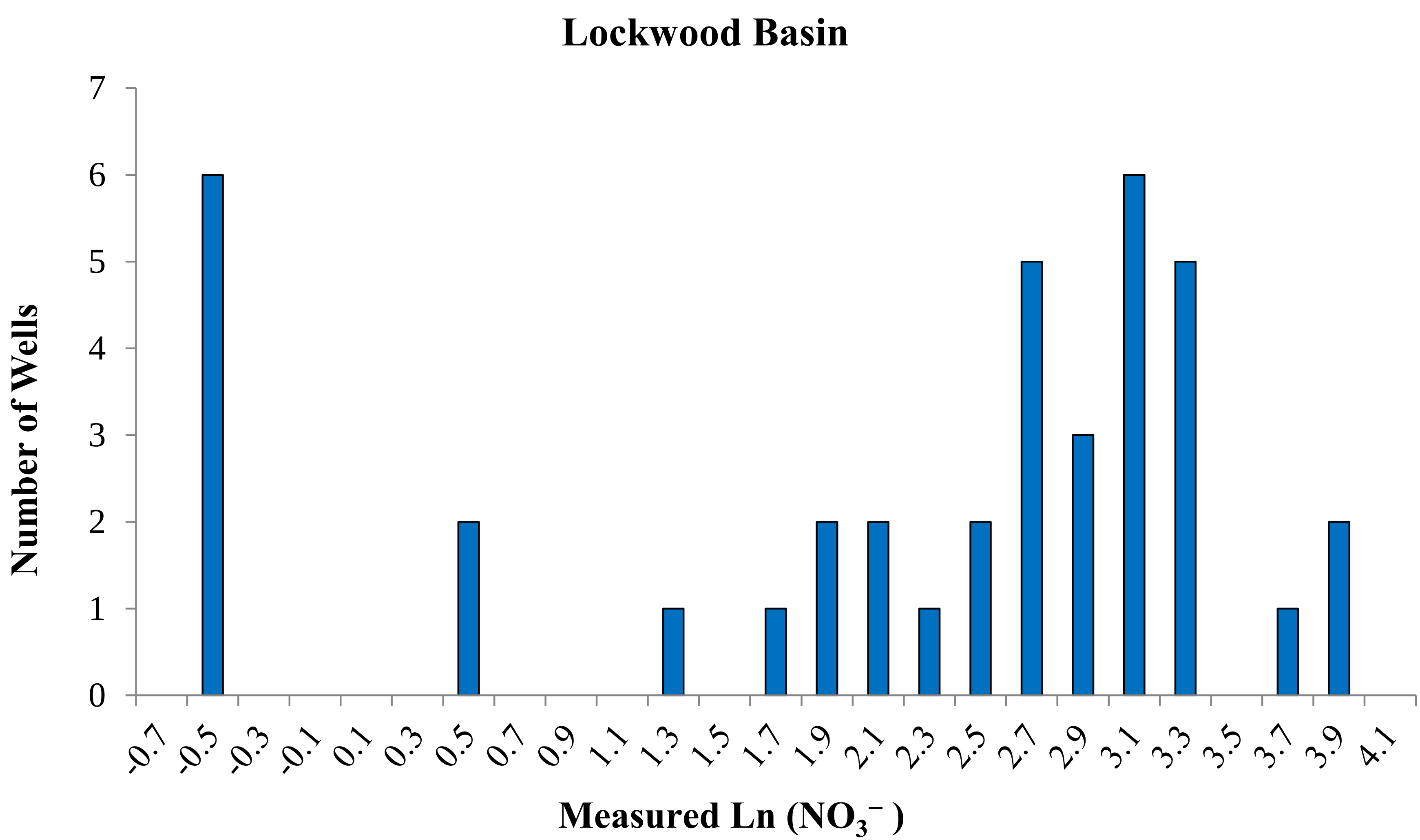


Figure A2-2: Histogram of the natural log of nitrate data

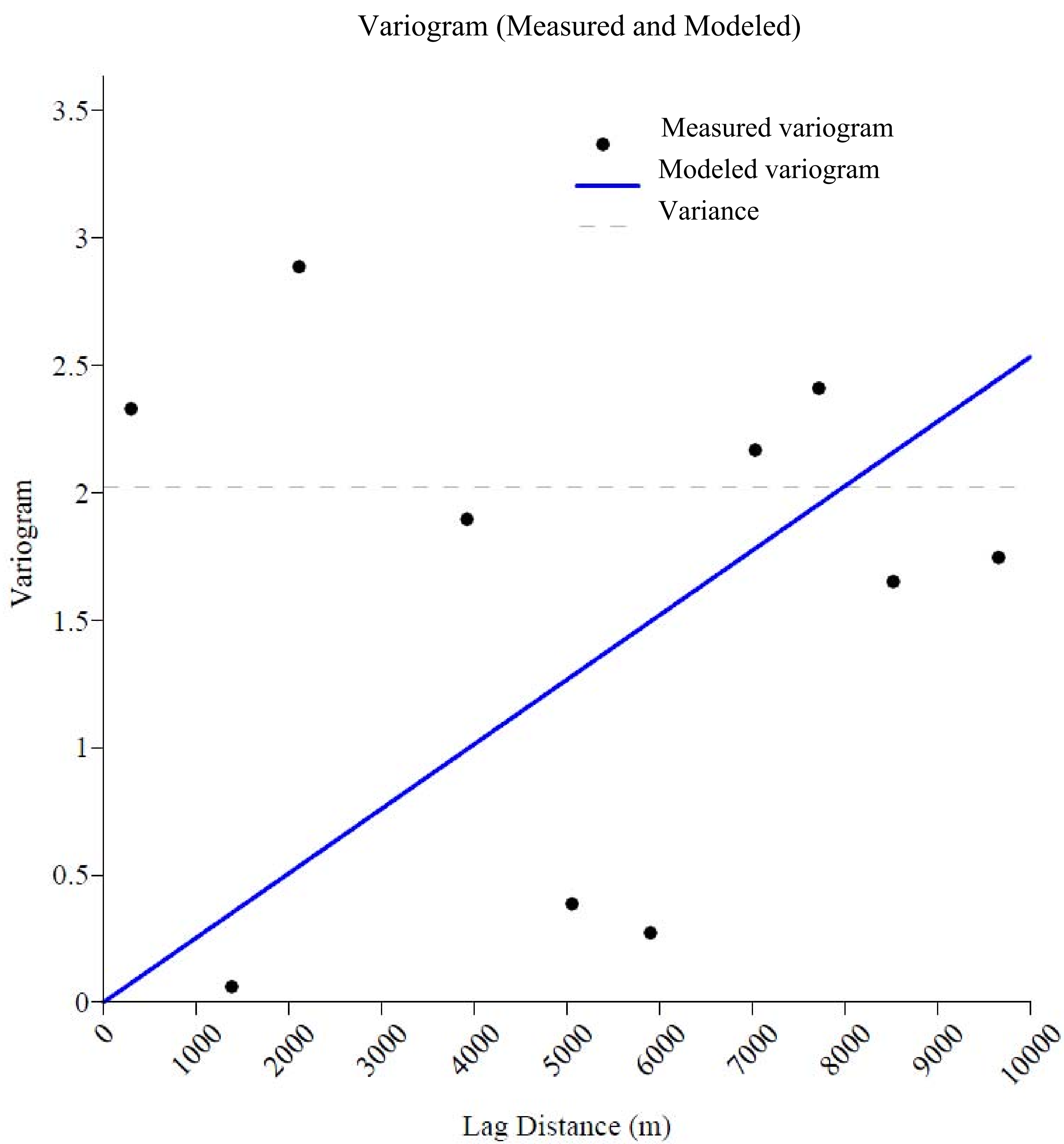


Figure A2-3: Variogram and its fit based on natural log of nitrate data

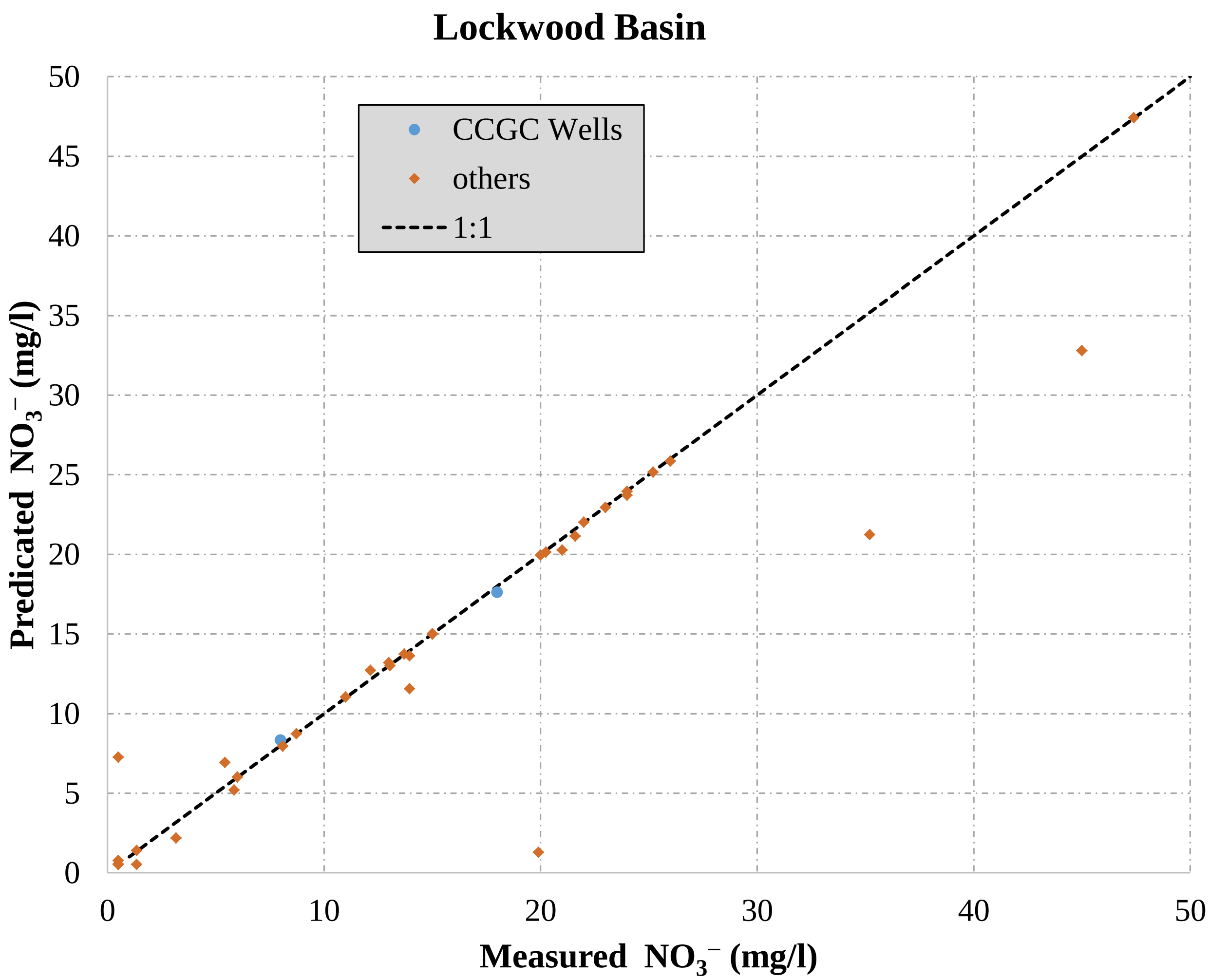


Figure A2-4: Scatter plot of measured and estimated nitrate categorized based on data sources

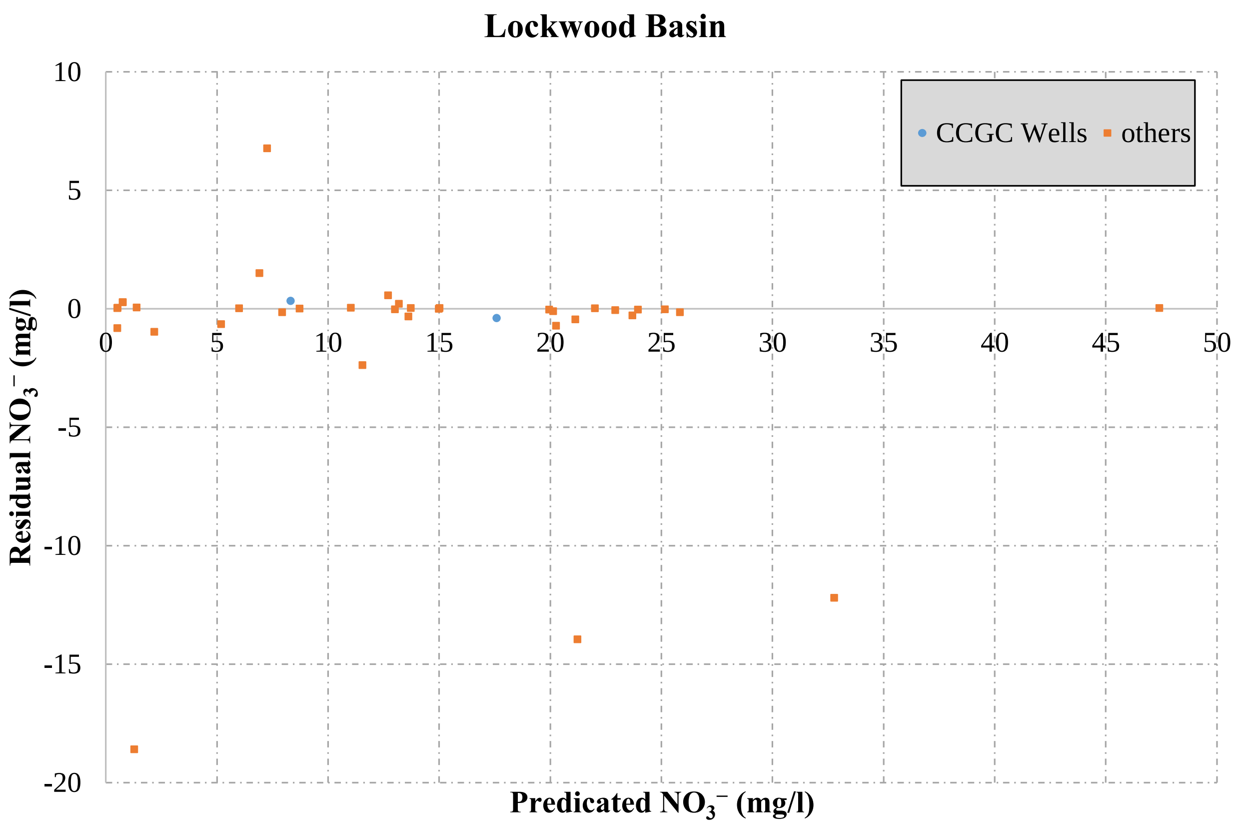


Figure A2-5: Residual versus estimated nitrate concentration based on data sources

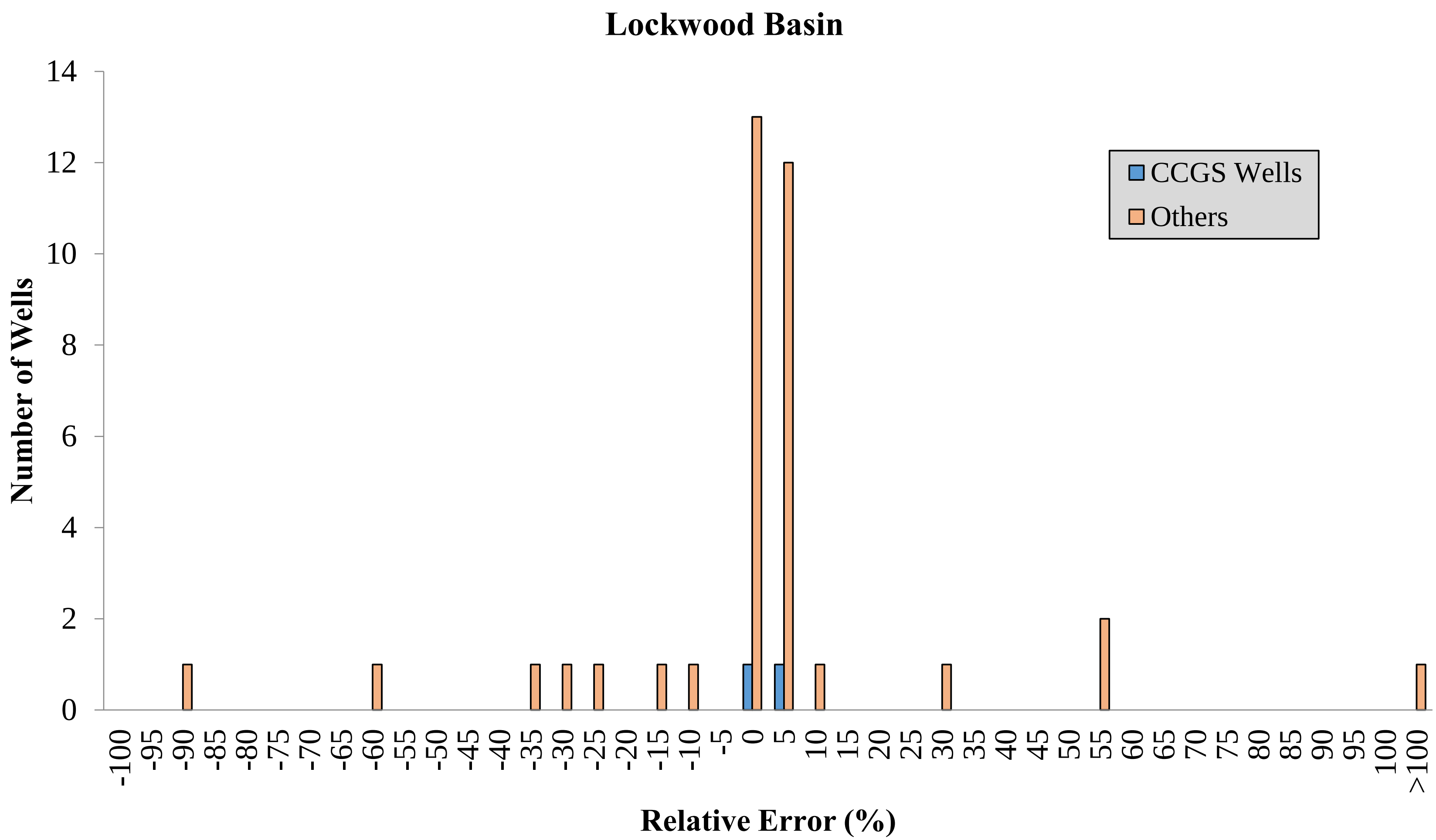


Figure A2-6: Relative error histogram categorized based on data sources

APPENDIX B

WELLS EXCLUDED FROM NITRATE MAPPING

Excluded wells are summarized in Tables B-1 through B-3 and in Figure B-1. A total of 393 wells were excluded from the kriging dataset for estimation of nitrate concentrations for various reasons. We assumed the shallow aquifer extends to 400 feet deep, and we therefore excluded 48 wells with known well depths greater than 400 feet. We assumed that any irrigation well with unknown depth had the potential to be greater than 400 feet deep in the Pressure Subbasin, and therefore 71 irrigation wells were excluded. Additionally, 10 domestic/irrigation wells with unknown depth were also excluded in the Pressure Subbasin. Finally, 23 observation wells from regulated clean-up sites located in the urban, downtown Salinas area were excluded from analysis due to extremely high nitrate values due to fertilizer and/or nitrate contamination.

Additionally, some data were excluded from our nitrate dataset. From selected wells, nitrate data from GeoTracker had less than qualifiers with unusually large nitrate values or had greater than qualifiers, i.e. <16 mg/L; >63.9 mg/L. Instead of using the numerical given value, we excluded 12 points from our dataset. Eight of these points were from excluded wells from regulated clean-up sites mentioned above. **Table B-3** summarizes these values.

Summary statistics for time-averaged nitrate concentrations from excluded wells are shown in **Table B-1**. The mean concentration was 48.1 mg/L. The median was 14.4 mg/L. Values ranged from 0.09 mg/L to 2,535 mg/L. 88 wells (22 %) had maximum concentrations over the MCL of 45 mg/L.

Figure B-1 shows the excluded well locations and **Table B-2** lists the wells excluded.

Table B1. Summary Statistics for Maximum Groundwater Nitrate Concentrations from Excluded Wells

	Excluded Wells
Mean	48.1
Median	14.4
Standard Deviation	178.4
Minimum	0.09
Maximum	2535
Number of Wells	393
Number of Wells (percent) with concentrations over the MCL	88 (22%)

Table B2. Excluded Wells

Well Name	Average NO3	Maximum NO3	Well_Depth	Use	Source	Reason For Exclusion	Basin
AW1780_HIGFCAI	17.0	17.0	600	Dom/Irrig	Field Visit	Well Depth > 400	East Side
AW1818_JFFJEED	98.0	98.0	608	Dom/Irrig	Field Visit	Well Depth > 400	East Side
AW0326_OFFICD1	4.7	5.0	660	Domestic	Field Visit; USGS-NWIS; USGS-GAP	Well Depth > 400	East Side
AW0326_SISTER1	6.0	6.0	660	Domestic	Field Visit	Well Depth > 400	East Side
USGS_363718121302001	220.0	222.0	700	Domestic	USGS-NWIS; USGS-GAP	Well Depth > 400	East Side
AW0370_CWPDESI	22.0	28.0	445	Irrigation	Field Visit	Well Depth > 400	East Side
AW1708_SPENCE3	690.0	690.0	640	Irrigation	Field Visit	Well Depth > 400	East Side
USGS_363552121304201	64.0	64.0	608	Irrigation	USGS-NWIS	Well Depth > 400	East Side
USGS_364217121391703	6.1	6.1	498	Observation	USGS-NWIS; GAMA	Well Depth > 400	East Side
USGS_364217121391702	4.2	4.2	610	Observation	USGS-NWIS; GAMA	Well Depth > 400	East Side
USGS_364217121391701	3.6	3.6	728	Observation	USGS-NWIS; GAMA	Well Depth > 400	East Side
2700851-001	14.4	402.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2700853-001	6.0	48.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2700853-002	170.0	170.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2700558-001	43.2	100.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2701433-001	35.5	40.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2702537-001	1.6	1.6		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710010-037	15.1	25.2		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710010-005	10.2	16.9		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710010-008	17.3	21.9		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710010-014	4.4	5.7		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710010-022	16.1	20.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710010-024	11.8	16.8		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710010-039	55.8	72.4		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710010-040	49.1	87.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710010-041	4.8	6.3		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710010-046	8.5	16.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710001-004	9.7	20.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710001-005	8.5	11.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710010-006	46.0	59.7		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710010-018	40.9	70.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710010-045	24.1	40.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710010-042	4.7	15.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710010-043	20.2	32.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2702021-003	0.8	1.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2702554-003	5.0	5.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2700586-003	2.3	4.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2700586-008	12.4	13.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2700651-001	46.0	47.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2700652-001	20.0	20.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2700736-001	23.0	23.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2701232-001	23.2	66.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2701456-001	15.0	15.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2701922-001	7.3	8.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2702259-004	33.6	34.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710001-012	4.8	12.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710001-001	15.5	27.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710001-002	25.4	36.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710001-007	19.2	35.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710001-011	8.0	16.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710001-013	25.3	37.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side

Well Name	Average NO3	Maximum NO3	Well_Depth	Use	Source	Reason For Exclusion	Basin
2710010-016	26.0	30.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710010-029	41.6	67.1		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2702475-001	30.4	38.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2702198-001	14.1	18.1		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2702198-002	11.8	16.5		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2702161-001	59.5	120.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2702409-001	55.5	66.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2702566-001	29.1	130.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2702121-001	2.7	2.8		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2702202-001	27.7	142.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2701904-001	71.0	71.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2700856-001	56.7	147.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2701151-001	6.6	11.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2701241-001	218.9	291.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2701931-001	30.0	48.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2702017-001	6.0	6.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2702572-001	4.3	5.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2701188-001	43.3	48.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2701068-001	71.2	82.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2701523-001	8.5	9.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2701589-006	13.2	18.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2702621-001	54.0	74.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710007-003	10.3	20.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2710007-005	11.1	30.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2702626-001	25.5	28.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2701946-001	54.3	85.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
2701678-001	23.0	23.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	East Side
USGS_364155121384701	17.1	17.1	668	Unknown	USGS-NWIS; GAMA	Well Depth > 400	East Side
USGS_364357121375701	31.3	31.3	619	Unknown	USGS-NWIS; GAMA	Well Depth > 400	East Side
USGS_364100121360001	7.3	7.3	810	Unknown	USGS-NWIS; GAMA	Well Depth > 400	East Side
AW1656_KIRWESC	50.0	50.0	544	Dom/Irrig	Field Visit	Well Depth > 400	Forebay
USGS_361941121153701	0.9	0.9	670	Domestic	USGS-GAP	Well Depth > 400	Forebay
AW1804_AG_BLAIR5	19.5	19.5	700	Irrigation	eNOI	Well Depth > 400	Forebay
2710851-001	52.4	58.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2710850-005	23.2	96.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2710850-007	10.3	16.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2710851-002	41.1	61.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2701000-002	4.8	6.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2701040-001	24.9	38.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2701046-001	1.2	1.3		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2701579-001	56.0	56.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2701579-003	11.0	18.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2702412-001	8.5	10.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2702412-002	13.3	15.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2710850-001	70.0	70.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2710850-002	39.0	39.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2701176-001	17.3	36.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2702317-001	7.0	10.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2701001-001	4.5	5.1		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2700774-001	40.0	40.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2710011-013	1.9	8.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2701550-001	14.7	85.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay

Well Name	Average NO3	Maximum NO3	Well_Depth	Use	Source	Reason For Exclusion	Basin
2701550-002	0.5	0.5		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2701550-003	39.0	39.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2701826-001	31.0	31.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2710011-002	32.3	55.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2710011-003	30.0	55.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2710011-005	0.8	1.9		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2710011-006	1.6	5.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2710011-007	1.2	4.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2710011-008	0.9	3.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2710011-009	1.0	2.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2710011-014	1.0	3.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2701045-001	8.5	9.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2702520-001	27.3	43.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2702520-002	2.0	2.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2701713-001	46.0	46.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2702466-001	16.8	39.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2702466-002	27.9	56.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2702496-001	1.9	2.4		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2701165-001	0.6	0.7		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2701165-003	0.5	0.5		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2710008-001	10.8	16.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2710008-006	16.0	31.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2701403-007	1.1	1.4		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2701036-001	60.0	119.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2710008-005	0.5	0.7		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2710008-009	0.4	0.4		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
2700999-001	28.2	31.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Forebay
USGS_362800121220001	4.5	4.5	830	Unknown	USGS-NWIS; GAMA	Well Depth > 400	Forebay
USGS_361900121160001	8.2	8.2	883	Unknown	USGS-NWIS; GAMA	Well Depth > 400	Forebay
USGS_364800121370001	6.7	6.7	500	Unknown	USGS-NWIS; GAMA	Well Depth > 400	Langley
USGS_364757121373301	0.1	0.1	472	Unknown	USGS-NWIS	Well Depth > 400	Langley
AW1645_BAILLD1	60.0	60.0		Dom/Irrig	Field Visit	Dom/Irrig wells without well depth excluded from subbasin	Pressure
AW1622_MARVIN1	0.5	0.5		Dom/Irrig	Field Visit	Dom/Irrig wells without well depth excluded from subbasin	Pressure
AW1780_HIGFSPE	3.0	3.0	580	Dom/Irrig	Field Visit	Well Depth > 400	Pressure
AW1641_TANAKNI	2.0	2.0	512	Dom/Irrig	Field Visit	Well Depth > 400	Pressure
AW3194_CONLAN5	1.0	1.0	1010	Dom/Irrig	Field Visit	Well Depth > 400	Pressure
AW3194_CONLAN3	2.0	2.0	780	Dom/Irrig	Field Visit	Well Depth > 400	Pressure
AW3194_CONLAN4	2.0	2.0	780	Dom/Irrig	Field Visit	Well Depth > 400	Pressure
AW1622_SCHOOLD	13.0	13.0		Dom/Irrig	Field Visit	Dom/Irrig wells without well depth excluded from subbasin	Pressure
AW1780_HIGFBLA	3.0	3.0	700	Dom/Irrig	Field Visit	Well Depth > 400	Pressure
AW1494_STORMW1	0.5	0.5		Dom/Irrig	Field Visit	Dom/Irrig wells without well depth excluded from subbasin	Pressure
AW1499_CHAPEL1	0.5	0.5		Dom/Irrig	Field Visit	Dom/Irrig wells without well depth excluded from subbasin	Pressure
AW1627_TSLARAD	0.5	0.5	446	Dom/Irrig	Field Visit	Well Depth > 400	Pressure
AW1499_KOUEDO1	20.0	20.0		Dom/Irrig	Field Visit	Dom/Irrig wells without well depth excluded from subbasin	Pressure
AW1627_TSLLAND	1.0	1.0	530	Dom/Irrig	Field Visit	Well Depth > 400	Pressure
AW1641_TANADAU	0.9	0.9	595	Dom/Irrig	Field Visit	Well Depth > 400	Pressure
AW1627_TSLTARD	1.0	1.0		Dom/Irrig	Field Visit	Dom/Irrig wells without well depth excluded from subbasin	Pressure
AW1726_BRIRYAD	9.0	9.0		Dom/Irrig	Field Visit	Dom/Irrig wells without well depth excluded from subbasin	Pressure
AW3431_FLOPFLO	5.0	5.0		Dom/Irrig	Field Visit	Dom/Irrig wells without well depth excluded from subbasin	Pressure
AW3544_QVFMATD	12.0	12.0		Dom/Irrig	Field Visit	Dom/Irrig wells without well depth excluded from subbasin	Pressure
AW1571_LJFAHOM	4.0	4.0	570	Dom/Irrig	Field Visit	Well Depth > 400	Pressure
AW1780_HIGFBRO	174.0	174.0	700	Dom/Irrig	Field Visit	Well Depth > 400	Pressure

Well Name	Average NO3	Maximum NO3	Well_Depth	Use	Source	Reason For Exclusion	Basin
AW1571_LJFRAN2	2.0	2.0	670	Dom/Irrig	Field Visit	Well Depth > 400	Pressure
AW1780_HIGFNAS	2.0	2.0	600	Domestic	Field Visit	Well Depth > 400	Pressure
AW1641_TANABAR	0.5	0.5	416	Domestic	Field Visit	Well Depth > 400	Pressure
AW1494_JACKSHP	1.0	1.0	410	Domestic	Field Visit	Well Depth > 400	Pressure
USGS_364117121411401	44.2	45.1	500	Domestic	USGS-NWIS; USGS-GAP	Well Depth > 400	Pressure
USGS_364337121402601	119.6	119.6	450	Domestic	USGS-GAP	Well Depth > 400	Pressure
USGS_363507121380601	81.4	82.8	700	Domestic	USGS-NWIS; USGS-GAP	Well Depth > 400	Pressure
AW1170_20845D	18.0	18.0	460	Domestic	Field Visit	Well Depth > 400	Pressure
AW3249_RIVERR1	10.2	10.5	589	Domestic	Field Visit; USGS-GAP	Well Depth > 400	Pressure
AW1571_LJFASOM	0.9	0.9	580	Domestic	Field Visit	Well Depth > 400	Pressure
AW0310_PISFPUR	70.0	70.0	441	Domestic	Field Visit	Well Depth > 400	Pressure
AW1353_AG_WELL_C	2.0	2.0		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1647_AG_WELL55B	22.5	28.6		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1817_WELL	0.5	0.5		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1647_AG_WELL95A	23.8	29.0		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW0378_AW 1 (3)	1.0	1.0		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1757_WELL 1 (1)	14.0	18.2		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1757_WELL 2	3.3	4.0		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW0378_AW 2 (3)	15.2	15.2		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1757_WELL 1 (3)	16.8	31.0		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1817_WELL #2	3.0	3.0		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1492_AG WELL 1 (2)	0.4	0.4		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1757_WELL 1 (2)	16.6	32.3		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW0446_AG_WELL_SU	16.3	16.3		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1646_AG_AMARAL	11.4	11.4		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW3194_AG_WELL1	6.1	6.1		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW0378_AW	3.5	3.5		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW3194_AG_WELL5	2.0	2.0		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW3337_AG_WELL	118.2	118.2		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1804_AG_GARIN4	120.4	120.4		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1437_AG WELL (3)	13.5	14.6		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW3053_AG_CUCUNA	34.5	34.5		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AGL020003691_AG_JACOB	53.9	80.7		Irrigation	GAMA_ILRP	Irrigation wells without well depth excluded from subbasin	Pressure
AW3508_AG_MERDIAN	20.8	23.3		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1804_AG_MCDOUG3	35.3	35.3		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1804_AG_VAUGHN3	55.1	55.1		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AGL020002105_AG_HAYMORE	6.2	6.2		Irrigation	GAMA_ILRP	Irrigation wells without well depth excluded from subbasin	Pressure
AGL020003644_AG_BLANCO	3.0	3.5		Irrigation	GAMA_ILRP	Irrigation wells without well depth excluded from subbasin	Pressure
AW3194_AG_WELL3	2.1	2.1		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AGL020011571_AG_JON_G	3.4	3.4		Irrigation	GAMA_ILRP	Irrigation wells without well depth excluded from subbasin	Pressure
AW3194_AG_WELL4	1.9	1.9		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW3194_AG_WELL2	1.4	1.4		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW3342_RSSLLBGWL	20.2	20.9		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW3342_RSSLLSMWL	144.7	144.7		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1492_AG WELL 2 (5)	2.7	2.7		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
USGS_364111121410701	62.7	71.0	430	Irrigation	USGS-NWIS	Well Depth > 400	Pressure
AGL020003654_AG_BORAND5	0.1	0.1		Irrigation	GAMA_ILRP	Irrigation wells without well depth excluded from subbasin	Pressure
AGL020003694_AG_DOLAN	0.8	0.8		Irrigation	GAMA_ILRP	Irrigation wells without well depth excluded from subbasin	Pressure
AW1492_AG WELL 1 (3)	82.8	82.8		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW3703_WELL	167.0	167.0		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW0378_AW 2 (2)	2.7	2.7		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW0378_AW 1 (2)	5.5	5.5		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure

Well Name	Average NO3	Maximum NO3	Well_Depth	Use	Source	Reason For Exclusion	Basin
AGL020003659_AG_FERRAS1	0.6	0.9		Irrigation	GAMA_ILRP	Irrigation wells without well depth excluded from subbasin	Pressure
AW0378_AW 1 (1)	2.4	2.4		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW0378_AW 3	4.1	4.1		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW0378_AW 2 (1)	2.4	2.4		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW4609_BRAMERS WELL	33.2	34.5		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW0644_SIP 1	2.5	2.5		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AGL020003661_AG_HUNT_18	67.0	75.6		Irrigation	GAMA_ILRP	Irrigation wells without well depth excluded from subbasin	Pressure
AW1492_AG WELL 1 (1)	10.2	10.2		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1492_AG WELL 1 (5)	10.6	10.6		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AGL020002966_AG_PETERS4	96.8	96.8		Irrigation	GAMA_ILRP	Irrigation wells without well depth excluded from subbasin	Pressure
AGL020002970_AG_DIAC1	1.3	1.3		Irrigation	GAMA_ILRP	Irrigation wells without well depth excluded from subbasin	Pressure
AW1492_AG WELL 2 (4)	5.8	5.8		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AGL020002975_AG_NMART_1	7.8	7.8		Irrigation	GAMA_ILRP	Irrigation wells without well depth excluded from subbasin	Pressure
AGL020002892_AG_MARTIN2	7.1	7.1		Irrigation	GAMA_ILRP	Irrigation wells without well depth excluded from subbasin	Pressure
AW1492_AG WELL 1 (4)	9.7	9.7		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1754_WELL #1	104.0	104.0		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1807_JENSEN WELL 3	0.9	0.9		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW4610_MANN WELL 3	12.0	12.8		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW0651_RIVER 1	45.2	46.5		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1492_AG WELL 2 (3)	4.0	4.0		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW0651_ABRAMS	9.7	10.2		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW0651_CAYMUS	7.5	8.0		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1487_RIVER RD	13.8	14.9		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1804_AG_SARG7	113.5	113.5		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AGL020002894_AG_MORISO1	6.0	6.0		Irrigation	GAMA_ILRP	Irrigation wells without well depth excluded from subbasin	Pressure
AW4610_BASSI WELL 1	50.3	55.8		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW4609_FANOE WELL 1	48.7	55.8		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1487_LA REINA	20.7	21.7		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1804_AG_PORTO6	80.2	80.2		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1804_AG_WILL51	3.9	3.9		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
AW1804_AG_WILL35	2.9	2.9		Irrigation	eNOI	Irrigation wells without well depth excluded from subbasin	Pressure
2701452-002	0.4	1.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701452-004	0.3	0.3		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701515-001	1.2	2.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701683-001	2.6	2.8		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701683-002	1.4	1.9		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710005-003	5.2	15.4		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701768-001	1.5	2.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710005-004	2.3	6.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2702453-001	40.0	42.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2702456-002	0.7	2.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700674-002	3.4	4.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700674-003	5.5	6.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700505-001	3.0	3.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700539-001	7.0	8.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700540-001	58.5	60.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700543-001	11.0	11.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700548-001	4.8	5.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700577-001	5.1	7.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700609-001	34.5	37.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700624-001	21.2	23.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700645-001	2.0	2.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure

Well Name	Average NO3	Maximum NO3	Well_Depth	Use	Source	Reason For Exclusion	Basin
2700758-001	3.0	3.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700760-001	19.5	23.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700802-001	30.3	32.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700842-001	22.0	43.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700842-002	3.8	4.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701120-001	5.0	5.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701237-001	4.0	4.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701393-001	49.0	62.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701481-001	25.0	26.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701602-001	13.0	13.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701622-001	4.0	4.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701633-001	19.2	32.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701636-001	14.0	14.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701647-001	10.3	12.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701786-001	16.0	16.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710003-001	4.3	13.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710003-002	1.0	2.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710003-004	19.9	46.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710005-005	3.4	9.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710019-001	21.7	26.6		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710019-003	3.1	4.2		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701109-001	1.1	2.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701813-001	3.7	4.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701740-012	9.0	9.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701606-001	10.0	10.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701625-001	31.0	32.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700525-001	42.0	42.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700541-001	6.5	9.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700544-001	13.5	16.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700547-001	2.7	3.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701451-001	3.0	4.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2700850-001	2.5	4.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701153-001	32.7	58.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701685-001	0.5	0.5		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2702482-001	39.9	110.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-020	6.5	11.5		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701229-001	0.5	0.5		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2702180-001	12.6	23.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-023	8.2	20.8		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-026	17.6	26.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-028	28.1	37.2		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-030	17.7	22.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2702320-001	6.2	19.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2702584-001	0.5	0.5		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-017	6.2	24.3		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-027	3.7	23.6		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701912-001	76.9	84.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710012-009	9.6	14.8		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-002	31.3	35.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-010	32.5	38.3		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-011	29.1	38.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-044TRTD	19.1	38.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure

Well Name	Average NO3	Maximum NO3	Well_Depth	Use	Source	Reason For Exclusion	Basin
2710010-081TRTD	13.0	13.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-082TRTD	12.0	12.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-083TRTD	11.0	11.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-084TRTD	36.0	36.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-085TRTD	34.0	34.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-086TRTD	33.0	33.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-096TRTD	27.9	36.3		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-097TRTD	34.5	36.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2702484-001	52.8	78.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2702484-003	2.0	4.4		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-007	51.0	51.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-009	20.2	34.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-019	61.7	92.6		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-021	24.6	40.6		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-077	27.5	38.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-101	20.9	52.9		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2702704-001	2.2	6.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710023-001	2.1	3.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710023-002	2.6	4.5		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710023-003	2.8	2.8		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710023-004	2.6	2.6		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701364-001	7.6	12.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701870-003	13.4	14.9		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701897-001	7.1	14.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2702444-001	16.9	20.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710012-002	7.4	9.6		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710012-003	3.5	9.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710012-011	6.0	6.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710012-016	8.4	22.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710012-017	6.7	9.4		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710012-023	2.7	3.4		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710012-024	10.8	14.4		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710010-015	24.0	44.3		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701214-001	2.3	11.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701214-002	2.8	3.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2702452-001	7.4	9.4		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2702452-002	164.0	168.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701575-001	9.0	11.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701750-001	3.0	3.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2702135-001	8.2	13.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2702431-001	6.5	11.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701152-001	12.5	13.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701057-001	76.0	85.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701202-002	2.5	3.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701202-004	3.2	28.8		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701698-001	6.0	6.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2702155-001	76.0	89.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2702440-001	23.5	25.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701542-001	132.0	132.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701060-001	2.0	2.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2702150-001	20.0	28.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2701063-001	130.3	190.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure

Well Name	Average NO3	Maximum NO3	Well_Depth	Use	Source	Reason For Exclusion	Basin
2701820-001	3.4	8.8		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710007-004	3.5	10.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
2710007-006	2.1	5.0		Public Supply	GAMA	Public Supply Wells Without Depths Excluded in Subbasin	Pressure
USGS_364500121480001	0.1	0.1	1364	Unknown	USGS-NWIS; GAMA	Well Depth > 400	Pressure
USGS_364600121430001	3.0	3.0	640	Unknown	USGS-NWIS; GAMA	Well Depth > 400	Pressure
USGS_363618121381901	8.4	8.4	490	Unknown	USGS-NWIS; GAMA	Well Depth > 400	Pressure
USGS_363901121375201	51.5	51.5	524	Unknown	USGS-NWIS; GAMA	Well Depth > 400	Pressure
MW-1	150			Observation	GAMA	Regulated clean-up site contaminated with fertilizer	Pressure
MW-10	0.5			Observation	GAMA	Regulated clean-up site contaminated with fertilizer	Pressure
MW-2	386		50	Observation	GAMA	Regulated clean-up site contaminated with fertilizer	Pressure
MW-3	0.7			Observation	GAMA	Regulated clean-up site contaminated with fertilizer	Pressure
MW-4	10.9			Observation	GAMA	Regulated clean-up site contaminated with fertilizer	Pressure
MW-6	3.1			Observation	GAMA	Regulated clean-up site contaminated with fertilizer	Pressure
MW-7	0.4			Observation	GAMA	Regulated clean-up site contaminated with fertilizer	Pressure
MW-8	16.9			Observation	GAMA	Regulated clean-up site contaminated with fertilizer	Pressure
MW-9	5.6			Observation	GAMA	Regulated clean-up site contaminated with fertilizer	Pressure
P-1	2535		21	Observation	GAMA	Regulated clean-up site contaminated with fertilizer	Pressure
P-2	2102.5		21	Observation	GAMA	Regulated clean-up site contaminated with fertilizer	Pressure
P-3	0.5			Observation	GAMA	Regulated clean-up site contaminated with fertilizer	Pressure
P-5	490.3			Observation	GAMA	Regulated clean-up site contaminated with fertilizer	Pressure
P-7	7.6			Observation	GAMA	Regulated clean-up site contaminated with fertilizer	Pressure
P-9	10			Observation	GAMA	Regulated clean-up site contaminated with fertilizer	Pressure
W-10	49.4			Observation	GAMA	Regulated clean-up site contaminated with fertilizer	Pressure
OW-1	55		80	Observation	GAMA	Regulated clean-up site contaminated with NO3	Pressure
OW-2	455.9		80	Observation	GAMA	Regulated clean-up site contaminated with NO3	Pressure
OW-4	59.9		84	Observation	GAMA	Regulated clean-up site contaminated with NO3	Pressure
OW-5	619.9		82	Observation	GAMA	Regulated clean-up site contaminated with NO3	Pressure
MW-1	253.3		45	Observation	GAMA	Regulated clean-up site near site contaminated with fertilizer	Pressure
MW-2	0.5			Observation	GAMA	Regulated clean-up site near site contaminated with fertilizer	Pressure
MW-3S	0.4			Observation	GAMA	Regulated clean-up site near site contaminated with fertilizer	Pressure

Table B3. Sampled data points excluded due to large less than or greater than qualifier.

Well Name	Basin	Well Depth	Sample Date	Constituent	Qualifier	Result	Units	Use	Source
2701676-001	Upper Valley		6/20/2002	NO3	<	10	MG/L	Unknown	GAMA
2702444-001	Pressure		5/23/2005	NO3	<	16	MG/L	Unknown	GAMA
MW-3 (18)	East Side		2/2/2006	NO3	>	67.31	MG/L	Observation	GAMA
MW-6 (13)	East Side		2/2/2006	NO3	>	61.11	MG/L	Observation	GAMA
OW-1	Pressure	80	10/3/2007	NO3	>	49.5	MG/L	Observation	GAMA
OW-1	Pressure	80	4/1/2009	NO3	>	67.05	MG/L	Observation	GAMA
OW-2	Pressure	80	10/3/2007	NO3	>	522	MG/L	Observation	GAMA
OW-2	Pressure	80	4/1/2009	NO3	>	540	MG/L	Observation	GAMA
OW-4	Pressure	84	10/3/2007	NO3	>	63.9	MG/L	Observation	GAMA
OW-4	Pressure	84	4/1/2009	NO3	>	61.2	MG/L	Observation	GAMA
OW-5	Pressure	82	10/3/2007	NO3	>	432.45	MG/L	Observation	GAMA
OW-5	Pressure	82	4/1/2009	NO3	>	1012.5	MG/L	Observation	GAMA

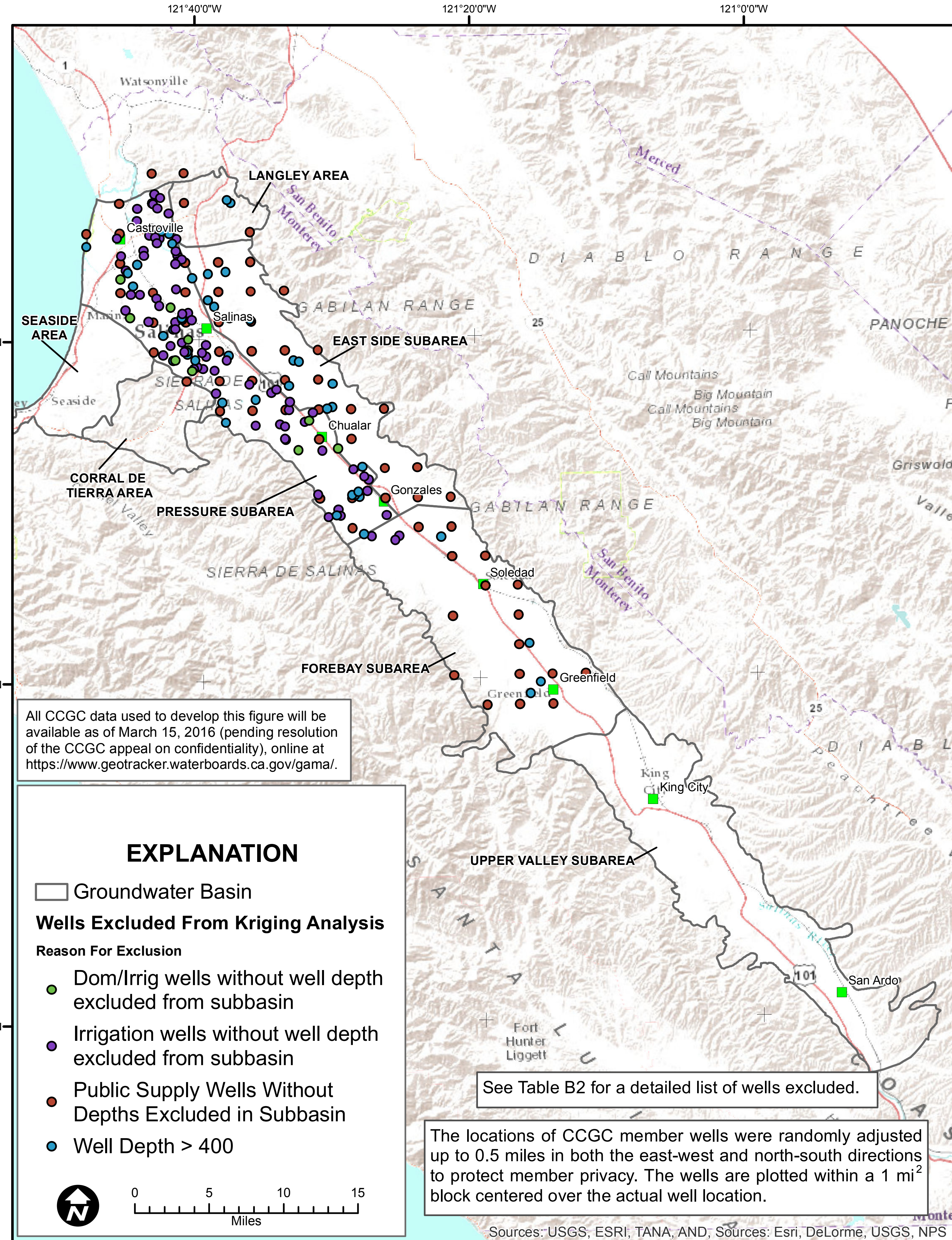


Figure B-1. Excluded Wells with Nitrate Data

Appendix C – Quality Assurance and Quality Control

Field Blanks

Field blanks detect possible constituent sources contributed from sampling methods and equipment. Examples include, but are not limited to, improperly cleaned sampling equipment, persistent airborne constituents in the sampling environment, and constituent sources in the sample containers. Fourteen field blanks were collected.[2]

Potassium, alkalinity, calcium, sodium, nitrate as NO_3, nitrate as N, nitrate + nitrite as N, nitrite as N, bicarbonate, and sulfate were detected in the field blanks. Detected concentrations were less than or equal to the PQL in 11 samples and above the PQL in three samples. Calcium was detected at a concentration of 2 mg/L in one field blank, which is above the PQL of 1 mg/L. NO_3+NO_2 as N was detected at concentrations of 0.2 and 0.3 mg/L, which are both above the PQL of 0.1 mg/L. NO_3 as N was detected at a concentration of 0.2 mg/L, which is above the PQL of 0.1 mg/L.
The table below summarizes detected values of nitrate species in the field blanks. Only three detected concentrations exceed the PQL.

[2] Field blanks were collected by pumping deionized water through a length of clean tubing. Sample bottles were filled, preserved, stored, and transported using the same procedures as used for the well water samples.

Table C1. Concentrations of NO_3, NO_3 as N, NO_3+NO_2 as N, and NO_2 as N in the field blanks.

Sample ID	Date	NO_3 (mg/L)	NO_3 as N (mg/L)	NO_3+NO_2 as N (mg/L)	NO_2 as N (mg/L)
	PQL	*1*	*0.1*	*0.1*	*0.1*
CCGC_0035	10/21/2013	ND	ND	ND	ND
CCGC_0043	10/22/2013	ND	ND	ND	ND
CCGC_0055	10/23/2013	ND	ND	ND	ND
CCGC_0028	10/24/2013	ND	ND	ND	ND
CCGC_0013	10/25/2013	ND	ND	ND	ND
CCGC_0107	3/10/2014	ND	ND	0.1	ND
CCGC_0158	3/11/2014	ND	ND	ND	ND
CCGC_0121	3/12/2014	ND	ND	0.1	ND
CCGC_0169	3/13/2014	ND	ND	0.1	0.1
CCGC_0136	3/14/2014	ND	ND	0.1	0.1
CCGC_0194	3/19/2014	ND	ND	**0.2**	ND
Penny_Irr	7/15/2014	ND	ND	ND	ND
Clausen_D	7/17/2014	ND	ND	ND	ND
CCGC_0178	8/27/2014	1	**0.2**	**0.3**	ND

Field Duplicates

Duplicates monitor matrix consistency or heterogeneity. Fourteen field duplicates were collected. Most duplicate sample results (99 percent) agreed, had differences within 10-percent, or had differences within the PQL (Practical Quantitation Limit) of the constituents analyzed. Of the remaining sample duplicate results, variations could be attributed to lab analytical variability or constituent sources introduced in the laboratory, field, or sampling equipment. The following table lists the sample duplicates and the percent differences for nitrate species. The differences in NO_2 as N concentrations for the RIVERR1 sample and duplicate exceed 10-percent, but have differences within the PQL of 0.1 mg/L. All other nitrate species concentration differences were less than 10-percent.

Table C2. Sample and duplicate NO_3, NO_3 as N, NO_3+NO_2 as N, and NO_2 as N concentrations and percent differences.

Sample ID	Date	NO_3 (mg/L)	NO_3 as N (mg/L)	NO_3+NO_2 as N (mg/L)	NO_2 as N (mg/L)
CCGC_0035	10/21/2013	65	14.6	15	0.4
CCGC_0035	10/21/2013	65	14.6	15	0.4
Percent Difference		**0.0%**	**0.0%**	**0.0%**	**0.0%**
CCGC_0043	10/22/2013	142	32.1	32.4	0.3
CCGC_0043	10/22/2013	145	32.7	33	0.3
Percent Difference		**2.1%**	**1.9%**	**1.8%**	**0.0%**
CCGC_0045	10/23/2013	4	0.8	1.1	0.3
CCGC_0045	10/23/2013	4	0.8	1.1	0.3
Percent Difference		**0.0%**	**0.0%**	**0.0%**	**0.0%**
CCGC_0028	10/24/2013	106	23.9	24.2	0.3
CCGC_0028	10/24/2013	106	24	24.4	0.3
Percent Difference		**0.0%**	**0.4%**	**0.8%**	**0.0%**

Sample ID	Date	NO_3 (mg/L)	NO_3 as N (mg/L)	NO_3+NO_2 as N (mg/L)	NO_2 as N (mg/L)
CCGC_0013	10/25/2013	2	0.5	0.8	0.3
CCGC_0013	10/25/2013	2	0.5	0.8	0.3
Percent Difference		**0.0%**	**0.0%**	**0.0%**	**0.0%**
CCGC_0107	3/10/2014	486	110	110	ND
CCGC_0107	3/10/2014	486	110	110	ND
Percent Difference		**0.0%**	**0.0%**	**0.0%**	**0.0%**
CCGC_0158	3/11/2014	62	14.1	14.3	0.2
CCGC_0158	3/11/2014	63	14.1	14.4	0.2
Percent Difference		**1.6%**	**0.0%**	**0.7%**	**0.0%**
CCGC_0121	3/12/2014	209	47.2	47.3	0.1
CCGC_0121	3/12/2014	214	48.3	48.4	0.1
Percent Difference		**2.4%**	**2.3%**	**2.3%**	**0.0%**
CCGC_0169	3/13/2014	20	4.6	5	0.4
CCGC_0169	3/13/2014	20	4.6	5	0.4
Percent Difference		**0.0%**	**0.0%**	**0.0%**	**0.0%**
CCGC_0136	3/14/2014	10	2.3	2.6	0.4
CCGC_0136	3/14/2014	10	2.3	2.6	0.3
Percent Difference		**0.0%**	**0.0%**	**0.0%**	**28.6%**
CCGC_0194	3/19/2014	454	100.5	102.6	ND
CCGC_0194	3/19/2014	454	100.8	102.5	ND
Percent Difference		**0.0%**	**0.3%**	**0.1%**	**0.0%**
Penny_Irr	7/15/2014	6	1.3	1.6	0.3
Penny_Irr	7/15/2014	6	1.3	1.6	0.3
Percent Difference		**0.0%**	**0.0%**	**0.0%**	**0.0%**
Clausen_D	7/17/2014	25	5.6	5.9	0.3
Clausen_D	7/17/2014	25	5.6	5.9	0.3
Percent Difference		**0.0%**	**0.0%**	**0.0%**	**0.0%**
CCGC_0178	8/27/2014	45	10.2	10.6	0.4
CCGC_0178	8/27/2014	45	10.2	10.6	0.4
Percent Difference		**0.0%**	**0.0%**	**0.0%**	**0.0%**

Anion-Cation Charge Balance

Anion-cation charge balance was calculated using concentrations of the major anions and cations in milliequivalents per liter (meq/L). The difference between the two sums was calculated as a percentage:

$$\frac{Anions - Cations}{Anions + Cations} \times 100$$

We use +/- 5 percent as a guide for an acceptable percent difference. The cation/anion balance difference exceeded 5 percent for 66 of 247 samples (27 %). The results are summarized in the following table. We have inquired with the laboratory to look into samples that exceed 10 percent. We are awaiting the laboratory’s response.

Table C3. Sum cations and anions and cation/anion balance.

Sample ID	Date	Sum Cations (meq/L)	Sum Anions (meq/L)	Anion/Cation balance (% difference)	Use	Basin
CCGC_0005	10/21/2013	12.43	12.19	1.0%	D	East Side
CCGC_0007	10/21/2013	6.61	6.47	1.1%	D/I	East Side
CCGC_0009	10/21/2013	5.89	5.72	1.4%	D	East Side
CCGC_0010	10/21/2013	26.00	25.24	1.5%	D	Pressure
CCGC_0012	10/21/2013	9.85	9.73	0.6%	D	Pressure
CCGC_0017	10/21/2013	22.78	21.90	2.0%	D	East Side
CCGC_0018	10/21/2013	11.71	11.55	0.7%	D	East Side
CCGC_0020	10/21/2013	10.96	10.75	1.0%	D	Pressure
CCGC_0023	10/21/2013	7.30	7.34	-0.2%	D/I	Pressure
CCGC_0035	10/21/2013	19.24	18.59	1.7%	D	Pressure
CCGC_0035	10/21/2013	19.16	18.57	1.5%	D	Pressure
CCGC_0054	10/21/2013	22.67	21.75	2.1%	D	Pressure
CCGC_0060	10/21/2013	6.77	6.61	1.2%	D	Pressure
CCGC_0069	10/21/2013	12.47	12.17	1.2%	D/I	Pressure
CCGC_0070	10/21/2013	10.95	10.93	0.1%	D	Pressure
CCGC_0004	10/22/2013	7.29	6.83	3.2%	D	East Side
CCGC_0008	10/22/2013	21.71	19.53	**5.3%**	D	Forebay
CCGC_0016	10/22/2013	11.44	10.97	2.1%	D	Upper Valley
CCGC_0031	10/22/2013	17.49	16.31	3.5%	D/I	Pressure
CCGC_0033	10/22/2013	11.79	11.09	3.1%	D	East Side
CCGC_0034	10/22/2013	8.24	7.85	2.5%	D/I	East Side
CCGC_0036	10/22/2013	7.79	7.44	2.3%	D	Pressure
CCGC_0037	10/22/2013	30.89	29.71	1.9%	D	Pressure
CCGC_0038	10/22/2013	8.12	8.00	0.8%	D/I	Pressure
CCGC_0043	10/22/2013	18.25	16.39	**5.4%**	D/I	Forebay
CCGC_0043	10/22/2013	17.99	16.58	4.1%	D/I	Forebay
CCGC_0044	10/22/2013	39.91	37.11	3.6%	D/I	Forebay
CCGC_0064	10/22/2013	5.51	5.30	2.0%	D/I	Forebay
CCGC_0065	10/22/2013	26.60	24.75	3.6%	D/I	Upper Valley
CCGC_0066	10/22/2013	11.96	11.34	2.6%	D/I	Upper Valley
CCGC_0068	10/22/2013	20.40	19.45	2.4%	D	Pressure
CCGC_0014	10/23/2013	19.71	18.01	4.5%	D	Forebay
CCGC_0045	10/23/2013	6.49	5.92	4.6%	D/I	Pressure
CCGC_0045	10/23/2013	6.49	5.94	4.4%	D/I	Pressure
CCGC_0046	10/23/2013	6.49	6.00	3.9%	D	Pressure
CCGC_0047	10/23/2013	6.74	6.36	2.9%	D	Pressure
CCGC_0048	10/23/2013	7.55	7.07	3.3%	D/I	Pressure
CCGC_0049	10/23/2013	15.43	14.19	4.2%	D/I	Forebay
CCGC_0052	10/23/2013	19.71	18.60	2.9%	D	Forebay
CCGC_0053	10/23/2013	54.86	50.65	4.0%	D	Forebay
CCGC_0055	10/23/2013	22.23	20.23	4.7%	D	East Side
CCGC_0056	10/23/2013	20.60	18.73	4.7%	D	Pressure
CCGC_0057	10/23/2013	14.42	13.43	3.6%	D	Pressure
CCGC_0059	10/23/2013	14.13	12.96	4.3%	D	Pressure
CCGC_0061	10/23/2013	23.94	22.51	3.1%	D/I	Forebay
CCGC_0062	10/23/2013	5.26	4.86	4.0%	D	Upper Valley
CCGC_0063	10/23/2013	18.88	17.38	4.2%	D	Forebay
CCGC_0072	10/23/2013	4.28	4.11	2.0%	D/I	Forebay
CCGC_0074	10/23/2013	16.31	15.16	3.7%	D/I	Forebay
CCGC_0075	10/23/2013	18.93	17.49	4.0%	D/I	Forebay
CCGC_0001	10/24/2013	11.97	10.74	**5.4%**	D	Pressure
CCGC_0002	10/24/2013	16.55	15.00	4.9%	D	Forebay

Sample ID	Date	Sum Cations (meq/L)	Sum Anions (meq/L)	Anion/Cation balance (% difference)	Use	Basin
CCGC_0003	10/24/2013	25.12	22.54	**5.4%**	D	Forebay
CCGC_0019	10/24/2013	6.15	5.74	3.5%	D	Forebay
CCGC_0024	10/24/2013	6.07	5.60	4.0%	D	Forebay
CCGC_0025	10/24/2013	9.62	8.82	4.3%	D	Forebay
CCGC_0026	10/24/2013	5.18	4.77	4.2%	D	Forebay
CCGC_0027	10/24/2013	8.45	7.86	3.6%	D/I	Forebay
CCGC_0028	10/24/2013	10.29	9.45	4.2%	D	Forebay
CCGC_0028	10/24/2013	10.34	9.42	4.6%	D	Forebay
CCGC_0029	10/24/2013	4.67	4.29	4.2%	D	Forebay
CCGC_0030	10/24/2013	4.00	3.71	3.7%	D	Forebay
CCGC_0040	10/24/2013	12.61	11.42	5.0%	D/I	Forebay
CCGC_0041	10/24/2013	8.31	7.62	4.3%	D/I	Forebay
CCGC_0042	10/24/2013	5.27	4.98	2.9%	D/I	Forebay
CCGC_0050	10/24/2013	7.47	8.02	-3.5%	D/I	Forebay
CCGC_0051	10/24/2013	4.91	4.71	2.1%	D	Forebay
CCGC_0006	10/25/2013	17.62	15.95	5.0%	D	Forebay
CCGC_0011	10/25/2013	9.58	8.84	4.0%	D	Forebay
CCGC_0013	10/25/2013	10.49	9.73	3.7%	D	Upper Valley
CCGC_0013	10/25/2013	10.53	9.71	4.1%	D	Upper Valley
CCGC_0015	10/25/2013	30.11	27.32	4.9%	D	Forebay
CCGC_0021	10/25/2013	7.03	6.53	3.7%	D/I	East Side
CCGC_0022	10/25/2013	27.17	24.73	4.7%	I	East Side
CCGC_0032	10/25/2013	25.11	23.01	4.4%	D/I	Pressure
CCGC_0039	10/25/2013	10.32	9.41	4.6%	D	Pressure
CCGC_0058	10/25/2013	8.05	7.55	3.2%	D	Upper Valley
CCGC_0067	10/25/2013	8.06	7.43	4.1%	D	Forebay
CCGC_0071	10/25/2013	6.16	5.61	4.7%	D/I	Pressure
CCGC_0073	10/25/2013	4.98	4.90	0.9%	D/I	Forebay
Well21_Irr	1/10/2014	6.46	6.66	-1.5%	I	East Side
0489_D/I	1/22/2014	2.42	2.50	-1.6%	D/I	Langley
Penny_Irr	1/23/2014	6.41	6.76	-2.6%	I	East Side
Clausen1_I	1/23/2014	5.72	6.04	-2.8%	I	Upper Valley
Clausen_D	1/23/2014	6.33	6.77	-3.4%	D	Upper Valley
CCGC_0109	3/10/2014	5.11	5.04	0.7%	D	Pressure
CCGC_0146	3/10/2014	10.82	10.15	3.2%	D	Pressure
CCGC_0142	3/10/2014	16.94	15.65	3.9%	D	Forebay
CCGC_0143	3/10/2014	8.82	8.04	4.7%	D	Forebay
CCGC_0144	3/10/2014	12.38	11.86	2.1%	D	Forebay
CCGC_0145	3/10/2014	9.90	9.50	2.1%	D	Pressure
CCGC_0107	3/10/2014	23.84	22.55	2.8%	D	East Side
CCGC_0107	3/10/2014	23.80	21.00	**6.3%**	D	East Side
CCGC_0112	3/10/2014	18.18	16.60	4.5%	D	Pressure
CCGC_0111	3/10/2014	9.06	8.74	1.8%	D	Pressure
CCGC_0110	3/10/2014	20.41	18.83	4.0%	D/I	Pressure
CCGC_0150	3/11/2014	7.86	6.76	**7.6%**	D	Forebay
CCGC_0113	3/11/2014	14.67	14.12	1.9%	D/I	Pressure
CCGC_0118	3/11/2014	18.27	15.64	**7.7%**	D	Pressure
CCGC_0155	3/11/2014	12.83	11.19	**6.8%**	D	Forebay
CCGC_0163	3/11/2014	61.01	53.98	**6.1%**	D	Upper Valley
CCGC_0152	3/11/2014	8.34	7.42	**5.9%**	D	Forebay
CCGC_0153	3/11/2014	60.58	52.11	**7.5%**	D	Upper Valley
CCGC_0162	3/11/2014	8.88	7.94	**5.6%**	D	Forebay
CCGC_0164	3/11/2014	19.64	17.32	**6.3%**	D	Forebay

Sample ID	Date	Sum Cations (meq/L)	Sum Anions (meq/L)	Anion/Cation balance (% difference)	Use	Basin
CCGC_0157	3/11/2014	21.83	18.93	**7.1%**	D	Forebay
CCGC_0158	3/11/2014	16.01	14.00	**6.7%**	D	Forebay
CCGC_0158	3/11/2014	16.00	14.06	**6.4%**	D	Forebay
CCGC_0156	3/11/2014	21.28	18.09	**8.1%**	D	Forebay
CCGC_0114	3/11/2014	14.85	13.96	3.1%	D	Pressure
CCGC_0115	3/11/2014	11.52	10.16	**6.3%**	D/I	East Side
CCGC_0116	3/11/2014	11.48	10.21	**5.9%**	D/I	East Side
CCGC_0117	3/11/2014	7.42	6.56	**6.2%**	D/I	Pressure
CCGC_0120	3/11/2014	15.57	13.52	**7.1%**	D/I	Pressure
CCGC_0178	3/12/2014	8.97	7.69	**7.7%**	D	East Side
CCGC_0121	3/12/2014	14.31	12.43	**7.0%**	D	East Side
CCGC_0121	3/12/2014	14.36	12.66	**6.3%**	D	East Side
CCGC_0165	3/12/2014	17.88	15.78	**6.2%**	D	Forebay
CCGC_0159	3/12/2014	6.45	5.68	**6.4%**	D/I	Pressure
CCGC_0161	3/12/2014	9.82	8.95	4.7%	D	Forebay
CCGC_0160	3/12/2014	10.44	9.20	**6.3%**	D	Forebay
CCGC_0127	3/12/2014	5.67	4.92	**7.1%**	D/I	Pressure
CCGC_0128	3/12/2014	5.50	4.69	**7.9%**	D/I	Pressure
CCGC_0126	3/12/2014	5.48	4.78	**6.8%**	D/I	Pressure
CCGC_0122	3/12/2014	19.44	17.25	**6.0%**	D	Pressure
CCGC_0125	3/12/2014	10.56	8.99	**8.0%**	D	East Side
CCGC_0179	3/12/2014	18.71	16.25	**7.0%**	D/I	Forebay
CCGC_0180	3/12/2014	7.75	6.71	**7.1%**	D	Upper Valley
CCGC_0181	3/12/2014	8.35	7.32	**6.6%**	D	Upper Valley
CCGC_0123	3/12/2014	28.51	24.65	**7.3%**	D	Pressure
CCGC_0129	3/12/2014	8.71	7.65	**6.5%**	D	Langley
CCGC_0151	3/12/2014	9.46	8.40	**5.9%**	D	Forebay
CCGC_0124	3/12/2014	11.41	9.96	**6.8%**	D	East Side
CCGC_0135	3/13/2014	9.42	8.65	4.2%	D	Pressure
CCGC_0134	3/13/2014	14.23	12.65	**5.9%**	D	Pressure
CCGC_0133	3/13/2014	8.71	8.27	2.6%	D	Pressure
CCGC_0184	3/13/2014	8.34	7.31	**6.6%**	D	Pressure
CCGC_0185	3/13/2014	10.84	9.60	**6.1%**	D	Pressure
CCGC_0182	3/13/2014	5.43	4.55	**8.8%**	D/I	Pressure
CCGC_0168	3/13/2014	11.53	10.31	**5.6%**	D	Upper Valley
CCGC_0166	3/13/2014	6.41	5.96	3.7%	D	Upper Valley
CCGC_0170	3/13/2014	43.91	38.48	**6.6%**	D	Upper Valley
CCGC_0169	3/13/2014	6.04	5.14	**8.0%**	D	Upper Valley
CCGC_0169	3/13/2014	5.71	5.16	**5.0%**	D	Upper Valley
CCGC_0167	3/13/2014	15.44	13.76	**5.8%**	D	Upper Valley
CCGC_0183	3/13/2014	16.41	13.82	**8.6%**	D/I	Pressure
CCGC_0131	3/13/2014	19.66	17.48	**5.9%**	D	Pressure
CCGC_0171	3/13/2014	51.17	45.13	**6.3%**	D	Upper Valley
CCGC_0172	3/13/2014	28.43	25.80	4.9%	D	Upper Valley
CCGC_0187	3/14/2014	26.77	21.84	**10.1%**	D	Forebay
CCGC_0174	3/14/2014	15.75	14.46	4.3%	D/I	Forebay
CCGC_0173	3/14/2014	30.44	25.18	**9.5%**	D/I	Forebay
CCGC_0175	3/14/2014	24.07	18.12	**14.1%**	D	Forebay
CCGC_0177	3/14/2014	19.18	15.81	**9.6%**	D	Forebay
CCGC_0176	3/14/2014	20.89	18.32	**6.6%**	D	Forebay
CCGC_0186	3/14/2014	14.46	11.95	**9.5%**	D	Forebay
CCGC_0140	3/14/2014	6.52	5.53	**8.2%**	D	East Side
CCGC_0136	3/14/2014	10.92	9.26	**8.2%**	D	Pressure

Sample ID	Date	Sum Cations (meq/L)	Sum Anions (meq/L)	Anion/Cation balance (% difference)	Use	Basin
CCGC_0136	3/14/2014	10.87	9.33	**7.6%**	D	Pressure
CCGC_0137	3/14/2014	9.07	8.17	**5.2%**	D	Pressure
CCGC_0141	3/14/2014	4.90	4.28	**6.7%**	D	East Side
CCGC_0138	3/14/2014	33.40	29.89	**5.5%**	I	East Side
CCGC_0139	3/14/2014	11.19	10.01	**5.6%**	D/I	East Side
CCGC_0191	3/19/2014	12.65	11.70	3.9%	D	Forebay
CCGC_0193	3/19/2014	26.30	24.25	4.0%	D	Pressure
CCGC_0197	3/19/2014	4.70	6.28	**-14.4%**	D	Forebay
CCGC_0188	3/19/2014	10.63	9.91	3.5%	D	Forebay
CCGC_0207	3/19/2014	8.79	8.26	3.2%	D	Forebay
CCGC_0195	3/19/2014	20.71	19.24	3.7%	D	Forebay
CCGC_0206	3/19/2014	12.50	11.68	3.4%	D/I	Forebay
CCGC_0194	3/19/2014	18.67	18.51	0.4%	D	East Side
CCGC_0194	3/19/2014	19.69	18.53	3.0%	D	East Side
CCGC_0189	3/19/2014	4.70	4.34	4.0%	D	Forebay
CCGC_0198	3/19/2014	8.49	8.02	2.8%	D	East Side
CCGC_0196	3/19/2014	5.91	5.74	1.5%	D	Forebay
CCGC_0190	3/19/2014	4.70	4.32	4.2%	D	Forebay
CCGC_0201	3/20/2014	36.90	35.05	2.6%	D	Upper Valley
CCGC_0203	3/20/2014	45.01	42.15	3.3%	D	Upper Valley
CCGC_0204	3/20/2014	18.86	18.36	1.3%	D	Upper Valley
CCGC_0200	3/20/2014	26.50	25.60	1.7%	D	Upper Valley
CCGC_0365	4/29/2014	7.77	7.41	2.3%	D	East Side
CCGC_0378	5/1/2014	3.88	3.54	4.6%	D	Pressure
Penny_Irr	7/15/2014	6.49	6.15	2.8%	I	East Side
Penny_Irr	7/15/2014	6.36	6.12	1.9%	I	East Side
Well21_Irr	7/15/2014	6.90	6.75	1.1%	I	East Side
0489_D/I	7/16/2014	2.54	2.44	2.2%	D/I	Langley
Clausen1_I	7/17/2014	5.90	6.31	-3.4%	I	Upper Valley
Clausen_D	7/17/2014	8.27	8.78	-3.0%	D	Upper Valley
Clausen_D	7/17/2014	8.31	8.76	-2.6%	D	Upper Valley
CCGC_0390	8/6/2014	9.14	9.35	-1.1%	D	Upper Valley
CCGC_0391	8/6/2014	36.46	37.93	-2.0%	D	Upper Valley
CCGC_0392	8/6/2014	21.67	22.33	-1.5%	D	Forebay
CCGC_0393	8/6/2014	14.57	14.71	-0.5%	D/I	Forebay
CCGC_0396	8/6/2014	37.36	36.65	1.0%	D	Forebay
CCGC_0395	8/6/2014	52.84	51.89	0.9%	D	Forebay
CCGC_0394	8/6/2014	44.25	44.33	-0.1%	D	Forebay
CCGC_0397	8/7/2014	10.60	10.32	1.4%	D	East Side
CCGC_0399	8/7/2014	9.11	8.43	3.9%	D	Pressure
CCGC_0398	8/7/2014	12.24	11.65	2.5%	D	Pressure
CCGC_0400	8/7/2014	12.51	11.80	2.9%	D	East Side
CCGC_0401	8/7/2014	8.41	7.76	4.0%	D	East Side
CCGC_0403	8/7/2014	8.95	8.60	2.0%	D/I	East Side
CCGC_0402	8/7/2014	10.84	10.38	2.2%	D	East Side
CCGC_0404	8/7/2014	15.07	14.58	1.6%	D	Pressure
CCGC_0406	8/7/2014	8.54	8.19	2.1%	D/I	Pressure
CCGC_0405	8/7/2014	8.92	8.42	2.8%	D	Pressure
CCGC_0431	8/8/2014	12.48	12.19	1.2%	D	Forebay
CCGC_0432	8/8/2014	27.74	26.76	1.8%	D	Forebay
CCGC_0433	8/8/2014	25.77	25.63	0.3%	D	East Side
CCGC_0430	8/8/2014	5.05	4.84	2.1%	D	Forebay
CCGC_0444	8/14/2014	4.74	4.52	2.4%	D/I	Pressure

Sample ID	Date	Sum Cations (meq/L)	Sum Anions (meq/L)	Anion/Cation balance (% difference)	Use	Basin
CCGC_0442	8/14/2014	5.45	5.19	2.5%	D/I	Pressure
CCGC_0443	8/14/2014	8.18	7.75	2.7%	D	Pressure
CCGC_0441	8/14/2014	9.14	9.04	0.5%	D/I	Pressure
CCGC_0512	8/26/2014	11.55	10.59	4.3%	D	Forebay
CCGC_0487	8/26/2014	9.33	8.89	2.4%	D	Forebay
CCGC_0178	8/27/2014	8.52	8.14	2.3%	D	East Side
CCGC_0178	8/27/2014	8.29	8.18	0.7%	D	East Side
CCGC_0471	8/27/2014	13.59	13.17	1.6%	D	East Side
CCGC_0484	8/27/2014	31.93	28.55	**5.6%**	D/I	Forebay
CCGC_0483	8/27/2014	7.77	7.26	3.4%	I	Forebay
CCGC_0493	8/27/2014	36.24	34.08	3.1%	D	Forebay
CCGC_0491	8/27/2014	31.08	29.31	2.9%	D	Forebay
CCGC_0492	8/27/2014	17.36	16.84	1.5%	D	Forebay
CCGC_0513	8/27/2014	15.99	15.00	3.2%	D	Forebay
CCGC_0488	8/27/2014	12.60	11.64	4.0%	D	Forebay
CCGC_0489	8/27/2014	26.22	24.89	2.6%	D	Forebay
CCGC_0490	8/27/2014	9.54	9.15	2.1%	D	Forebay
CCGC_0474	8/27/2014	11.82	11.49	1.4%	D	East Side
CCGC_0473	8/27/2014	9.99	9.62	1.9%	D	East Side
CCGC_0511	8/27/2014	33.44	31.40	3.1%	D	Forebay
CCGC_0475	8/28/2014	11.35	11.54	-0.8%	D	Pressure
CCGC_0502	8/28/2014	47.51	44.45	3.3%	D	Forebay
CCGC_0500	8/28/2014	22.38	21.37	2.3%	D	Forebay
CCGC_0508	8/28/2014	6.10	5.67	3.6%	D	Forebay
CCGC_0509	8/28/2014	16.69	15.25	4.5%	D	Forebay
CCGC_0510	8/28/2014	4.90	4.46	4.6%	D	Upper Valley
CCGC_0503	8/28/2014	18.44	17.73	1.9%	D	Forebay
CCGC_0505	8/28/2014	15.56	14.83	2.4%	D/I	Forebay
CCGC_0514	8/28/2014	22.96	21.50	3.3%	D	Forebay
CCGC_0507	8/28/2014	34.98	32.97	3.0%	D	Forebay
CCGC_0056	8/28/2014	19.47	18.73	1.9%	D	Pressure
CCGC_0059	8/28/2014	15.08	14.64	1.5%	D	Pressure
CCGC_0476	8/28/2014	19.04	19.59	-1.4%	D	East Side
CCGC_0477	8/28/2014	13.34	13.71	-1.4%	D	East Side
CCGC_0496	8/28/2014	7.93	7.64	1.9%	D/I	East Side
CCGC_0498	8/28/2014	22.54	22.51	0.0%	D	Forebay

Ratio of Calculated Sum of Dissolved Solids to Specific Conductance

The ratio of the calculated sum of dissolved solids (mg/L) to specific conductance was calculated. The ratio was calculated as follows:

$$\frac{Sum\ of\ dissolved\ solids\ in\ mg/L}{Specific\ conductance}$$

The sum of dissolved solids divided by the specific conductance should fall within the range 0.55 to 0.81. 55 of the 247 samples (22 percent) do not fall within this range.

Ratio of the Sum of Reacting Constituents to Specific Conductance

The ratio of the sum of reacting cations (meq/L) to 0.01 times specific conductance, as well as the sum of reacting anions (meq/L) to 0.01 times specific conductance, should be within the range 0.92 to 1.242. This ratio was calculated as follows:

$$\frac{Sum\ of\ reacting\ cations\ (or\ anions) in\ meq/L}{0.01 \times Specific\ Conductance}$$

Of the 247 samples, 26 (11 percent) do not fall within the range for cations and 15 (6.1 percent) do not fall within the range for anions.

Laboratory Flags

Two wells have associated laboratory flags that deal with nitrate, summarized in the following table.

WellCode	SampleDate	SampleTypeCode	LabSampleID	Replicate	LabReplicate	QACode
CCGC_0163	**3/11/2014**	MS1	**AB12790+LFM**	1	**1**	BC, LM
			AB12790+LFMD	1	**2**	BC, LM
CCGC_0492	**8/27/2014**	MS1	**AB19923+MS**	1	**1**	BC, LM
			AB19923+MSD	1	**2**	BC, LM

QA Code	Description
BC	Matrix spike out of control, lab control sample within limits
LM	MS and/or MSD above acceptance limits. See Blank Spike(LCS).

An extensive review of the laboratory QA/QC data will be available in the Groundwater Characterization Report.

Appendix D – CCGC Sampled Well Information and Results

Analytical results for all wells sampled in the Salinas Valley under Characterization Monitoring can be found in the following tables.

Any data excluded from the analysis can be found in Appendix B.

FieldPointName	Use	Top Of Screened Interval	Bottom Of Screened Interval	WellDepth	SampleDate	AnalyteName	Result	ResQual Code	QACode	GW Basin
CCGC_0001	D			NR	24/Oct/2013	Nitrate as NO3	21	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0002	D	150	270	270	24/Oct/2013	Nitrate as NO3	97	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0003	D			NR	24/Oct/2013	Nitrate as NO3	296	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0004	D			NR	22/Oct/2013	Nitrate as NO3	9	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0005	D			NR	21/Oct/2013	Nitrate as NO3	32	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0006	D			NR	25/Oct/2013	Nitrate as NO3	237	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0007	D/I	280	460	460	21/Oct/2013	Nitrate as NO3	72	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0008	D	120	160	165	22/Oct/2013	Nitrate as NO3	278	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0009	D			NR	21/Oct/2013	Nitrate as NO3	4	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0010	D			NR	21/Oct/2013	Nitrate as NO3	69	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0011	D			NR	25/Oct/2013	Nitrate as NO3	108	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0012	D			NR	21/Oct/2013	Nitrate as NO3	0.9	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0013	D			NR	25/Oct/2013	Nitrate as NO3	2	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0014	D			NR	23/Oct/2013	Nitrate as NO3	143	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0015	D			NR	25/Oct/2013	Nitrate as NO3	239	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0016	D			NR	22/Oct/2013	Nitrate as NO3	73	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0017	D			NR	21/Oct/2013	Nitrate as NO3	607	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0018	D			NR	21/Oct/2013	Nitrate as NO3	346	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0019	D	100	160	162	24/Oct/2013	Nitrate as NO3	54	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0020	D	154	164	176	21/Oct/2013	Nitrate as NO3	52	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0021	I			NR	25/Oct/2013	Nitrate as NO3	12	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0022	D/I			NR	25/Oct/2013	Nitrate as NO3	317	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0023	D/I			NR	21/Oct/2013	Nitrate as NO3	5	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0024	D			210	24/Oct/2013	Nitrate as NO3	7	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0025	D			NR	24/Oct/2013	Nitrate as NO3	22	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0026	D			180	24/Oct/2013	Nitrate as NO3	23	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0027	D/I			380	24/Oct/2013	Nitrate as NO3	32	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0028	D			200	24/Oct/2013	Nitrate as NO3	106	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0029	D			200	24/Oct/2013	Nitrate as NO3	11	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0030	D			NR	24/Oct/2013	Nitrate as NO3	11	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0031	D/I			700	22/Oct/2013	Nitrate as NO3	3	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0032	D/I			700	25/Oct/2013	Nitrate as NO3	174	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0033	D			400	22/Oct/2013	Nitrate as NO3	10	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0034	D/I			600	22/Oct/2013	Nitrate as NO3	17	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0035	D	200	260	260	21/Oct/2013	Nitrate as NO3	65	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0036	D			600	22/Oct/2013	Nitrate as NO3	2	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0037	D			NR	22/Oct/2013	Nitrate as NO3	<1	ND	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0038	D/I	416 540	442 558	580	22/Oct/2013	Nitrate as NO3	3	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0039	D	210	270	270	25/Oct/2013	Nitrate as NO3	1	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0040	D/I			544	24/Oct/2013	Nitrate as NO3	50	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0041	D/I			NR	24/Oct/2013	Nitrate as NO3	28	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0042	D/I	300	390	410	24/Oct/2013	Nitrate as NO3	10	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0043	D/I			NR	22/Oct/2013	Nitrate as NO3	142	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0044	D/I			NR	22/Oct/2013	Nitrate as NO3	379	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0045	D/I	360	570	570	23/Oct/2013	Nitrate as NO3	4	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0046	D			NR	23/Oct/2013	Nitrate as NO3	0.9	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0047	D			580	23/Oct/2013	Nitrate as NO3	0.9	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0048	D/I	370	670	670	23/Oct/2013	Nitrate as NO3	2	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0049	D/I			NR	23/Oct/2013	Nitrate as NO3	57	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0050	D/I	300	380	380	24/Oct/2013	Nitrate as NO3	35	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0051	D			NR	24/Oct/2013	Nitrate as NO3	4	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0052	D			120	23/Oct/2013	Nitrate as NO3	128	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0053	D			150	23/Oct/2013	Nitrate as NO3	304	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0054	D			NR	21/Oct/2013	Nitrate as NO3	94	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0055	D			NR	23/Oct/2013	Nitrate as NO3	131	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0056	D	100 140 240	120 200 400	400	23/Oct/2013	Nitrate as NO3	44	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0056	D	100 140 240	120 200 400	400	28/Aug/2014	Nitrate as NO3	39	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0057	D	381	421	441	23/Oct/2013	Nitrate as NO3	70	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0058	D			180	25/Oct/2013	Nitrate as NO3	52	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0059	D			100	23/Oct/2013	Nitrate as NO3	43	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0059	D			100	28/Aug/2014	Nitrate as NO3	83	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0060	D			60	21/Oct/2013	Nitrate as NO3	0.4	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0061	D/I			NR	23/Oct/2013	Nitrate as NO3	237	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0062	D			NR	23/Oct/2013	Nitrate as NO3	4	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0063	D			NR	23/Oct/2013	Nitrate as NO3	113	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0064	D/I			NR	22/Oct/2013	Nitrate as NO3	12	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0065	D/I			NR	22/Oct/2013	Nitrate as NO3	61	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0066	D/I			NR	22/Oct/2013	Nitrate as NO3	20	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0067	D			NR	25/Oct/2013	Nitrate as NO3	7	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0068	D	260	383	416	22/Oct/2013	Nitrate as NO3	<1	ND	None	SALINAS VALLEY - 180/400 FOOT AQUIFER

FieldPointName	Use	Top Of Screened Interval	Bottom Of Screened Interval	WellDepth	SampleDate	AnalyteName	Result	ResQual Code	QACode	GW Basin
CCGC_0069	D/I	400	440	595	21/Oct/2013	Nitrate as NO3	0.9	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0070	D			NR	21/Oct/2013	Nitrate as NO3	9	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0071	D/I	418 430 470	424 448 487	512	25/Oct/2013	Nitrate as NO3	2	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0072	D/I			400	23/Oct/2013	Nitrate as NO3	7	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0073	D/I			400	25/Oct/2013	Nitrate as NO3	21	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0074	D/I			250	23/Oct/2013	Nitrate as NO3	156	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0075	D/I			200	23/Oct/2013	Nitrate as NO3	92	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0107	D			NR	10/Mar/2014	Nitrate as NO3	486	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0108	D	271	309	326	10/Mar/2014	Nitrate as NO3	4	=	None	SALINAS VALLEY - CORRAL DE TIERRA AREA
CCGC_0109	D	360	400	500	10/Mar/2014	Nitrate as NO3	1	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0110	D/I			NR	10/Mar/2014	Nitrate as NO3	<1	ND	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0111	D			NR	10/Mar/2014	Nitrate as NO3	3	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0112	D			NR	10/Mar/2014	Nitrate as NO3	11	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0113	D/I			NR	11/Mar/2014	Nitrate as NO3	60	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0114	D			317	11/Mar/2014	Nitrate as NO3	<1	ND	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0115	D/I			NR	11/Mar/2014	Nitrate as NO3	172	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0116	D/I			NR	11/Mar/2014	Nitrate as NO3	174	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0117	D/I			NR	11/Mar/2014	Nitrate as NO3	<1	ND	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0118	D			NR	11/Mar/2014	Nitrate as NO3	<1	ND	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0120	D/I			NR	11/Mar/2014	Nitrate as NO3	13	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0121	D			NR	12/Mar/2014	Nitrate as NO3	209	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0122	D			NR	12/Mar/2014	Nitrate as NO3	106	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0123	D			NR	12/Mar/2014	Nitrate as NO3	249	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0124	D	119	135	152	12/Mar/2014	Nitrate as NO3	114	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0125	D			NR	12/Mar/2014	Nitrate as NO3	177	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0126	D/I			1010	12/Mar/2014	Nitrate as NO3	1	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0127	D/I			780	12/Mar/2014	Nitrate as NO3	2	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0128	D/I			780	12/Mar/2014	Nitrate as NO3	2	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0129	D	55	170	175	12/Mar/2014	Nitrate as NO3	<1	ND	None	SALINAS VALLEY - LANGLEY AREA
CCGC_0131	D			NR	13/Mar/2014	Nitrate as NO3	79	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0132	D			200	13/Mar/2014	Nitrate as NO3	<1	ND	None	SALINAS VALLEY - SEASIDE AREA
CCGC_0133	D	437	452	460	13/Mar/2014	Nitrate as NO3	18	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0134	D			NR	13/Mar/2014	Nitrate as NO3	2	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0135	D			NR	13/Mar/2014	Nitrate as NO3	19	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0136	D	480	580	589	14/Mar/2014	Nitrate as NO3	10	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0137	D			230	14/Mar/2014	Nitrate as NO3	6	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0138	I			640	14/Mar/2014	Nitrate as NO3	690	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0139	D/I	260 360	312 450	500	14/Mar/2014	Nitrate as NO3	191	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0140	D	580	660	900	14/Mar/2014	Nitrate as NO3	4	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0141	D			660	14/Mar/2014	Nitrate as NO3	6	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0142	D			NR	10/Mar/2014	Nitrate as NO3	30	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0143	D			NR	10/Mar/2014	Nitrate as NO3	92	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0144	D			410	10/Mar/2014	Nitrate as NO3	2	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0145	D			NR	10/Mar/2014	Nitrate as NO3	19	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0146	D			NR	10/Mar/2014	Nitrate as NO3	22	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0150	D			NR	11/Mar/2014	Nitrate as NO3	36	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0151	D			NR	12/Mar/2014	Nitrate as NO3	19	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0152	D			NR	11/Mar/2014	Nitrate as NO3	20	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0153	D			NR	11/Mar/2014	Nitrate as NO3	239	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0155	D			NR	11/Mar/2014	Nitrate as NO3	76	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0156	D			NR	11/Mar/2014	Nitrate as NO3	182	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0157	D			NR	11/Mar/2014	Nitrate as NO3	106	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0158	D			NR	11/Mar/2014	Nitrate as NO3	62	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0159	D/I			NR	12/Mar/2014	Nitrate as NO3	9	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0160	D			NR	12/Mar/2014	Nitrate as NO3	205	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0161	D			NR	12/Mar/2014	Nitrate as NO3	112	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0162	D			NR	11/Mar/2014	Nitrate as NO3	46	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0163	D			NR	11/Mar/2014	Nitrate as NO3	482	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0164	D	220	400	400	11/Mar/2014	Nitrate as NO3	221	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0165	D			NR	12/Mar/2014	Nitrate as NO3	97	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0166	D			NR	13/Mar/2014	Nitrate as NO3	28	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0167	D			NR	13/Mar/2014	Nitrate as NO3	178	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0168	D			NR	13/Mar/2014	Nitrate as NO3	111	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0169	D			NR	13/Mar/2014	Nitrate as NO3	20	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0170	D			NR	13/Mar/2014	Nitrate as NO3	230	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0171	D			NR	13/Mar/2014	Nitrate as NO3	146	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0172	D			NR	13/Mar/2014	Nitrate as NO3	<1	ND	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0173	D/I			NR	14/Mar/2014	Nitrate as NO3	166	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0174	D/I			NR	14/Mar/2014	Nitrate as NO3	78	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0175	D			NR	14/Mar/2014	Nitrate as NO3	168	=	None	SALINAS VALLEY - FOREBAY AQUIFER

FieldPointName	Use	Top Of Screened Interval	Bottom Of Screened Interval	WellDepth	SampleDate	AnalyteName	Result	ResQual Code	QACode	GW Basin
CCGC_0176	D			NR	14/Mar/2014	Nitrate as NO3	179	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0177	D	190 228	200 240	200	14/Mar/2014	Nitrate as NO3	90	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0178	D	200	290	290	12/Mar/2014	Nitrate as NO3	43	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0178	D	200	290	290	27/Aug/2014	Nitrate as NO3	45	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0179	D/I			NR	12/Mar/2014	Nitrate as NO3	105	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0180	D			NR	12/Mar/2014	Nitrate as NO3	1	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0181	D			NR	12/Mar/2014	Nitrate as NO3	8	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0182	D/I			NR	13/Mar/2014	Nitrate as NO3	<1	ND	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0183	D/I			NR	13/Mar/2014	Nitrate as NO3	20	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0184	D			300	13/Mar/2014	Nitrate as NO3	4	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0185	D			NR	13/Mar/2014	Nitrate as NO3	5	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0186	D	150	175	180	14/Mar/2014	Nitrate as NO3	52	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0187	D			190	14/Mar/2014	Nitrate as NO3	257	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0188	D			NR	19/Mar/2014	Nitrate as NO3	102	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0189	D			NR	19/Mar/2014	Nitrate as NO3	28	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0190	D			NR	19/Mar/2014	Nitrate as NO3	10	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0191	D			NR	19/Mar/2014	Nitrate as NO3	188	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0193	D			NR	19/Mar/2014	Nitrate as NO3	202	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0194	D			NR	19/Mar/2014	Nitrate as NO3	454	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0195	D			NR	19/Mar/2014	Nitrate as NO3	308	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0196	D			NR	19/Mar/2014	Nitrate as NO3	74	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0197	D			NR	19/Mar/2014	Nitrate as NO3	64	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0198	D	170	320	328	19/Mar/2014	Nitrate as NO3	73	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0200	D			NR	20/Mar/2014	Nitrate as NO3	<1	ND	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0201	D			NR	20/Mar/2014	Nitrate as NO3	146	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0203	D			NR	20/Mar/2014	Nitrate as NO3	174	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0204	D	100	150	152	20/Mar/2014	Nitrate as NO3	202	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0206	D/I			NR	19/Mar/2014	Nitrate as NO3	162	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0207	D			NR	19/Mar/2014	Nitrate as NO3	87	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0365	D			400	29/Apr/2014	Nitrate as NO3	59	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0378	D			NR	01/May/2014	Nitrate as NO3	7	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0386	D			NR	06/Aug/2014	Nitrate as NO3	<1	ND	None	SALINAS VALLEY - PASO ROBLES AREA
CCGC_0387	D			NR	06/Aug/2014	Nitrate as NO3	41	=	None	SALINAS VALLEY - PASO ROBLES AREA
CCGC_0390	D			NR	06/Aug/2014	Nitrate as NO3	62	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0391	D			NR	06/Aug/2014	Nitrate as NO3	228	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0392	D			NR	06/Aug/2014	Nitrate as NO3	313	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0393	D/I			NR	06/Aug/2014	Nitrate as NO3	122	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0394	D	280 320	310 350	355	06/Aug/2014	Nitrate as NO3	362	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0395	D			NR	06/Aug/2014	Nitrate as NO3	487	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0396	D			NR	06/Aug/2014	Nitrate as NO3	144	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0397	D			NR	07/Aug/2014	Nitrate as NO3	218	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0398	D			NR	07/Aug/2014	Nitrate as NO3	149	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0399	D			NR	07/Aug/2014	Nitrate as NO3	10	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0400	D			NR	07/Aug/2014	Nitrate as NO3	<1	ND	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0401	D			NR	07/Aug/2014	Nitrate as NO3	3	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0402	D			180	07/Aug/2014	Nitrate as NO3	248	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0403	D/I			608	07/Aug/2014	Nitrate as NO3	98	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0404	D			NR	07/Aug/2014	Nitrate as NO3	171	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0405	D			NR	07/Aug/2014	Nitrate as NO3	14	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0406	D/I			NR	07/Aug/2014	Nitrate as NO3	12	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0430	D			NR	08/Aug/2014	Nitrate as NO3	47	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0431	D			NR	08/Aug/2014	Nitrate as NO3	156	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0432	D			NR	08/Aug/2014	Nitrate as NO3	235	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0433	D			NR	08/Aug/2014	Nitrate as NO3	159	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0441	D/I			NR	14/Aug/2014	Nitrate as NO3	1	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0442	D/I	157 283 370	190 295 414	530	14/Aug/2014	Nitrate as NO3	1	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0443	D	355	365	370	14/Aug/2014	Nitrate as NO3	<1	ND	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0444	D/I	385 401	395 434	446	14/Aug/2014	Nitrate as NO3	<1	ND	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0471	D			NR	27/Aug/2014	Nitrate as NO3	249	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0473	D			NR	27/Aug/2014	Nitrate as NO3	48	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0474	D			NR	27/Aug/2014	Nitrate as NO3	72	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0475	D			NR	28/Aug/2014	Nitrate as NO3	1	=	None	SALINAS VALLEY - 180/400 FOOT AQUIFER
CCGC_0476	D			NR	28/Aug/2014	Nitrate as NO3	614	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0477	D	230 280 320	250 300 360	400	28/Aug/2014	Nitrate as NO3	25	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0483	I			NR	27/Aug/2014	Nitrate as NO3	16	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0484	D/I			NR	27/Aug/2014	Nitrate as NO3	46	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0487	D			NR	26/Aug/2014	Nitrate as NO3	85	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0488	D			NR	27/Aug/2014	Nitrate as NO3	16	=	None	SALINAS VALLEY - FOREBAY AQUIFER

FieldPointName	Use	Top Of Screened Interval	Bottom Of Screened Interval	WellDepth	SampleDate	AnalyteName	Result	ResQual Code	QACode	GW Basin
CCGC_0489	D			NR	27/Aug/2014	Nitrate as NO3	239	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0490	D			NR	27/Aug/2014	Nitrate as NO3	116	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0491	D			147	27/Aug/2014	Nitrate as NO3	398	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0492	D			NR	27/Aug/2014	Nitrate as NO3	95	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0493	D			NR	27/Aug/2014	Nitrate as NO3	511	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0496	D/I			NR	28/Aug/2014	Nitrate as NO3	23	=	None	SALINAS VALLEY - EAST SIDE AQUIFER
CCGC_0498	D			NR	28/Aug/2014	Nitrate as NO3	51	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0500	D			NR	28/Aug/2014	Nitrate as NO3	256	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0502	D			NR	28/Aug/2014	Nitrate as NO3	84	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0503	D			NR	28/Aug/2014	Nitrate as NO3	286	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0505	D/I			NR	28/Aug/2014	Nitrate as NO3	186	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0507	D			NR	28/Aug/2014	Nitrate as NO3	346	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0508	D			NR	28/Aug/2014	Nitrate as NO3	12	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0509	D			NR	28/Aug/2014	Nitrate as NO3	144	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0510	D			NR	28/Aug/2014	Nitrate as NO3	2	=	None	SALINAS VALLEY - UPPER VALLEY AQUIFER
CCGC_0511	D			NR	27/Aug/2014	Nitrate as NO3	198	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0512	D	190	210	210	26/Aug/2014	Nitrate as NO3	93	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0513	D			NR	27/Aug/2014	Nitrate as NO3	47	=	None	SALINAS VALLEY - FOREBAY AQUIFER
CCGC_0514	D			NR	28/Aug/2014	Nitrate as NO3	343	=	None	SALINAS VALLEY - FOREBAY AQUIFER

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0001	24/Oct/2013	Alkalinity as CaCO3	239	=	None
CCGC_0001	24/Oct/2013	Bicarbonate	292	=	None
CCGC_0001	24/Oct/2013	Calcium	134	=	None
CCGC_0001	24/Oct/2013	Chloride	57	=	None
CCGC_0001	24/Oct/2013	Hardness as CaCO3	475	=	None
CCGC_0001	24/Oct/2013	Magnesium	34	=	None
CCGC_0001	24/Oct/2013	Nitrate + Nitrite as N	5	=	None
CCGC_0001	24/Oct/2013	Nitrate as NO3-N	4.7	=	None
CCGC_0001	24/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0001	24/Oct/2013	Potassium	3.8	=	None
CCGC_0001	24/Oct/2013	Sodium	55	=	None
CCGC_0001	24/Oct/2013	SpecificConductivity	1015	=	None
CCGC_0001	24/Oct/2013	Sulfate	193	=	None
CCGC_0001	24/Oct/2013	Total Dissolved Solids	700	=	None
CCGC_0002	24/Oct/2013	Alkalinity as CaCO3	237	=	None
CCGC_0002	24/Oct/2013	Bicarbonate	289	=	None
CCGC_0002	24/Oct/2013	Calcium	179	=	None
CCGC_0002	24/Oct/2013	Chloride	147	=	None
CCGC_0002	24/Oct/2013	Hardness as CaCO3	649	=	None
CCGC_0002	24/Oct/2013	Magnesium	49	=	None
CCGC_0002	24/Oct/2013	Nitrate + Nitrite as N	22.1	=	None
CCGC_0002	24/Oct/2013	Nitrate as NO3-N	21.8	=	None
CCGC_0002	24/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0002	24/Oct/2013	Potassium	5.8	=	None
CCGC_0002	24/Oct/2013	Sodium	79	=	None
CCGC_0002	24/Oct/2013	SpecificConductivity	1443	=	None
CCGC_0002	24/Oct/2013	Sulfate	219	=	None
CCGC_0002	24/Oct/2013	Total Dissolved Solids	937	=	None
CCGC_0003	24/Oct/2013	Alkalinity as CaCO3	266	=	None
CCGC_0003	24/Oct/2013	Bicarbonate	325	=	None
CCGC_0003	24/Oct/2013	Calcium	277	=	None
CCGC_0003	24/Oct/2013	Chloride	104	=	None
CCGC_0003	24/Oct/2013	Hardness as CaCO3	1038	=	None
CCGC_0003	24/Oct/2013	Magnesium	84	=	None
CCGC_0003	24/Oct/2013	Nitrate + Nitrite as N	67.1	=	None
CCGC_0003	24/Oct/2013	Nitrate as NO3-N	66.8	=	None
CCGC_0003	24/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0003	24/Oct/2013	Potassium	6.6	=	None
CCGC_0003	24/Oct/2013	Sodium	97	=	None
CCGC_0003	24/Oct/2013	SpecificConductivity	2044	=	None
CCGC_0003	24/Oct/2013	Sulfate	457	=	None
CCGC_0003	24/Oct/2013	Total Dissolved Solids	1523	=	None
CCGC_0004	22/Oct/2013	Alkalinity as CaCO3	249	=	None
CCGC_0004	22/Oct/2013	Bicarbonate	304	=	None
CCGC_0004	22/Oct/2013	Calcium	54	=	None
CCGC_0004	22/Oct/2013	Chloride	54	=	None
CCGC_0004	22/Oct/2013	Hardness as CaCO3	209	=	None
CCGC_0004	22/Oct/2013	Magnesium	18	=	None
CCGC_0004	22/Oct/2013	Nitrate + Nitrite as N	2.4	=	None
CCGC_0004	22/Oct/2013	Nitrate as NO3-N	2	=	None
CCGC_0004	22/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0004	22/Oct/2013	Potassium	2.6	=	None
CCGC_0004	22/Oct/2013	Sodium	70	=	None
CCGC_0004	22/Oct/2013	SpecificConductivity	658	=	None
CCGC_0004	22/Oct/2013	Sulfate	9	=	None
CCGC_0004	22/Oct/2013	Total Dissolved Solids	400	=	None
CCGC_0005	21/Oct/2013	Alkalinity as CaCO3	209	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0005	21/Oct/2013	Bicarbonate	255	=	None
CCGC_0005	21/Oct/2013	Calcium	105	=	None
CCGC_0005	21/Oct/2013	Chloride	84	=	None
CCGC_0005	21/Oct/2013	Hardness as CaCO3	419	=	None
CCGC_0005	21/Oct/2013	Magnesium	38	=	None
CCGC_0005	21/Oct/2013	Nitrate + Nitrite as N	7.6	=	None
CCGC_0005	21/Oct/2013	Nitrate as NO3-N	7.3	=	None
CCGC_0005	21/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0005	21/Oct/2013	Potassium	4	=	None
CCGC_0005	21/Oct/2013	Sodium	91	=	None
CCGC_0005	21/Oct/2013	SpecificConductivity	1162	=	None
CCGC_0005	21/Oct/2013	Sulfate	246	=	None
CCGC_0005	21/Oct/2013	Total Dissolved Solids	820	=	None
CCGC_0006	25/Oct/2013	Alkalinity as CaCO3	255	=	None
CCGC_0006	25/Oct/2013	Bicarbonate	311	=	None
CCGC_0006	25/Oct/2013	Calcium	168	=	None
CCGC_0006	25/Oct/2013	Chloride	80	=	None
CCGC_0006	25/Oct/2013	Hardness as CaCO3	588	=	None
CCGC_0006	25/Oct/2013	Magnesium	41	=	None
CCGC_0006	25/Oct/2013	Nitrate + Nitrite as N	53.9	=	None
CCGC_0006	25/Oct/2013	Nitrate as NO3-N	53.6	=	None
CCGC_0006	25/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0006	25/Oct/2013	Potassium	6.4	=	None
CCGC_0006	25/Oct/2013	Sodium	131	=	None
CCGC_0006	25/Oct/2013	SpecificConductivity	1543	=	None
CCGC_0006	25/Oct/2013	Sulfate	229	=	None
CCGC_0006	25/Oct/2013	Total Dissolved Solids	1054	=	None
CCGC_0007	21/Oct/2013	Alkalinity as CaCO3	135	=	None
CCGC_0007	21/Oct/2013	Bicarbonate	165	=	None
CCGC_0007	21/Oct/2013	Calcium	44	=	None
CCGC_0007	21/Oct/2013	Chloride	71	=	None
CCGC_0007	21/Oct/2013	Hardness as CaCO3	180	=	None
CCGC_0007	21/Oct/2013	Magnesium	17	=	None
CCGC_0007	21/Oct/2013	Nitrate + Nitrite as N	16.5	=	None
CCGC_0007	21/Oct/2013	Nitrate as NO3-N	16.3	=	None
CCGC_0007	21/Oct/2013	Nitrite as NO2-N	0.2	=	None
CCGC_0007	21/Oct/2013	Potassium	2.4	=	None
CCGC_0007	21/Oct/2013	Sodium	68	=	None
CCGC_0007	21/Oct/2013	SpecificConductivity	688	=	None
CCGC_0007	21/Oct/2013	Sulfate	29	=	None
CCGC_0007	21/Oct/2013	Total Dissolved Solids	431	=	None
CCGC_0008	22/Oct/2013	Alkalinity as CaCO3	230	=	None
CCGC_0008	22/Oct/2013	Bicarbonate	281	=	None
CCGC_0008	22/Oct/2013	Calcium	218	=	None
CCGC_0008	22/Oct/2013	Chloride	122	=	None
CCGC_0008	22/Oct/2013	Hardness as CaCO3	775	=	None
CCGC_0008	22/Oct/2013	Magnesium	56	=	None
CCGC_0008	22/Oct/2013	Nitrate + Nitrite as N	63	=	None
CCGC_0008	22/Oct/2013	Nitrate as NO3-N	62.7	=	None
CCGC_0008	22/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0008	22/Oct/2013	Potassium	6.9	=	None
CCGC_0008	22/Oct/2013	Sodium	139	=	None
CCGC_0008	22/Oct/2013	SpecificConductivity	1837	=	None
CCGC_0008	22/Oct/2013	Sulfate	337	=	None
CCGC_0008	22/Oct/2013	Total Dissolved Solids	1323	=	None
CCGC_0009	21/Oct/2013	Alkalinity as CaCO3	141	=	None
CCGC_0009	21/Oct/2013	Bicarbonate	172	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0009	21/Oct/2013	Calcium	47	=	None
CCGC_0009	21/Oct/2013	Chloride	33	=	None
CCGC_0009	21/Oct/2013	Hardness as CaCO3	191	=	None
CCGC_0009	21/Oct/2013	Magnesium	18	=	None
CCGC_0009	21/Oct/2013	Nitrate + Nitrite as N	1.1	=	None
CCGC_0009	21/Oct/2013	Nitrate as NO3-N	0.8	=	None
CCGC_0009	21/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0009	21/Oct/2013	Potassium	2.3	=	None
CCGC_0009	21/Oct/2013	Sodium	46	=	None
CCGC_0009	21/Oct/2013	SpecificConductivity	568	=	None
CCGC_0009	21/Oct/2013	Sulfate	92	=	None
CCGC_0009	21/Oct/2013	Total Dissolved Solids	363	=	None
CCGC_0010	21/Oct/2013	Alkalinity as CaCO3	387	=	None
CCGC_0010	21/Oct/2013	Bicarbonate	472	=	None
CCGC_0010	21/Oct/2013	Calcium	165	=	None
CCGC_0010	21/Oct/2013	Chloride	91	=	None
CCGC_0010	21/Oct/2013	Hardness as CaCO3	935	=	None
CCGC_0010	21/Oct/2013	Magnesium	127	=	None
CCGC_0010	21/Oct/2013	Nitrate + Nitrite as N	16.1	=	None
CCGC_0010	21/Oct/2013	Nitrate as NO3-N	15.6	=	None
CCGC_0010	21/Oct/2013	Nitrite as NO2-N	0.5	=	None
CCGC_0010	21/Oct/2013	Potassium	3.8	=	None
CCGC_0010	21/Oct/2013	Sodium	166	=	None
CCGC_0010	21/Oct/2013	SpecificConductivity	2128	=	None
CCGC_0010	21/Oct/2013	Sulfate	664	=	None
CCGC_0010	21/Oct/2013	Total Dissolved Solids	1669	=	None
CCGC_0011	25/Oct/2013	Alkalinity as CaCO3	186	=	None
CCGC_0011	25/Oct/2013	Bicarbonate	227	=	None
CCGC_0011	25/Oct/2013	Calcium	80	=	None
CCGC_0011	25/Oct/2013	Chloride	21	=	None
CCGC_0011	25/Oct/2013	Hardness as CaCO3	278	=	None
CCGC_0011	25/Oct/2013	Magnesium	19	=	None
CCGC_0011	25/Oct/2013	Nitrate + Nitrite as N	24.7	=	None
CCGC_0011	25/Oct/2013	Nitrate as NO3-N	24.4	=	None
CCGC_0011	25/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0011	25/Oct/2013	Potassium	4.3	=	None
CCGC_0011	25/Oct/2013	Sodium	90	=	None
CCGC_0011	25/Oct/2013	SpecificConductivity	878	=	None
CCGC_0011	25/Oct/2013	Sulfate	134	=	None
CCGC_0011	25/Oct/2013	Total Dissolved Solids	594	=	None
CCGC_0012	21/Oct/2013	Alkalinity as CaCO3	292	=	None
CCGC_0012	21/Oct/2013	Bicarbonate	356	=	None
CCGC_0012	21/Oct/2013	Calcium	98	=	None
CCGC_0012	21/Oct/2013	Chloride	85	=	None
CCGC_0012	21/Oct/2013	Hardness as CaCO3	364	=	None
CCGC_0012	21/Oct/2013	Magnesium	29	=	None
CCGC_0012	21/Oct/2013	Nitrate + Nitrite as N	0.6	=	None
CCGC_0012	21/Oct/2013	Nitrate as NO3-N	0.2	=	None
CCGC_0012	21/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0012	21/Oct/2013	Potassium	5.4	=	None
CCGC_0012	21/Oct/2013	Sodium	56	=	None
CCGC_0012	21/Oct/2013	SpecificConductivity	918	=	None
CCGC_0012	21/Oct/2013	Sulfate	71	=	None
CCGC_0012	21/Oct/2013	Total Dissolved Solids	583	=	None
CCGC_0013	25/Oct/2013	Alkalinity as CaCO3	174	=	None
CCGC_0013	25/Oct/2013	Bicarbonate	212	=	None
CCGC_0013	25/Oct/2013	Calcium	86	=	None
CCGC_0013	25/Oct/2013	Chloride	64	=	None
CCGC_0013	25/Oct/2013	Hardness as CaCO3	363	=	None
CCGC_0013	25/Oct/2013	Magnesium	36	=	None
CCGC_0013	25/Oct/2013	Nitrate + Nitrite as N	0.8	=	None
CCGC_0013	25/Oct/2013	Nitrate as NO3-N	0.5	=	None
CCGC_0013	25/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0013	25/Oct/2013	Potassium	2.4	=	None
CCGC_0013	25/Oct/2013	Sodium	73	=	None
CCGC_0013	25/Oct/2013	SpecificConductivity	938	=	None
CCGC_0013	25/Oct/2013	Sulfate	212	=	None
CCGC_0013	25/Oct/2013	Total Dissolved Solids	637	=	None
CCGC_0014	23/Oct/2013	Alkalinity as CaCO3	265	=	None
CCGC_0014	23/Oct/2013	Bicarbonate	323	=	None
CCGC_0014	23/Oct/2013	Calcium	185	=	None
CCGC_0014	23/Oct/2013	Chloride	123	=	None
CCGC_0014	23/Oct/2013	Hardness as CaCO3	730	=	None
CCGC_0014	23/Oct/2013	Magnesium	65	=	None
CCGC_0014	23/Oct/2013	Nitrate + Nitrite as N	32.6	=	None
CCGC_0014	23/Oct/2013	Nitrate as NO3-N	32.3	=	None
CCGC_0014	23/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0014	23/Oct/2013	Potassium	5	=	None
CCGC_0014	23/Oct/2013	Sodium	115	=	None
CCGC_0014	23/Oct/2013	SpecificConductivity	1663	=	None
CCGC_0014	23/Oct/2013	Sulfate	333	=	None
CCGC_0014	23/Oct/2013	Total Dissolved Solids	1136	=	None
CCGC_0015	25/Oct/2013	Alkalinity as CaCO3	291	=	None
CCGC_0015	25/Oct/2013	Bicarbonate	355	=	None
CCGC_0015	25/Oct/2013	Calcium	279	=	None
CCGC_0015	25/Oct/2013	Chloride	165	=	None
CCGC_0015	25/Oct/2013	Hardness as CaCO3	1121	=	None
CCGC_0015	25/Oct/2013	Magnesium	103	=	None
CCGC_0015	25/Oct/2013	Nitrate + Nitrite as N	54.3	=	None
CCGC_0015	25/Oct/2013	Nitrate as NO3-N	54	=	None
CCGC_0015	25/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0015	25/Oct/2013	Potassium	5.8	=	None
CCGC_0015	25/Oct/2013	Sodium	174	=	None
CCGC_0015	25/Oct/2013	SpecificConductivity	2436	=	None
CCGC_0015	25/Oct/2013	Sulfate	624	=	None
CCGC_0015	25/Oct/2013	Total Dissolved Solids	1795	=	None
CCGC_0016	22/Oct/2013	Alkalinity as CaCO3	184	=	None
CCGC_0016	22/Oct/2013	Bicarbonate	224	=	None
CCGC_0016	22/Oct/2013	Calcium	118	=	None
CCGC_0016	22/Oct/2013	Chloride	50	=	None
CCGC_0016	22/Oct/2013	Hardness as CaCO3	463	=	None
CCGC_0016	22/Oct/2013	Magnesium	41	=	None
CCGC_0016	22/Oct/2013	Nitrate + Nitrite as N	16.7	=	None
CCGC_0016	22/Oct/2013	Nitrate as NO3-N	16.4	=	None
CCGC_0016	22/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0016	22/Oct/2013	Potassium	1.9	=	None
CCGC_0016	22/Oct/2013	Sodium	49	=	None
CCGC_0016	22/Oct/2013	SpecificConductivity	1023	=	None
CCGC_0016	22/Oct/2013	Sulfate	226	=	None
CCGC_0016	22/Oct/2013	Total Dissolved Solids	729	=	None
CCGC_0017	21/Oct/2013	Alkalinity as CaCO3	138	=	None
CCGC_0017	21/Oct/2013	Bicarbonate	168	=	None
CCGC_0017	21/Oct/2013	Calcium	205	=	None
CCGC_0017	21/Oct/2013	Chloride	227	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0017	21/Oct/2013	Hardness as CaCO3	850	=	None
CCGC_0017	21/Oct/2013	Magnesium	82	=	None
CCGC_0017	21/Oct/2013	Nitrate + Nitrite as N	137.3	=	None
CCGC_0017	21/Oct/2013	Nitrate as NO3-N	137	=	None
CCGC_0017	21/Oct/2013	Nitrite as NO2-N	0.2	=	None
CCGC_0017	21/Oct/2013	Potassium	4.1	=	None
CCGC_0017	21/Oct/2013	Sodium	131	=	None
CCGC_0017	21/Oct/2013	SpecificConductivity	2237	=	None
CCGC_0017	21/Oct/2013	Sulfate	142	=	None
CCGC_0017	21/Oct/2013	Total Dissolved Solids	1629	=	None
CCGC_0018	21/Oct/2013	Alkalinity as CaCO3	82	=	None
CCGC_0018	21/Oct/2013	Bicarbonate	100	=	None
CCGC_0018	21/Oct/2013	Calcium	95	=	None
CCGC_0018	21/Oct/2013	Chloride	103	=	None
CCGC_0018	21/Oct/2013	Hardness as CaCO3	402	=	None
CCGC_0018	21/Oct/2013	Magnesium	40	=	None
CCGC_0018	21/Oct/2013	Nitrate + Nitrite as N	78.2	=	None
CCGC_0018	21/Oct/2013	Nitrate as NO3-N	78	=	None
CCGC_0018	21/Oct/2013	Nitrite as NO2-N	0.2	=	None
CCGC_0018	21/Oct/2013	Potassium	2.5	=	None
CCGC_0018	21/Oct/2013	Sodium	83	=	None
CCGC_0018	21/Oct/2013	SpecificConductivity	1238	=	None
CCGC_0018	21/Oct/2013	Sulfate	69	=	None
CCGC_0018	21/Oct/2013	Total Dissolved Solids	900	=	None
CCGC_0019	24/Oct/2013	Alkalinity as CaCO3	137	=	None
CCGC_0019	24/Oct/2013	Bicarbonate	167	=	None
CCGC_0019	24/Oct/2013	Calcium	73	=	None
CCGC_0019	24/Oct/2013	Chloride	12	=	None
CCGC_0019	24/Oct/2013	Hardness as CaCO3	256	=	None
CCGC_0019	24/Oct/2013	Magnesium	18	=	None
CCGC_0019	24/Oct/2013	Nitrate + Nitrite as N	12.5	=	None
CCGC_0019	24/Oct/2013	Nitrate as NO3-N	12.2	=	None
CCGC_0019	24/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0019	24/Oct/2013	Potassium	2.8	=	None
CCGC_0019	24/Oct/2013	Sodium	22	=	None
CCGC_0019	24/Oct/2013	SpecificConductivity	572	=	None
CCGC_0019	24/Oct/2013	Sulfate	86	=	None
CCGC_0019	24/Oct/2013	Total Dissolved Solids	391	=	None
CCGC_0020	21/Oct/2013	Alkalinity as CaCO3	206	=	None
CCGC_0020	21/Oct/2013	Bicarbonate	251	=	None
CCGC_0020	21/Oct/2013	Calcium	94	=	None
CCGC_0020	21/Oct/2013	Chloride	98	=	None
CCGC_0020	21/Oct/2013	Hardness as CaCO3	391	=	None
CCGC_0020	21/Oct/2013	Magnesium	38	=	None
CCGC_0020	21/Oct/2013	Nitrate + Nitrite as N	12.1	=	None
CCGC_0020	21/Oct/2013	Nitrate as NO3-N	11.8	=	None
CCGC_0020	21/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0020	21/Oct/2013	Potassium	3.9	=	None
CCGC_0020	21/Oct/2013	Sodium	70	=	None
CCGC_0020	21/Oct/2013	SpecificConductivity	1056	=	None
CCGC_0020	21/Oct/2013	Sulfate	145	=	None
CCGC_0020	21/Oct/2013	Total Dissolved Solids	680	=	None
CCGC_0021	25/Oct/2013	Alkalinity as CaCO3	169	=	None
CCGC_0021	25/Oct/2013	Bicarbonate	206	=	None
CCGC_0021	25/Oct/2013	Calcium	57	=	None
CCGC_0021	25/Oct/2013	Chloride	68	=	None
CCGC_0021	25/Oct/2013	Hardness as CaCO3	208	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0021	25/Oct/2013	Magnesium	16	=	None
CCGC_0021	25/Oct/2013	Nitrate + Nitrite as N	3	=	None
CCGC_0021	25/Oct/2013	Nitrate as NO3-N	2.7	=	None
CCGC_0021	25/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0021	25/Oct/2013	Potassium	3.4	=	None
CCGC_0021	25/Oct/2013	Sodium	64	=	None
CCGC_0021	25/Oct/2013	SpecificConductivity	667	=	None
CCGC_0021	25/Oct/2013	Sulfate	50	=	None
CCGC_0021	25/Oct/2013	Total Dissolved Solids	446	=	None
CCGC_0022	25/Oct/2013	Alkalinity as CaCO3	260	=	None
CCGC_0022	25/Oct/2013	Bicarbonate	317	=	None
CCGC_0022	25/Oct/2013	Calcium	209	=	None
CCGC_0022	25/Oct/2013	Chloride	360	=	None
CCGC_0022	25/Oct/2013	Hardness as CaCO3	892	=	None
CCGC_0022	25/Oct/2013	Magnesium	90	=	None
CCGC_0022	25/Oct/2013	Nitrate + Nitrite as N	71.7	=	None
CCGC_0022	25/Oct/2013	Nitrate as NO3-N	71.5	=	None
CCGC_0022	25/Oct/2013	Nitrite as NO2-N	0.2	=	None
CCGC_0022	25/Oct/2013	Potassium	6.2	=	None
CCGC_0022	25/Oct/2013	Sodium	211	=	None
CCGC_0022	25/Oct/2013	SpecificConductivity	2457	=	None
CCGC_0022	25/Oct/2013	Sulfate	205	=	None
CCGC_0022	25/Oct/2013	Total Dissolved Solids	1574	=	None
CCGC_0023	21/Oct/2013	Alkalinity as CaCO3	163	=	None
CCGC_0023	21/Oct/2013	Bicarbonate	199	=	None
CCGC_0023	21/Oct/2013	Calcium	63	=	None
CCGC_0023	21/Oct/2013	Chloride	53	=	None
CCGC_0023	21/Oct/2013	Hardness as CaCO3	252	=	None
CCGC_0023	21/Oct/2013	Magnesium	23	=	None
CCGC_0023	21/Oct/2013	Nitrate + Nitrite as N	1.5	=	None
CCGC_0023	21/Oct/2013	Nitrate as NO3-N	1.2	=	None
CCGC_0023	21/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0023	21/Oct/2013	Potassium	3.6	=	None
CCGC_0023	21/Oct/2013	Sodium	50	=	None
CCGC_0023	21/Oct/2013	SpecificConductivity	720	=	None
CCGC_0023	21/Oct/2013	Sulfate	120	=	None
CCGC_0023	21/Oct/2013	Total Dissolved Solids	463	=	None
CCGC_0024	24/Oct/2013	Alkalinity as CaCO3	166	=	None
CCGC_0024	24/Oct/2013	Bicarbonate	203	=	None
CCGC_0024	24/Oct/2013	Calcium	60	=	None
CCGC_0024	24/Oct/2013	Chloride	21	=	None
CCGC_0024	24/Oct/2013	Hardness as CaCO3	224	=	None
CCGC_0024	24/Oct/2013	Magnesium	18	=	None
CCGC_0024	24/Oct/2013	Nitrate + Nitrite as N	1.8	=	None
CCGC_0024	24/Oct/2013	Nitrate as NO3-N	1.5	=	None
CCGC_0024	24/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0024	24/Oct/2013	Potassium	3	=	None
CCGC_0024	24/Oct/2013	Sodium	35	=	None
CCGC_0024	24/Oct/2013	SpecificConductivity	551	=	None
CCGC_0024	24/Oct/2013	Sulfate	76	=	None
CCGC_0024	24/Oct/2013	Total Dissolved Solids	371	=	None
CCGC_0025	24/Oct/2013	Alkalinity as CaCO3	224	=	None
CCGC_0025	24/Oct/2013	Bicarbonate	273	=	None
CCGC_0025	24/Oct/2013	Calcium	101	=	None
CCGC_0025	24/Oct/2013	Chloride	42	=	None
CCGC_0025	24/Oct/2013	Hardness as CaCO3	372	=	None
CCGC_0025	24/Oct/2013	Magnesium	29	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0025	24/Oct/2013	Nitrate + Nitrite as N	5.2	=	None
CCGC_0025	24/Oct/2013	Nitrate as NO3-N	4.9	=	None
CCGC_0025	24/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0025	24/Oct/2013	Potassium	4	=	None
CCGC_0025	24/Oct/2013	Sodium	48	=	None
CCGC_0025	24/Oct/2013	SpecificConductivity	841	=	None
CCGC_0025	24/Oct/2013	Sulfate	135	=	None
CCGC_0025	24/Oct/2013	Total Dissolved Solids	574	=	None
CCGC_0026	24/Oct/2013	Alkalinity as CaCO3	132	=	None
CCGC_0026	24/Oct/2013	Bicarbonate	161	=	None
CCGC_0026	24/Oct/2013	Calcium	64	=	None
CCGC_0026	24/Oct/2013	Chloride	10	=	None
CCGC_0026	24/Oct/2013	Hardness as CaCO3	222	=	None
CCGC_0026	24/Oct/2013	Magnesium	15	=	None
CCGC_0026	24/Oct/2013	Nitrate + Nitrite as N	5.5	=	None
CCGC_0026	24/Oct/2013	Nitrate as NO3-N	5.2	=	None
CCGC_0026	24/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0026	24/Oct/2013	Potassium	2.4	=	None
CCGC_0026	24/Oct/2013	Sodium	16	=	None
CCGC_0026	24/Oct/2013	SpecificConductivity	475	=	None
CCGC_0026	24/Oct/2013	Sulfate	71	=	None
CCGC_0026	24/Oct/2013	Total Dissolved Solids	331	=	None
CCGC_0027	24/Oct/2013	Alkalinity as CaCO3	161	=	None
CCGC_0027	24/Oct/2013	Bicarbonate	196	=	None
CCGC_0027	24/Oct/2013	Calcium	98	=	None
CCGC_0027	24/Oct/2013	Chloride	76	=	None
CCGC_0027	24/Oct/2013	Hardness as CaCO3	339	=	None
CCGC_0027	24/Oct/2013	Magnesium	23	=	None
CCGC_0027	24/Oct/2013	Nitrate + Nitrite as N	7.5	=	None
CCGC_0027	24/Oct/2013	Nitrate as NO3-N	7.3	=	None
CCGC_0027	24/Oct/2013	Nitrite as NO2-N	0.2	=	None
CCGC_0027	24/Oct/2013	Potassium	3.8	=	None
CCGC_0027	24/Oct/2013	Sodium	36	=	None
CCGC_0027	24/Oct/2013	SpecificConductivity	793	=	None
CCGC_0027	24/Oct/2013	Sulfate	95	=	None
CCGC_0027	24/Oct/2013	Total Dissolved Solids	518	=	None
CCGC_0028	24/Oct/2013	Alkalinity as CaCO3	192	=	None
CCGC_0028	24/Oct/2013	Bicarbonate	234	=	None
CCGC_0028	24/Oct/2013	Calcium	127	=	None
CCGC_0028	24/Oct/2013	Chloride	33	=	None
CCGC_0028	24/Oct/2013	Hardness as CaCO3	441	=	None
CCGC_0028	24/Oct/2013	Magnesium	30	=	None
CCGC_0028	24/Oct/2013	Nitrate + Nitrite as N	24.2	=	None
CCGC_0028	24/Oct/2013	Nitrate as NO3-N	23.9	=	None
CCGC_0028	24/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0028	24/Oct/2013	Potassium	3.5	=	None
CCGC_0028	24/Oct/2013	Sodium	32	=	None
CCGC_0028	24/Oct/2013	SpecificConductivity	920	=	None
CCGC_0028	24/Oct/2013	Sulfate	143	=	None
CCGC_0028	24/Oct/2013	Total Dissolved Solids	643	=	None
CCGC_0029	24/Oct/2013	Alkalinity as CaCO3	125	=	None
CCGC_0029	24/Oct/2013	Bicarbonate	153	=	None
CCGC_0029	24/Oct/2013	Calcium	56	=	None
CCGC_0029	24/Oct/2013	Chloride	8	=	None
CCGC_0029	24/Oct/2013	Hardness as CaCO3	193	=	None
CCGC_0029	24/Oct/2013	Magnesium	13	=	None
CCGC_0029	24/Oct/2013	Nitrate + Nitrite as N	2.7	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0029	24/Oct/2013	Nitrate as NO3-N	2.4	=	None
CCGC_0029	24/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0029	24/Oct/2013	Potassium	2.6	=	None
CCGC_0029	24/Oct/2013	Sodium	17	=	None
CCGC_0029	24/Oct/2013	SpecificConductivity	429	=	None
CCGC_0029	24/Oct/2013	Sulfate	67	=	None
CCGC_0029	24/Oct/2013	Total Dissolved Solids	300	=	None
CCGC_0030	24/Oct/2013	Alkalinity as CaCO3	116	=	None
CCGC_0030	24/Oct/2013	Bicarbonate	142	=	None
CCGC_0030	24/Oct/2013	Calcium	47	=	None
CCGC_0030	24/Oct/2013	Chloride	6	=	None
CCGC_0030	24/Oct/2013	Hardness as CaCO3	167	=	None
CCGC_0030	24/Oct/2013	Magnesium	12	=	None
CCGC_0030	24/Oct/2013	Nitrate + Nitrite as N	2.7	=	None
CCGC_0030	24/Oct/2013	Nitrate as NO3-N	2.5	=	None
CCGC_0030	24/Oct/2013	Nitrite as NO2-N	0.2	=	None
CCGC_0030	24/Oct/2013	Potassium	2.1	=	None
CCGC_0030	24/Oct/2013	Sodium	14	=	None
CCGC_0030	24/Oct/2013	SpecificConductivity	372	=	None
CCGC_0030	24/Oct/2013	Sulfate	50	=	None
CCGC_0030	24/Oct/2013	Total Dissolved Solids	271	=	None
CCGC_0031	22/Oct/2013	Alkalinity as CaCO3	275	=	None
CCGC_0031	22/Oct/2013	Bicarbonate	336	=	None
CCGC_0031	22/Oct/2013	Calcium	188	=	None
CCGC_0031	22/Oct/2013	Chloride	129	=	None
CCGC_0031	22/Oct/2013	Hardness as CaCO3	667	=	None
CCGC_0031	22/Oct/2013	Magnesium	48	=	None
CCGC_0031	22/Oct/2013	Nitrate + Nitrite as N	1	=	None
CCGC_0031	22/Oct/2013	Nitrate as NO3-N	0.7	=	None
CCGC_0031	22/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0031	22/Oct/2013	Potassium	6.3	=	None
CCGC_0031	22/Oct/2013	Sodium	92	=	None
CCGC_0031	22/Oct/2013	SpecificConductivity	1494	=	None
CCGC_0031	22/Oct/2013	Sulfate	342	=	None
CCGC_0031	22/Oct/2013	Total Dissolved Solids	1094	=	None
CCGC_0032	25/Oct/2013	Alkalinity as CaCO3	328	=	None
CCGC_0032	25/Oct/2013	Bicarbonate	400	=	None
CCGC_0032	25/Oct/2013	Calcium	195	=	None
CCGC_0032	25/Oct/2013	Chloride	182	=	None
CCGC_0032	25/Oct/2013	Hardness as CaCO3	870	=	None
CCGC_0032	25/Oct/2013	Magnesium	93	=	None
CCGC_0032	25/Oct/2013	Nitrate + Nitrite as N	39.5	=	None
CCGC_0032	25/Oct/2013	Nitrate as NO3-N	39.2	=	None
CCGC_0032	25/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0032	25/Oct/2013	Potassium	4.7	=	None
CCGC_0032	25/Oct/2013	Sodium	175	=	None
CCGC_0032	25/Oct/2013	SpecificConductivity	2090	=	None
CCGC_0032	25/Oct/2013	Sulfate	409	=	None
CCGC_0032	25/Oct/2013	Total Dissolved Solids	1488	=	None
CCGC_0033	22/Oct/2013	Alkalinity as CaCO3	308	=	None
CCGC_0033	22/Oct/2013	Bicarbonate	376	=	None
CCGC_0033	22/Oct/2013	Calcium	134	=	None
CCGC_0033	22/Oct/2013	Chloride	104	=	None
CCGC_0033	22/Oct/2013	Hardness as CaCO3	470	=	None
CCGC_0033	22/Oct/2013	Magnesium	33	=	None
CCGC_0033	22/Oct/2013	Nitrate + Nitrite as N	2.7	=	None
CCGC_0033	22/Oct/2013	Nitrate as NO3-N	2.3	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0033	22/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0033	22/Oct/2013	Potassium	1.6	=	None
CCGC_0033	22/Oct/2013	Sodium	54	=	None
CCGC_0033	22/Oct/2013	SpecificConductivity	1056	=	None
CCGC_0033	22/Oct/2013	Sulfate	88	=	None
CCGC_0033	22/Oct/2013	Total Dissolved Solids	668	=	None
CCGC_0034	22/Oct/2013	Alkalinity as CaCO3	197	=	None
CCGC_0034	22/Oct/2013	Bicarbonate	240	=	None
CCGC_0034	22/Oct/2013	Calcium	76	=	None
CCGC_0034	22/Oct/2013	Chloride	77	=	None
CCGC_0034	22/Oct/2013	Hardness as CaCO3	301	=	None
CCGC_0034	22/Oct/2013	Magnesium	27	=	None
CCGC_0034	22/Oct/2013	Nitrate + Nitrite as N	4.2	=	None
CCGC_0034	22/Oct/2013	Nitrate as NO3-N	3.9	=	None
CCGC_0034	22/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0034	22/Oct/2013	Potassium	2.2	=	None
CCGC_0034	22/Oct/2013	Sodium	50	=	None
CCGC_0034	22/Oct/2013	SpecificConductivity	776	=	None
CCGC_0034	22/Oct/2013	Sulfate	70	=	None
CCGC_0034	22/Oct/2013	Total Dissolved Solids	506	=	None
CCGC_0035	21/Oct/2013	Alkalinity as CaCO3	336	=	None
CCGC_0035	21/Oct/2013	Bicarbonate	410	=	None
CCGC_0035	21/Oct/2013	Calcium	155	=	None
CCGC_0035	21/Oct/2013	Chloride	74	=	None
CCGC_0035	21/Oct/2013	Hardness as CaCO3	667	=	None
CCGC_0035	21/Oct/2013	Magnesium	68	=	None
CCGC_0035	21/Oct/2013	Nitrate + Nitrite as N	15	=	None
CCGC_0035	21/Oct/2013	Nitrate as NO3-N	14.6	=	None
CCGC_0035	21/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0035	21/Oct/2013	Potassium	3.4	=	None
CCGC_0035	21/Oct/2013	Sodium	134	=	None
CCGC_0035	21/Oct/2013	SpecificConductivity	1625	=	None
CCGC_0035	21/Oct/2013	Sulfate	420	=	None
CCGC_0035	21/Oct/2013	Total Dissolved Solids	1222	=	None
CCGC_0036	22/Oct/2013	Alkalinity as CaCO3	143	=	None
CCGC_0036	22/Oct/2013	Bicarbonate	174	=	None
CCGC_0036	22/Oct/2013	Calcium	62	=	None
CCGC_0036	22/Oct/2013	Chloride	119	=	None
CCGC_0036	22/Oct/2013	Hardness as CaCO3	237	=	None
CCGC_0036	22/Oct/2013	Magnesium	20	=	None
CCGC_0036	22/Oct/2013	Nitrate + Nitrite as N	0.7	=	None
CCGC_0036	22/Oct/2013	Nitrate as NO3-N	0.5	=	None
CCGC_0036	22/Oct/2013	Nitrite as NO2-N	0.2	=	None
CCGC_0036	22/Oct/2013	Potassium	3.6	=	None
CCGC_0036	22/Oct/2013	Sodium	68	=	None
CCGC_0036	22/Oct/2013	SpecificConductivity	775	=	None
CCGC_0036	22/Oct/2013	Sulfate	57	=	None
CCGC_0036	22/Oct/2013	Total Dissolved Solids	500	=	None
CCGC_0037	22/Oct/2013	Alkalinity as CaCO3	46	=	None
CCGC_0037	22/Oct/2013	Bicarbonate	56	=	None
CCGC_0037	22/Oct/2013	Calcium	294	=	None
CCGC_0037	22/Oct/2013	Chloride	1000	=	None
CCGC_0037	22/Oct/2013	Hardness as CaCO3	1232	=	None
CCGC_0037	22/Oct/2013	Magnesium	121	=	None
CCGC_0037	22/Oct/2013	Nitrate + Nitrite as N	<0.1	ND	None
CCGC_0037	22/Oct/2013	Nitrate as NO3-N	<0.1	ND	None
CCGC_0037	22/Oct/2013	Nitrite as NO2-N	<0.1	ND	None
CCGC_0037	22/Oct/2013	Potassium	6.8	=	None
CCGC_0037	22/Oct/2013	Sodium	140	=	None
CCGC_0037	22/Oct/2013	SpecificConductivity	3178	=	None
CCGC_0037	22/Oct/2013	Sulfate	28	=	None
CCGC_0037	22/Oct/2013	Total Dissolved Solids	2171	=	None
CCGC_0038	22/Oct/2013	Alkalinity as CaCO3	155	=	None
CCGC_0038	22/Oct/2013	Alkalinity as CaCO3	155	=	None
CCGC_0038	22/Oct/2013	Bicarbonate	189	=	None
CCGC_0038	22/Oct/2013	Bicarbonate	189	=	None
CCGC_0038	22/Oct/2013	Calcium	70	=	None
CCGC_0038	22/Oct/2013	Calcium	70	=	None
CCGC_0038	22/Oct/2013	Chloride	122	=	None
CCGC_0038	22/Oct/2013	Chloride	122	=	None
CCGC_0038	22/Oct/2013	Hardness as CaCO3	274	=	None
CCGC_0038	22/Oct/2013	Hardness as CaCO3	274	=	None
CCGC_0038	22/Oct/2013	Magnesium	24	=	None
CCGC_0038	22/Oct/2013	Magnesium	24	=	None
CCGC_0038	22/Oct/2013	Nitrate + Nitrite as N	0.8	=	None
CCGC_0038	22/Oct/2013	Nitrate + Nitrite as N	0.8	=	None
CCGC_0038	22/Oct/2013	Nitrate as NO3-N	0.6	=	None
CCGC_0038	22/Oct/2013	Nitrate as NO3-N	0.6	=	None
CCGC_0038	22/Oct/2013	Nitrite as NO2-N	0.2	=	None
CCGC_0038	22/Oct/2013	Nitrite as NO2-N	0.2	=	None
CCGC_0038	22/Oct/2013	Potassium	3.5	=	None
CCGC_0038	22/Oct/2013	Potassium	3.5	=	None
CCGC_0038	22/Oct/2013	Sodium	59	=	None
CCGC_0038	22/Oct/2013	Sodium	59	=	None
CCGC_0038	22/Oct/2013	SpecificConductivity	825	=	None
CCGC_0038	22/Oct/2013	SpecificConductivity	825	=	None
CCGC_0038	22/Oct/2013	Sulfate	68	=	None
CCGC_0038	22/Oct/2013	Sulfate	68	=	None
CCGC_0038	22/Oct/2013	Total Dissolved Solids	526	=	None
CCGC_0038	22/Oct/2013	Total Dissolved Solids	526	=	None
CCGC_0039	25/Oct/2013	Alkalinity as CaCO3	236	=	None
CCGC_0039	25/Oct/2013	Bicarbonate	288	=	None
CCGC_0039	25/Oct/2013	Calcium	99	=	None
CCGC_0039	25/Oct/2013	Chloride	32	=	None
CCGC_0039	25/Oct/2013	Hardness as CaCO3	400	=	None
CCGC_0039	25/Oct/2013	Magnesium	37	=	None
CCGC_0039	25/Oct/2013	Nitrate + Nitrite as N	0.7	=	None
CCGC_0039	25/Oct/2013	Nitrate as NO3-N	0.3	=	None
CCGC_0039	25/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0039	25/Oct/2013	Potassium	3	=	None
CCGC_0039	25/Oct/2013	Sodium	52	=	None
CCGC_0039	25/Oct/2013	SpecificConductivity	870	=	None
CCGC_0039	25/Oct/2013	Sulfate	181	=	None
CCGC_0039	25/Oct/2013	Total Dissolved Solids	611	=	None
CCGC_0040	24/Oct/2013	Alkalinity as CaCO3	244	=	None
CCGC_0040	24/Oct/2013	Bicarbonate	298	=	None
CCGC_0040	24/Oct/2013	Calcium	132	=	None
CCGC_0040	24/Oct/2013	Chloride	58	=	None
CCGC_0040	24/Oct/2013	Hardness as CaCO3	482	=	None
CCGC_0040	24/Oct/2013	Magnesium	37	=	None
CCGC_0040	24/Oct/2013	Nitrate + Nitrite as N	11.5	=	None
CCGC_0040	24/Oct/2013	Nitrate as NO3-N	11.2	=	None
CCGC_0040	24/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0040	24/Oct/2013	Potassium	4.4	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0040	24/Oct/2013	Sodium	66	=	None
CCGC_0040	24/Oct/2013	SpecificConductivity	1073	=	None
CCGC_0040	24/Oct/2013	Sulfate	197	=	None
CCGC_0040	24/Oct/2013	Total Dissolved Solids	734	=	None
CCGC_0041	24/Oct/2013	Alkalinity as CaCO3	182	=	None
CCGC_0041	24/Oct/2013	Bicarbonate	222	=	None
CCGC_0041	24/Oct/2013	Calcium	87	=	None
CCGC_0041	24/Oct/2013	Chloride	35	=	None
CCGC_0041	24/Oct/2013	Hardness as CaCO3	324	=	None
CCGC_0041	24/Oct/2013	Magnesium	26	=	None
CCGC_0041	24/Oct/2013	Nitrate + Nitrite as N	6.6	=	None
CCGC_0041	24/Oct/2013	Nitrate as NO3-N	6.3	=	None
CCGC_0041	24/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0041	24/Oct/2013	Potassium	3.4	=	None
CCGC_0041	24/Oct/2013	Sodium	40	=	None
CCGC_0041	24/Oct/2013	SpecificConductivity	740	=	None
CCGC_0041	24/Oct/2013	Sulfate	122	=	None
CCGC_0041	24/Oct/2013	Total Dissolved Solids	520	=	None
CCGC_0042	24/Oct/2013	Alkalinity as CaCO3	131	=	None
CCGC_0042	24/Oct/2013	Bicarbonate	160	=	None
CCGC_0042	24/Oct/2013	Calcium	62	=	None
CCGC_0042	24/Oct/2013	Chloride	29	=	None
CCGC_0042	24/Oct/2013	Hardness as CaCO3	212	=	None
CCGC_0042	24/Oct/2013	Magnesium	14	=	None
CCGC_0042	24/Oct/2013	Nitrate + Nitrite as N	2.5	=	None
CCGC_0042	24/Oct/2013	Nitrate as NO3-N	2.3	=	None
CCGC_0042	24/Oct/2013	Nitrite as NO2-N	0.2	=	None
CCGC_0042	24/Oct/2013	Potassium	2.8	=	None
CCGC_0042	24/Oct/2013	Sodium	22	=	None
CCGC_0042	24/Oct/2013	SpecificConductivity	506	=	None
CCGC_0042	24/Oct/2013	Sulfate	66	=	None
CCGC_0042	24/Oct/2013	Total Dissolved Solids	331	=	None
CCGC_0043	22/Oct/2013	Alkalinity as CaCO3	215	=	None
CCGC_0043	22/Oct/2013	Bicarbonate	262	=	None
CCGC_0043	22/Oct/2013	Calcium	114	=	None
CCGC_0043	22/Oct/2013	Chloride	89	=	None
CCGC_0043	22/Oct/2013	Hardness as CaCO3	585	=	None
CCGC_0043	22/Oct/2013	Magnesium	73	=	None
CCGC_0043	22/Oct/2013	Nitrate + Nitrite as N	32.4	=	None
CCGC_0043	22/Oct/2013	Nitrate as NO3-N	32.1	=	None
CCGC_0043	22/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0043	22/Oct/2013	Potassium	2.8	=	None
CCGC_0043	22/Oct/2013	Sodium	149	=	None
CCGC_0043	22/Oct/2013	SpecificConductivity	1540	=	None
CCGC_0043	22/Oct/2013	Sulfate	350	=	None
CCGC_0043	22/Oct/2013	Total Dissolved Solids	1164	=	None
CCGC_0044	22/Oct/2013	Alkalinity as CaCO3	302	=	None
CCGC_0044	22/Oct/2013	Bicarbonate	368	=	None
CCGC_0044	22/Oct/2013	Calcium	267	=	None
CCGC_0044	22/Oct/2013	Chloride	248	=	None
CCGC_0044	22/Oct/2013	Hardness as CaCO3	1321	=	None
CCGC_0044	22/Oct/2013	Magnesium	159	=	None
CCGC_0044	22/Oct/2013	Nitrate + Nitrite as N	85.9	=	None
CCGC_0044	22/Oct/2013	Nitrate as NO3-N	85.6	=	None
CCGC_0044	22/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0044	22/Oct/2013	Potassium	6	=	None
CCGC_0044	22/Oct/2013	Sodium	307	=	None
CCGC_0044	22/Oct/2013	SpecificConductivity	3262	=	None
CCGC_0044	22/Oct/2013	Sulfate	863	=	None
CCGC_0044	22/Oct/2013	Total Dissolved Solids	2540	=	None
CCGC_0045	23/Oct/2013	Alkalinity as CaCO3	164	=	None
CCGC_0045	23/Oct/2013	Bicarbonate	200	=	None
CCGC_0045	23/Oct/2013	Calcium	73	=	None
CCGC_0045	23/Oct/2013	Chloride	20	=	None
CCGC_0045	23/Oct/2013	Hardness as CaCO3	265	=	None
CCGC_0045	23/Oct/2013	Magnesium	20	=	None
CCGC_0045	23/Oct/2013	Nitrate + Nitrite as N	1.1	=	None
CCGC_0045	23/Oct/2013	Nitrate as NO3-N	0.8	=	None
CCGC_0045	23/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0045	23/Oct/2013	Potassium	2.8	=	None
CCGC_0045	23/Oct/2013	Sodium	26	=	None
CCGC_0045	23/Oct/2013	SpecificConductivity	572	=	None
CCGC_0045	23/Oct/2013	Sulfate	97	=	None
CCGC_0045	23/Oct/2013	Total Dissolved Solids	403	=	None
CCGC_0046	23/Oct/2013	Alkalinity as CaCO3	174	=	None
CCGC_0046	23/Oct/2013	Bicarbonate	212	=	None
CCGC_0046	23/Oct/2013	Calcium	69	=	None
CCGC_0046	23/Oct/2013	Chloride	23	=	None
CCGC_0046	23/Oct/2013	Hardness as CaCO3	246	=	None
CCGC_0046	23/Oct/2013	Magnesium	18	=	None
CCGC_0046	23/Oct/2013	Nitrate + Nitrite as N	0.5	=	None
CCGC_0046	23/Oct/2013	Nitrate as NO3-N	0.2	=	None
CCGC_0046	23/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0046	23/Oct/2013	Potassium	3.3	=	None
CCGC_0046	23/Oct/2013	Sodium	34	=	None
CCGC_0046	23/Oct/2013	SpecificConductivity	579	=	None
CCGC_0046	23/Oct/2013	Sulfate	89	=	None
CCGC_0046	23/Oct/2013	Total Dissolved Solids	391	=	None
CCGC_0047	23/Oct/2013	Alkalinity as CaCO3	172	=	None
CCGC_0047	23/Oct/2013	Bicarbonate	210	=	None
CCGC_0047	23/Oct/2013	Calcium	70	=	None
CCGC_0047	23/Oct/2013	Chloride	24	=	None
CCGC_0047	23/Oct/2013	Hardness as CaCO3	278	=	None
CCGC_0047	23/Oct/2013	Magnesium	25	=	None
CCGC_0047	23/Oct/2013	Nitrate + Nitrite as N	0.4	=	None
CCGC_0047	23/Oct/2013	Nitrate as NO3-N	0.2	=	None
CCGC_0047	23/Oct/2013	Nitrite as NO2-N	0.2	=	None
CCGC_0047	23/Oct/2013	Potassium	2.3	=	None
CCGC_0047	23/Oct/2013	Sodium	26	=	None
CCGC_0047	23/Oct/2013	SpecificConductivity	600	=	None
CCGC_0047	23/Oct/2013	Sulfate	107	=	None
CCGC_0047	23/Oct/2013	Total Dissolved Solids	420	=	None
CCGC_0048	23/Oct/2013	Alkalinity as CaCO3	180	=	None
CCGC_0048	23/Oct/2013	Bicarbonate	220	=	None
CCGC_0048	23/Oct/2013	Calcium	78	=	None
CCGC_0048	23/Oct/2013	Chloride	28	=	None
CCGC_0048	23/Oct/2013	Hardness as CaCO3	314	=	None
CCGC_0048	23/Oct/2013	Magnesium	29	=	None
CCGC_0048	23/Oct/2013	Nitrate + Nitrite as N	0.8	=	None
CCGC_0048	23/Oct/2013	Nitrate as NO3-N	0.5	=	None
CCGC_0048	23/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0048	23/Oct/2013	Potassium	2.2	=	None
CCGC_0048	23/Oct/2013	Sodium	28	=	None
CCGC_0048	23/Oct/2013	SpecificConductivity	665	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0048	23/Oct/2013	Sulfate	127	=	None
CCGC_0048	23/Oct/2013	Total Dissolved Solids	468	=	None
CCGC_0049	23/Oct/2013	Alkalinity as CaCO3	279	=	None
CCGC_0049	23/Oct/2013	Bicarbonate	340	=	None
CCGC_0049	23/Oct/2013	Calcium	158	=	None
CCGC_0049	23/Oct/2013	Chloride	41	=	None
CCGC_0049	23/Oct/2013	Hardness as CaCO3	642	=	None
CCGC_0049	23/Oct/2013	Magnesium	60	=	None
CCGC_0049	23/Oct/2013	Nitrate + Nitrite as N	13.3	=	None
CCGC_0049	23/Oct/2013	Nitrate as NO3-N	12.9	=	None
CCGC_0049	23/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0049	23/Oct/2013	Potassium	3.4	=	None
CCGC_0049	23/Oct/2013	Sodium	58	=	None
CCGC_0049	23/Oct/2013	SpecificConductivity	1260	=	None
CCGC_0049	23/Oct/2013	Sulfate	314	=	None
CCGC_0049	23/Oct/2013	Total Dissolved Solids	917	=	None
CCGC_0050	24/Oct/2013	Alkalinity as CaCO3	140	=	None
CCGC_0050	24/Oct/2013	Bicarbonate	171	=	None
CCGC_0050	24/Oct/2013	Calcium	89	=	None
CCGC_0050	24/Oct/2013	Chloride	89	=	None
CCGC_0050	24/Oct/2013	Hardness as CaCO3	309	=	None
CCGC_0050	24/Oct/2013	Magnesium	21	=	None
CCGC_0050	24/Oct/2013	Nitrate + Nitrite as N	8.1	=	None
CCGC_0050	24/Oct/2013	Nitrate as NO3-N	7.9	=	None
CCGC_0050	24/Oct/2013	Nitrite as NO2-N	0.2	=	None
CCGC_0050	24/Oct/2013	Potassium	3.4	=	None
CCGC_0050	24/Oct/2013	Sodium	28	=	None
CCGC_0050	24/Oct/2013	SpecificConductivity	705	=	None
CCGC_0050	24/Oct/2013	Sulfate	103	=	None
CCGC_0050	24/Oct/2013	Total Dissolved Solids	446	=	None
CCGC_0051	24/Oct/2013	Alkalinity as CaCO3	135	=	None
CCGC_0051	24/Oct/2013	Bicarbonate	165	=	None
CCGC_0051	24/Oct/2013	Calcium	51	=	None
CCGC_0051	24/Oct/2013	Chloride	17	=	None
CCGC_0051	24/Oct/2013	Hardness as CaCO3	181	=	None
CCGC_0051	24/Oct/2013	Magnesium	13	=	None
CCGC_0051	24/Oct/2013	Nitrate + Nitrite as N	1.3	=	None
CCGC_0051	24/Oct/2013	Nitrate as NO3-N	1	=	None
CCGC_0051	24/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0051	24/Oct/2013	Potassium	2.9	=	None
CCGC_0051	24/Oct/2013	Sodium	28	=	None
CCGC_0051	24/Oct/2013	SpecificConductivity	468	=	None
CCGC_0051	24/Oct/2013	Sulfate	70	=	None
CCGC_0051	24/Oct/2013	Total Dissolved Solids	328	=	None
CCGC_0052	23/Oct/2013	Alkalinity as CaCO3	194	=	None
CCGC_0052	23/Oct/2013	Bicarbonate	237	=	None
CCGC_0052	23/Oct/2013	Calcium	199	=	None
CCGC_0052	23/Oct/2013	Chloride	237	=	None
CCGC_0052	23/Oct/2013	Hardness as CaCO3	744	=	None
CCGC_0052	23/Oct/2013	Magnesium	60	=	None
CCGC_0052	23/Oct/2013	Nitrate + Nitrite as N	29	=	None
CCGC_0052	23/Oct/2013	Nitrate as NO3-N	28.8	=	None
CCGC_0052	23/Oct/2013	Nitrite as NO2-N	0.2	=	None
CCGC_0052	23/Oct/2013	Potassium	5.6	=	None
CCGC_0052	23/Oct/2013	Sodium	108	=	None
CCGC_0052	23/Oct/2013	SpecificConductivity	1793	=	None
CCGC_0052	23/Oct/2013	Sulfate	287	=	None
CCGC_0052	23/Oct/2013	Total Dissolved Solids	1208	=	None
CCGC_0053	23/Oct/2013	Alkalinity as CaCO3	361	=	None
CCGC_0053	23/Oct/2013	Bicarbonate	440	=	None
CCGC_0053	23/Oct/2013	Calcium	354	=	None
CCGC_0053	23/Oct/2013	Chloride	328	=	None
CCGC_0053	23/Oct/2013	Hardness as CaCO3	1773	=	None
CCGC_0053	23/Oct/2013	Magnesium	216	=	None
CCGC_0053	23/Oct/2013	Nitrate + Nitrite as N	69	=	None
CCGC_0053	23/Oct/2013	Nitrate as NO3-N	68.7	=	None
CCGC_0053	23/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0053	23/Oct/2013	Potassium	7.8	=	None
CCGC_0053	23/Oct/2013	Sodium	442	=	None
CCGC_0053	23/Oct/2013	SpecificConductivity	4123	=	None
CCGC_0053	23/Oct/2013	Sulfate	1406	=	None
CCGC_0053	23/Oct/2013	Total Dissolved Solids	3303	=	None
CCGC_0054	21/Oct/2013	Alkalinity as CaCO3	372	=	None
CCGC_0054	21/Oct/2013	Bicarbonate	454	=	None
CCGC_0054	21/Oct/2013	Calcium	169	=	None
CCGC_0054	21/Oct/2013	Chloride	74	=	None
CCGC_0054	21/Oct/2013	Hardness as CaCO3	809	=	None
CCGC_0054	21/Oct/2013	Magnesium	94	=	None
CCGC_0054	21/Oct/2013	Nitrate + Nitrite as N	21.8	=	None
CCGC_0054	21/Oct/2013	Nitrate as NO3-N	21.3	=	None
CCGC_0054	21/Oct/2013	Nitrite as NO2-N	0.5	=	None
CCGC_0054	21/Oct/2013	Potassium	4.3	=	None
CCGC_0054	21/Oct/2013	Sodium	147	=	None
CCGC_0054	21/Oct/2013	SpecificConductivity	1857	=	None
CCGC_0054	21/Oct/2013	Sulfate	514	=	None
CCGC_0054	21/Oct/2013	Total Dissolved Solids	1423	=	None
CCGC_0055	23/Oct/2013	Alkalinity as CaCO3	258	=	None
CCGC_0055	23/Oct/2013	Bicarbonate	315	=	None
CCGC_0055	23/Oct/2013	Calcium	174	=	None
CCGC_0055	23/Oct/2013	Chloride	210	=	None
CCGC_0055	23/Oct/2013	Hardness as CaCO3	752	=	None
CCGC_0055	23/Oct/2013	Magnesium	77	=	None
CCGC_0055	23/Oct/2013	Nitrate + Nitrite as N	29.8	=	None
CCGC_0055	23/Oct/2013	Nitrate as NO3-N	29.5	=	None
CCGC_0055	23/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0055	23/Oct/2013	Potassium	4.8	=	None
CCGC_0055	23/Oct/2013	Sodium	163	=	None
CCGC_0055	23/Oct/2013	SpecificConductivity	1922	=	None
CCGC_0055	23/Oct/2013	Sulfate	338	=	None
CCGC_0055	23/Oct/2013	Total Dissolved Solids	1297	=	None
CCGC_0056	23/Oct/2013	Alkalinity as CaCO3	328	=	None
CCGC_0056	23/Oct/2013	Alkalinity as CaCO3	328	=	None
CCGC_0056	23/Oct/2013	Alkalinity as CaCO3	328	=	None
CCGC_0056	28/Aug/2014	Alkalinity as CaCO3	331	=	None
CCGC_0056	28/Aug/2014	Alkalinity as CaCO3	331	=	None
CCGC_0056	28/Aug/2014	Alkalinity as CaCO3	331	=	None
CCGC_0056	23/Oct/2013	Bicarbonate	400	=	None
CCGC_0056	23/Oct/2013	Bicarbonate	400	=	None
CCGC_0056	23/Oct/2013	Bicarbonate	400	=	None
CCGC_0056	28/Aug/2014	Bicarbonate	404	=	None
CCGC_0056	28/Aug/2014	Bicarbonate	404	=	None
CCGC_0056	28/Aug/2014	Bicarbonate	404	=	None
CCGC_0056	28/Aug/2014	Calcium	117	=	D
CCGC_0056	28/Aug/2014	Calcium	117	=	D

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0056	28/Aug/2014	Calcium	117	=	D
CCGC_0056	23/Oct/2013	Calcium	124	=	None
CCGC_0056	23/Oct/2013	Calcium	124	=	None
CCGC_0056	23/Oct/2013	Calcium	124	=	None
CCGC_0056	23/Oct/2013	Chloride	63	=	None
CCGC_0056	23/Oct/2013	Chloride	63	=	None
CCGC_0056	23/Oct/2013	Chloride	63	=	None
CCGC_0056	28/Aug/2014	Chloride	64	=	None
CCGC_0056	28/Aug/2014	Chloride	64	=	None
CCGC_0056	28/Aug/2014	Chloride	64	=	None
CCGC_0056	23/Oct/2013	Hardness as CaCO3	577	=	None
CCGC_0056	23/Oct/2013	Hardness as CaCO3	577	=	None
CCGC_0056	23/Oct/2013	Hardness as CaCO3	577	=	None
CCGC_0056	28/Aug/2014	Hardness as CaCO3	547	=	None
CCGC_0056	28/Aug/2014	Hardness as CaCO3	547	=	None
CCGC_0056	28/Aug/2014	Hardness as CaCO3	547	=	None
CCGC_0056	23/Oct/2013	Magnesium	65	=	None
CCGC_0056	23/Oct/2013	Magnesium	65	=	None
CCGC_0056	23/Oct/2013	Magnesium	65	=	None
CCGC_0056	28/Aug/2014	Magnesium	62	=	D
CCGC_0056	28/Aug/2014	Magnesium	62	=	D
CCGC_0056	28/Aug/2014	Magnesium	62	=	D
CCGC_0056	23/Oct/2013	Nitrate + Nitrite as N	10.4	=	None
CCGC_0056	23/Oct/2013	Nitrate + Nitrite as N	10.4	=	None
CCGC_0056	23/Oct/2013	Nitrate + Nitrite as N	10.4	=	None
CCGC_0056	28/Aug/2014	Nitrate + Nitrite as N	9.3	=	None
CCGC_0056	28/Aug/2014	Nitrate + Nitrite as N	9.3	=	None
CCGC_0056	28/Aug/2014	Nitrate + Nitrite as N	9.3	=	None
CCGC_0056	23/Oct/2013	Nitrate as NO3-N	10	=	None
CCGC_0056	23/Oct/2013	Nitrate as NO3-N	10	=	None
CCGC_0056	23/Oct/2013	Nitrate as NO3-N	10	=	None
CCGC_0056	28/Aug/2014	Nitrate as NO3-N	8.8	=	None
CCGC_0056	28/Aug/2014	Nitrate as NO3-N	8.8	=	None
CCGC_0056	28/Aug/2014	Nitrate as NO3-N	8.8	=	None
CCGC_0056	28/Aug/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0056	23/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0056	23/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0056	23/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0056	28/Aug/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0056	28/Aug/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0056	23/Oct/2013	Potassium	4	=	None
CCGC_0056	23/Oct/2013	Potassium	4	=	None
CCGC_0056	23/Oct/2013	Potassium	4	=	None
CCGC_0056	28/Aug/2014	Potassium	3.6	=	D
CCGC_0056	28/Aug/2014	Potassium	3.6	=	D
CCGC_0056	28/Aug/2014	Potassium	3.6	=	D
CCGC_0056	23/Oct/2013	Sodium	206	=	None
CCGC_0056	23/Oct/2013	Sodium	206	=	None
CCGC_0056	23/Oct/2013	Sodium	206	=	None
CCGC_0056	28/Aug/2014	Sodium	194	=	D
CCGC_0056	28/Aug/2014	Sodium	194	=	D
CCGC_0056	28/Aug/2014	Sodium	194	=	D
CCGC_0056	23/Oct/2013	SpecificConductivity	1671	=	None
CCGC_0056	23/Oct/2013	SpecificConductivity	1671	=	None
CCGC_0056	23/Oct/2013	SpecificConductivity	1671	=	None
CCGC_0056	28/Aug/2014	SpecificConductivity	1661	=	None
CCGC_0056	28/Aug/2014	SpecificConductivity	1661	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0056	28/Aug/2014	SpecificConductivity	1661	=	None
CCGC_0056	28/Aug/2014	Sulfate	465	=	None
CCGC_0056	23/Oct/2013	Sulfate	465	=	None
CCGC_0056	23/Oct/2013	Sulfate	465	=	None
CCGC_0056	23/Oct/2013	Sulfate	465	=	None
CCGC_0056	28/Aug/2014	Sulfate	465	=	None
CCGC_0056	28/Aug/2014	Sulfate	465	=	None
CCGC_0056	23/Oct/2013	Total Dissolved Solids	1203	=	None
CCGC_0056	23/Oct/2013	Total Dissolved Solids	1203	=	None
CCGC_0056	23/Oct/2013	Total Dissolved Solids	1203	=	None
CCGC_0056	28/Aug/2014	Total Dissolved Solids	1151	=	None
CCGC_0056	28/Aug/2014	Total Dissolved Solids	1151	=	None
CCGC_0056	28/Aug/2014	Total Dissolved Solids	1151	=	None
CCGC_0057	23/Oct/2013	Alkalinity as CaCO3	253	=	None
CCGC_0057	23/Oct/2013	Bicarbonate	309	=	None
CCGC_0057	23/Oct/2013	Calcium	142	=	None
CCGC_0057	23/Oct/2013	Chloride	65	=	None
CCGC_0057	23/Oct/2013	Hardness as CaCO3	593	=	None
CCGC_0057	23/Oct/2013	Magnesium	58	=	None
CCGC_0057	23/Oct/2013	Nitrate + Nitrite as N	16.1	=	None
CCGC_0057	23/Oct/2013	Nitrate as NO3-N	15.7	=	None
CCGC_0057	23/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0057	23/Oct/2013	Potassium	3.1	=	None
CCGC_0057	23/Oct/2013	Sodium	57	=	None
CCGC_0057	23/Oct/2013	SpecificConductivity	1231	=	None
CCGC_0057	23/Oct/2013	Sulfate	260	=	None
CCGC_0057	23/Oct/2013	Total Dissolved Solids	859	=	None
CCGC_0058	25/Oct/2013	Alkalinity as CaCO3	170	=	None
CCGC_0058	25/Oct/2013	Bicarbonate	207	=	None
CCGC_0058	25/Oct/2013	Calcium	76	=	None
CCGC_0058	25/Oct/2013	Chloride	34	=	None
CCGC_0058	25/Oct/2013	Hardness as CaCO3	309	=	None
CCGC_0058	25/Oct/2013	Magnesium	29	=	None
CCGC_0058	25/Oct/2013	Nitrate + Nitrite as N	12.1	=	None
CCGC_0058	25/Oct/2013	Nitrate as NO3-N	11.8	=	None
CCGC_0058	25/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0058	25/Oct/2013	Potassium	1.7	=	None
CCGC_0058	25/Oct/2013	Sodium	42	=	None
CCGC_0058	25/Oct/2013	SpecificConductivity	744	=	None
CCGC_0058	25/Oct/2013	Sulfate	113	=	None
CCGC_0058	25/Oct/2013	Total Dissolved Solids	488	=	None
CCGC_0059	23/Oct/2013	Alkalinity as CaCO3	280	=	None
CCGC_0059	28/Aug/2014	Alkalinity as CaCO3	301	=	None
CCGC_0059	23/Oct/2013	Bicarbonate	342	=	None
CCGC_0059	28/Aug/2014	Bicarbonate	367	=	None
CCGC_0059	28/Aug/2014	Calcium	133	=	D
CCGC_0059	23/Oct/2013	Calcium	124	=	None
CCGC_0059	23/Oct/2013	Chloride	45	=	None
CCGC_0059	28/Aug/2014	Chloride	52	=	None
CCGC_0059	23/Oct/2013	Hardness as CaCO3	520	=	None
CCGC_0059	28/Aug/2014	Hardness as CaCO3	559	=	None
CCGC_0059	23/Oct/2013	Magnesium	51	=	None
CCGC_0059	28/Aug/2014	Magnesium	55	=	D
CCGC_0059	23/Oct/2013	Nitrate + Nitrite as N	10.2	=	None
CCGC_0059	28/Aug/2014	Nitrate + Nitrite as N	19.1	=	None
CCGC_0059	23/Oct/2013	Nitrate as NO3-N	9.8	=	None
CCGC_0059	28/Aug/2014	Nitrate as NO3-N	18.6	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0059	23/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0059	28/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0059	23/Oct/2013	Potassium	3.6	=	None
CCGC_0059	28/Aug/2014	Potassium	3.5	=	D
CCGC_0059	23/Oct/2013	Sodium	84	=	None
CCGC_0059	28/Aug/2014	Sodium	88	=	D
CCGC_0059	23/Oct/2013	SpecificConductivity	1172	=	None
CCGC_0059	28/Aug/2014	SpecificConductivity	1311	=	None
CCGC_0059	23/Oct/2013	Sulfate	259	=	None
CCGC_0059	28/Aug/2014	Sulfate	280	=	None
CCGC_0059	23/Oct/2013	Total Dissolved Solids	817	=	None
CCGC_0059	28/Aug/2014	Total Dissolved Solids	917	=	None
CCGC_0060	21/Oct/2013	Alkalinity as CaCO3	197	=	None
CCGC_0060	21/Oct/2013	Bicarbonate	240	=	None
CCGC_0060	21/Oct/2013	Calcium	72	=	None
CCGC_0060	21/Oct/2013	Chloride	22	=	None
CCGC_0060	21/Oct/2013	Hardness as CaCO3	270	=	None
CCGC_0060	21/Oct/2013	Magnesium	22	=	None
CCGC_0060	21/Oct/2013	Nitrate + Nitrite as N	0.5	=	None
CCGC_0060	21/Oct/2013	Nitrate as NO3-N	0.1	=	None
CCGC_0060	21/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0060	21/Oct/2013	Potassium	2.6	=	None
CCGC_0060	21/Oct/2013	Sodium	30	=	None
CCGC_0060	21/Oct/2013	SpecificConductivity	622	=	None
CCGC_0060	21/Oct/2013	Sulfate	98	=	None
CCGC_0060	21/Oct/2013	Total Dissolved Solids	409	=	None
CCGC_0061	23/Oct/2013	Alkalinity as CaCO3	207	=	None
CCGC_0061	23/Oct/2013	Bicarbonate	253	=	None
CCGC_0061	23/Oct/2013	Calcium	276	=	None
CCGC_0061	23/Oct/2013	Chloride	246	=	None
CCGC_0061	23/Oct/2013	Hardness as CaCO3	990	=	None
CCGC_0061	23/Oct/2013	Magnesium	73	=	None
CCGC_0061	23/Oct/2013	Nitrate + Nitrite as N	53.8	=	None
CCGC_0061	23/Oct/2013	Nitrate as NO3-N	53.6	=	None
CCGC_0061	23/Oct/2013	Nitrite as NO2-N	0.2	=	None
CCGC_0061	23/Oct/2013	Potassium	6.3	=	None
CCGC_0061	23/Oct/2013	Sodium	92	=	None
CCGC_0061	23/Oct/2013	SpecificConductivity	2087	=	None
CCGC_0061	23/Oct/2013	Sulfate	365	=	None
CCGC_0061	23/Oct/2013	Total Dissolved Solids	1503	=	None
CCGC_0062	23/Oct/2013	Alkalinity as CaCO3	141	=	None
CCGC_0062	23/Oct/2013	Bicarbonate	172	=	None
CCGC_0062	23/Oct/2013	Calcium	49	=	None
CCGC_0062	23/Oct/2013	Chloride	19	=	None
CCGC_0062	23/Oct/2013	Hardness as CaCO3	201	=	None
CCGC_0062	23/Oct/2013	Magnesium	19	=	None
CCGC_0062	23/Oct/2013	Nitrate + Nitrite as N	1.3	=	None
CCGC_0062	23/Oct/2013	Nitrate as NO3-N	1	=	None
CCGC_0062	23/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0062	23/Oct/2013	Potassium	1.5	=	None
CCGC_0062	23/Oct/2013	Sodium	28	=	None
CCGC_0062	23/Oct/2013	SpecificConductivity	481	=	None
CCGC_0062	23/Oct/2013	Sulfate	69	=	None
CCGC_0062	23/Oct/2013	Total Dissolved Solids	308	=	None
CCGC_0063	23/Oct/2013	Alkalinity as CaCO3	202	=	None
CCGC_0063	23/Oct/2013	Bicarbonate	246	=	None
CCGC_0063	23/Oct/2013	Calcium	221	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0063	23/Oct/2013	Chloride	178	=	None
CCGC_0063	23/Oct/2013	Hardness as CaCO3	721	=	None
CCGC_0063	23/Oct/2013	Magnesium	41	=	None
CCGC_0063	23/Oct/2013	Nitrate + Nitrite as N	25.7	=	None
CCGC_0063	23/Oct/2013	Nitrate as NO3-N	25.5	=	None
CCGC_0063	23/Oct/2013	Nitrite as NO2-N	0.2	=	None
CCGC_0063	23/Oct/2013	Potassium	6.9	=	None
CCGC_0063	23/Oct/2013	Sodium	99	=	None
CCGC_0063	23/Oct/2013	SpecificConductivity	1653	=	None
CCGC_0063	23/Oct/2013	Sulfate	312	=	None
CCGC_0063	23/Oct/2013	Total Dissolved Solids	1137	=	None
CCGC_0064	22/Oct/2013	Alkalinity as CaCO3	150	=	None
CCGC_0064	22/Oct/2013	Bicarbonate	183	=	None
CCGC_0064	22/Oct/2013	Calcium	49	=	None
CCGC_0064	22/Oct/2013	Chloride	20	=	None
CCGC_0064	22/Oct/2013	Hardness as CaCO3	209	=	None
CCGC_0064	22/Oct/2013	Magnesium	21	=	None
CCGC_0064	22/Oct/2013	Nitrate + Nitrite as N	3	=	None
CCGC_0064	22/Oct/2013	Nitrate as NO3-N	2.7	=	None
CCGC_0064	22/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0064	22/Oct/2013	Potassium	1.4	=	None
CCGC_0064	22/Oct/2013	Sodium	30	=	None
CCGC_0064	22/Oct/2013	SpecificConductivity	519	=	None
CCGC_0064	22/Oct/2013	Sulfate	74	=	None
CCGC_0064	22/Oct/2013	Total Dissolved Solids	371	=	None
CCGC_0065	22/Oct/2013	Alkalinity as CaCO3	316	=	None
CCGC_0065	22/Oct/2013	Bicarbonate	386	=	None
CCGC_0065	22/Oct/2013	Calcium	201	=	None
CCGC_0065	22/Oct/2013	Chloride	132	=	None
CCGC_0065	22/Oct/2013	Hardness as CaCO3	910	=	None
CCGC_0065	22/Oct/2013	Magnesium	99	=	None
CCGC_0065	22/Oct/2013	Nitrate + Nitrite as N	14.2	=	None
CCGC_0065	22/Oct/2013	Nitrate as NO3-N	13.8	=	None
CCGC_0065	22/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0065	22/Oct/2013	Potassium	4.7	=	None
CCGC_0065	22/Oct/2013	Sodium	191	=	None
CCGC_0065	22/Oct/2013	SpecificConductivity	2161	=	None
CCGC_0065	22/Oct/2013	Sulfate	659	=	None
CCGC_0065	22/Oct/2013	Total Dissolved Solids	1674	=	None
CCGC_0066	22/Oct/2013	Alkalinity as CaCO3	247	=	None
CCGC_0066	22/Oct/2013	Bicarbonate	301	=	None
CCGC_0066	22/Oct/2013	Calcium	82	=	None
CCGC_0066	22/Oct/2013	Chloride	62	=	None
CCGC_0066	22/Oct/2013	Hardness as CaCO3	378	=	None
CCGC_0066	22/Oct/2013	Magnesium	42	=	None
CCGC_0066	22/Oct/2013	Nitrate + Nitrite as N	4.8	=	None
CCGC_0066	22/Oct/2013	Nitrate as NO3-N	4.5	=	None
CCGC_0066	22/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0066	22/Oct/2013	Potassium	2.3	=	None
CCGC_0066	22/Oct/2013	Sodium	100	=	None
CCGC_0066	22/Oct/2013	SpecificConductivity	1060	=	None
CCGC_0066	22/Oct/2013	Sulfate	208	=	None
CCGC_0066	22/Oct/2013	Total Dissolved Solids	708	=	None
CCGC_0067	25/Oct/2013	Alkalinity as CaCO3	192	=	None
CCGC_0067	25/Oct/2013	Bicarbonate	234	=	None
CCGC_0067	25/Oct/2013	Calcium	62	=	None
CCGC_0067	25/Oct/2013	Chloride	28	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0067	25/Oct/2013	Hardness as CaCO3	274	=	None
CCGC_0067	25/Oct/2013	Magnesium	29	=	None
CCGC_0067	25/Oct/2013	Nitrate + Nitrite as N	2	=	None
CCGC_0067	25/Oct/2013	Nitrate as NO3-N	1.6	=	None
CCGC_0067	25/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0067	25/Oct/2013	Potassium	2.2	=	None
CCGC_0067	25/Oct/2013	Sodium	58	=	None
CCGC_0067	25/Oct/2013	SpecificConductivity	712	=	None
CCGC_0067	25/Oct/2013	Sulfate	129	=	None
CCGC_0067	25/Oct/2013	Total Dissolved Solids	477	=	None
CCGC_0068	22/Oct/2013	Alkalinity as CaCO3	351	=	None
CCGC_0068	22/Oct/2013	Bicarbonate	428	=	None
CCGC_0068	22/Oct/2013	Calcium	169	=	None
CCGC_0068	22/Oct/2013	Chloride	124	=	None
CCGC_0068	22/Oct/2013	Hardness as CaCO3	661	=	None
CCGC_0068	22/Oct/2013	Magnesium	58	=	None
CCGC_0068	22/Oct/2013	Nitrate + Nitrite as N	0.4	=	None
CCGC_0068	22/Oct/2013	Nitrate as NO3-N	<0.1	ND	None
CCGC_0068	22/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0068	22/Oct/2013	Potassium	7.5	=	None
CCGC_0068	22/Oct/2013	Sodium	161	=	None
CCGC_0068	22/Oct/2013	SpecificConductivity	1745	=	None
CCGC_0068	22/Oct/2013	Sulfate	429	=	None
CCGC_0068	22/Oct/2013	Total Dissolved Solids	1251	=	None
CCGC_0069	21/Oct/2013	Alkalinity as CaCO3	289	=	None
CCGC_0069	21/Oct/2013	Alkalinity as CaCO3	289	=	None
CCGC_0069	21/Oct/2013	Alkalinity as CaCO3	289	=	None
CCGC_0069	21/Oct/2013	Bicarbonate	353	=	None
CCGC_0069	21/Oct/2013	Bicarbonate	353	=	None
CCGC_0069	21/Oct/2013	Bicarbonate	353	=	None
CCGC_0069	21/Oct/2013	Calcium	149	=	None
CCGC_0069	21/Oct/2013	Calcium	149	=	None
CCGC_0069	21/Oct/2013	Calcium	149	=	None
CCGC_0069	21/Oct/2013	Chloride	80	=	None
CCGC_0069	21/Oct/2013	Chloride	80	=	None
CCGC_0069	21/Oct/2013	Chloride	80	=	None
CCGC_0069	21/Oct/2013	Hardness as CaCO3	520	=	None
CCGC_0069	21/Oct/2013	Hardness as CaCO3	520	=	None
CCGC_0069	21/Oct/2013	Hardness as CaCO3	520	=	None
CCGC_0069	21/Oct/2013	Magnesium	36	=	None
CCGC_0069	21/Oct/2013	Magnesium	36	=	None
CCGC_0069	21/Oct/2013	Magnesium	36	=	None
CCGC_0069	21/Oct/2013	Nitrate + Nitrite as N	0.6	=	None
CCGC_0069	21/Oct/2013	Nitrate + Nitrite as N	0.6	=	None
CCGC_0069	21/Oct/2013	Nitrate + Nitrite as N	0.6	=	None
CCGC_0069	21/Oct/2013	Nitrate as NO3-N	0.2	=	None
CCGC_0069	21/Oct/2013	Nitrate as NO3-N	0.2	=	None
CCGC_0069	21/Oct/2013	Nitrate as NO3-N	0.2	=	None
CCGC_0069	21/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0069	21/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0069	21/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0069	21/Oct/2013	Potassium	4.7	=	None
CCGC_0069	21/Oct/2013	Potassium	4.7	=	None
CCGC_0069	21/Oct/2013	Potassium	4.7	=	None
CCGC_0069	21/Oct/2013	Sodium	45	=	None
CCGC_0069	21/Oct/2013	Sodium	45	=	None
CCGC_0069	21/Oct/2013	Sodium	45	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0069	21/Oct/2013	SpecificConductivity	1116	=	None
CCGC_0069	21/Oct/2013	SpecificConductivity	1116	=	None
CCGC_0069	21/Oct/2013	SpecificConductivity	1116	=	None
CCGC_0069	21/Oct/2013	Sulfate	198	=	None
CCGC_0069	21/Oct/2013	Sulfate	198	=	None
CCGC_0069	21/Oct/2013	Sulfate	198	=	None
CCGC_0069	21/Oct/2013	Total Dissolved Solids	789	=	None
CCGC_0069	21/Oct/2013	Total Dissolved Solids	789	=	None
CCGC_0069	21/Oct/2013	Total Dissolved Solids	789	=	None
CCGC_0070	21/Oct/2013	Alkalinity as CaCO3	278	=	None
CCGC_0070	21/Oct/2013	Bicarbonate	339	=	None
CCGC_0070	21/Oct/2013	Calcium	110	=	None
CCGC_0070	21/Oct/2013	Chloride	62	=	None
CCGC_0070	21/Oct/2013	Hardness as CaCO3	398	=	None
CCGC_0070	21/Oct/2013	Magnesium	30	=	None
CCGC_0070	21/Oct/2013	Nitrate + Nitrite as N	2.4	=	None
CCGC_0070	21/Oct/2013	Nitrate as NO3-N	2	=	None
CCGC_0070	21/Oct/2013	Nitrite as NO2-N	0.4	=	None
CCGC_0070	21/Oct/2013	Potassium	4.9	=	None
CCGC_0070	21/Oct/2013	Sodium	66	=	None
CCGC_0070	21/Oct/2013	SpecificConductivity	985	=	None
CCGC_0070	21/Oct/2013	Sulfate	167	=	None
CCGC_0070	21/Oct/2013	Total Dissolved Solids	680	=	None
CCGC_0071	25/Oct/2013	Alkalinity as CaCO3	175	=	None
CCGC_0071	25/Oct/2013	Alkalinity as CaCO3	175	=	None
CCGC_0071	25/Oct/2013	Alkalinity as CaCO3	175	=	None
CCGC_0071	25/Oct/2013	Bicarbonate	214	=	None
CCGC_0071	25/Oct/2013	Bicarbonate	214	=	None
CCGC_0071	25/Oct/2013	Bicarbonate	214	=	None
CCGC_0071	25/Oct/2013	Calcium	37	=	None
CCGC_0071	25/Oct/2013	Calcium	37	=	None
CCGC_0071	25/Oct/2013	Calcium	37	=	None
CCGC_0071	25/Oct/2013	Chloride	59	=	None
CCGC_0071	25/Oct/2013	Chloride	59	=	None
CCGC_0071	25/Oct/2013	Chloride	59	=	None
CCGC_0071	25/Oct/2013	Hardness as CaCO3	142	=	None
CCGC_0071	25/Oct/2013	Hardness as CaCO3	142	=	None
CCGC_0071	25/Oct/2013	Hardness as CaCO3	142	=	None
CCGC_0071	25/Oct/2013	Magnesium	12	=	None
CCGC_0071	25/Oct/2013	Magnesium	12	=	None
CCGC_0071	25/Oct/2013	Magnesium	12	=	None
CCGC_0071	25/Oct/2013	Nitrate + Nitrite as N	0.7	=	None
CCGC_0071	25/Oct/2013	Nitrate + Nitrite as N	0.7	=	None
CCGC_0071	25/Oct/2013	Nitrate + Nitrite as N	0.7	=	None
CCGC_0071	25/Oct/2013	Nitrate as NO3-N	0.4	=	None
CCGC_0071	25/Oct/2013	Nitrate as NO3-N	0.4	=	None
CCGC_0071	25/Oct/2013	Nitrate as NO3-N	0.4	=	None
CCGC_0071	25/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0071	25/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0071	25/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0071	25/Oct/2013	Potassium	2.4	=	None
CCGC_0071	25/Oct/2013	Potassium	2.4	=	None
CCGC_0071	25/Oct/2013	Potassium	2.4	=	None
CCGC_0071	25/Oct/2013	Sodium	75	=	None
CCGC_0071	25/Oct/2013	Sodium	75	=	None
CCGC_0071	25/Oct/2013	Sodium	75	=	None
CCGC_0071	25/Oct/2013	SpecificConductivity	568	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0071	25/Oct/2013	SpecificConductivity	568	=	None
CCGC_0071	25/Oct/2013	SpecificConductivity	568	=	None
CCGC_0071	25/Oct/2013	Sulfate	20	=	None
CCGC_0071	25/Oct/2013	Sulfate	20	=	None
CCGC_0071	25/Oct/2013	Sulfate	20	=	None
CCGC_0071	25/Oct/2013	Total Dissolved Solids	374	=	None
CCGC_0071	25/Oct/2013	Total Dissolved Solids	374	=	None
CCGC_0071	25/Oct/2013	Total Dissolved Solids	374	=	None
CCGC_0072	23/Oct/2013	Alkalinity as CaCO3	118	=	None
CCGC_0072	23/Oct/2013	Bicarbonate	144	=	None
CCGC_0072	23/Oct/2013	Calcium	49	=	None
CCGC_0072	23/Oct/2013	Chloride	8	=	None
CCGC_0072	23/Oct/2013	Hardness as CaCO3	172	=	None
CCGC_0072	23/Oct/2013	Magnesium	12	=	None
CCGC_0072	23/Oct/2013	Nitrate + Nitrite as N	1.8	=	None
CCGC_0072	23/Oct/2013	Nitrate as NO3-N	1.5	=	None
CCGC_0072	23/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0072	23/Oct/2013	Potassium	2.4	=	None
CCGC_0072	23/Oct/2013	Sodium	18	=	None
CCGC_0072	23/Oct/2013	SpecificConductivity	408	=	None
CCGC_0072	23/Oct/2013	Sulfate	68	=	None
CCGC_0072	23/Oct/2013	Total Dissolved Solids	263	=	None
CCGC_0073	25/Oct/2013	Alkalinity as CaCO3	124	=	None
CCGC_0073	25/Oct/2013	Bicarbonate	151	=	None
CCGC_0073	25/Oct/2013	Calcium	58	=	None
CCGC_0073	25/Oct/2013	Chloride	11	=	None
CCGC_0073	25/Oct/2013	Hardness as CaCO3	202	=	None
CCGC_0073	25/Oct/2013	Magnesium	14	=	None
CCGC_0073	25/Oct/2013	Nitrate + Nitrite as N	4.9	=	None
CCGC_0073	25/Oct/2013	Nitrate as NO3-N	4.7	=	None
CCGC_0073	25/Oct/2013	Nitrite as NO2-N	0.2	=	None
CCGC_0073	25/Oct/2013	Potassium	2.5	=	None
CCGC_0073	25/Oct/2013	Sodium	20	=	None
CCGC_0073	25/Oct/2013	SpecificConductivity	475	=	None
CCGC_0073	25/Oct/2013	Sulfate	85	=	None
CCGC_0073	25/Oct/2013	Total Dissolved Solids	326	=	None
CCGC_0074	23/Oct/2013	Alkalinity as CaCO3	231	=	None
CCGC_0074	23/Oct/2013	Bicarbonate	282	=	None
CCGC_0074	23/Oct/2013	Calcium	180	=	None
CCGC_0074	23/Oct/2013	Chloride	124	=	None
CCGC_0074	23/Oct/2013	Hardness as CaCO3	635	=	None
CCGC_0074	23/Oct/2013	Magnesium	45	=	None
CCGC_0074	23/Oct/2013	Nitrate + Nitrite as N	35.6	=	None
CCGC_0074	23/Oct/2013	Nitrate as NO3-N	35.3	=	None
CCGC_0074	23/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0074	23/Oct/2013	Potassium	5.6	=	None
CCGC_0074	23/Oct/2013	Sodium	80	=	None
CCGC_0074	23/Oct/2013	SpecificConductivity	1455	=	None
CCGC_0074	23/Oct/2013	Sulfate	217	=	None
CCGC_0074	23/Oct/2013	Total Dissolved Solids	968	=	None
CCGC_0075	23/Oct/2013	Alkalinity as CaCO3	263	=	None
CCGC_0075	23/Oct/2013	Bicarbonate	321	=	None
CCGC_0075	23/Oct/2013	Calcium	191	=	None
CCGC_0075	23/Oct/2013	Chloride	162	=	None
CCGC_0075	23/Oct/2013	Hardness as CaCO3	712	=	None
CCGC_0075	23/Oct/2013	Magnesium	57	=	None
CCGC_0075	23/Oct/2013	Nitrate + Nitrite as N	21	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0075	23/Oct/2013	Nitrate as NO3-N	20.7	=	None
CCGC_0075	23/Oct/2013	Nitrite as NO2-N	0.3	=	None
CCGC_0075	23/Oct/2013	Potassium	5.6	=	None
CCGC_0075	23/Oct/2013	Sodium	105	=	None
CCGC_0075	23/Oct/2013	SpecificConductivity	1638	=	None
CCGC_0075	23/Oct/2013	Sulfate	297	=	None
CCGC_0075	23/Oct/2013	Total Dissolved Solids	1094	=	None
CCGC_0107	10/Mar/2014	Alkalinity as CaCO3	128	=	None
CCGC_0107	10/Mar/2014	Bicarbonate	156	=	None
CCGC_0107	10/Mar/2014	Calcium	127	=	D
CCGC_0107	10/Mar/2014	Chloride	211	=	None
CCGC_0107	10/Mar/2014	Hardness as CaCO3	609	=	None
CCGC_0107	10/Mar/2014	Magnesium	71	=	D
CCGC_0107	10/Mar/2014	Nitrate + Nitrite as N	110	=	None
CCGC_0107	10/Mar/2014	Nitrate as NO3-N	110	=	None
CCGC_0107	10/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0107	10/Mar/2014	Potassium	3.6	=	D
CCGC_0107	10/Mar/2014	Sodium	266	=	D
CCGC_0107	10/Mar/2014	SpecificConductivity	2205	=	None
CCGC_0107	10/Mar/2014	Sulfate	297	=	None
CCGC_0107	10/Mar/2014	Total Dissolved Solids	1503	=	None
CCGC_0108	10/Mar/2014	Alkalinity as CaCO3	231	=	None
CCGC_0108	10/Mar/2014	Bicarbonate	282	=	None
CCGC_0108	10/Mar/2014	Calcium	69	=	D
CCGC_0108	10/Mar/2014	Chloride	180	=	None
CCGC_0108	10/Mar/2014	Hardness as CaCO3	267	=	None
CCGC_0108	10/Mar/2014	Magnesium	23	=	D
CCGC_0108	10/Mar/2014	Nitrate + Nitrite as N	0.9	=	None
CCGC_0108	10/Mar/2014	Nitrate as NO3-N	0.8	=	None
CCGC_0108	10/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0108	10/Mar/2014	Potassium	4.3	=	D
CCGC_0108	10/Mar/2014	Sodium	152	=	D
CCGC_0108	10/Mar/2014	SpecificConductivity	1108	=	None
CCGC_0108	10/Mar/2014	Sulfate	45	=	None
CCGC_0108	10/Mar/2014	Total Dissolved Solids	626	=	None
CCGC_0109	10/Mar/2014	Alkalinity as CaCO3	152	=	None
CCGC_0109	10/Mar/2014	Bicarbonate	185	=	None
CCGC_0109	10/Mar/2014	Calcium	50	=	D
CCGC_0109	10/Mar/2014	Chloride	17	=	None
CCGC_0109	10/Mar/2014	Hardness as CaCO3	178	=	None
CCGC_0109	10/Mar/2014	Magnesium	13	=	D
CCGC_0109	10/Mar/2014	Nitrate + Nitrite as N	0.6	=	None
CCGC_0109	10/Mar/2014	Nitrate as NO3-N	0.3	=	None
CCGC_0109	10/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0109	10/Mar/2014	Potassium	2.6	=	D
CCGC_0109	10/Mar/2014	Sodium	34	=	D
CCGC_0109	10/Mar/2014	SpecificConductivity	474	=	None
CCGC_0109	10/Mar/2014	Sulfate	72	=	None
CCGC_0109	10/Mar/2014	Total Dissolved Solids	326	=	None
CCGC_0110	10/Mar/2014	Alkalinity as CaCO3	301	=	None
CCGC_0110	10/Mar/2014	Bicarbonate	367	=	None
CCGC_0110	10/Mar/2014	Calcium	230	=	D
CCGC_0110	10/Mar/2014	Chloride	178	=	None
CCGC_0110	10/Mar/2014	Hardness as CaCO3	821	=	None
CCGC_0110	10/Mar/2014	Magnesium	60	=	D
CCGC_0110	10/Mar/2014	Nitrate + Nitrite as N	0.2	=	None
CCGC_0110	10/Mar/2014	Nitrate as NO3-N	0.1	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0110	10/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0110	10/Mar/2014	Potassium	6.5	=	D
CCGC_0110	10/Mar/2014	Sodium	88	=	D
CCGC_0110	10/Mar/2014	SpecificConductivity	1728	=	None
CCGC_0110	10/Mar/2014	Sulfate	374	=	None
CCGC_0110	10/Mar/2014	Total Dissolved Solids	1180	=	None
CCGC_0111	10/Mar/2014	Alkalinity as CaCO3	236	=	None
CCGC_0111	10/Mar/2014	Bicarbonate	288	=	None
CCGC_0111	10/Mar/2014	Calcium	80	=	D
CCGC_0111	10/Mar/2014	Chloride	36	=	None
CCGC_0111	10/Mar/2014	Hardness as CaCO3	307	=	None
CCGC_0111	10/Mar/2014	Magnesium	26	=	D
CCGC_0111	10/Mar/2014	Nitrate + Nitrite as N	0.9	=	None
CCGC_0111	10/Mar/2014	Nitrate as NO3-N	0.7	=	None
CCGC_0111	10/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0111	10/Mar/2014	Potassium	3.9	=	D
CCGC_0111	10/Mar/2014	Sodium	65	=	D
CCGC_0111	10/Mar/2014	SpecificConductivity	798	=	None
CCGC_0111	10/Mar/2014	Sulfate	142	=	None
CCGC_0111	10/Mar/2014	Total Dissolved Solids	520	=	None
CCGC_0112	10/Mar/2014	Alkalinity as CaCO3	383	=	None
CCGC_0112	10/Mar/2014	Bicarbonate	467	=	None
CCGC_0112	10/Mar/2014	Calcium	151	=	D
CCGC_0112	10/Mar/2014	Chloride	65	=	None
CCGC_0112	10/Mar/2014	Hardness as CaCO3	641	=	None
CCGC_0112	10/Mar/2014	Magnesium	64	=	D
CCGC_0112	10/Mar/2014	Nitrate + Nitrite as N	2.7	=	None
CCGC_0112	10/Mar/2014	Nitrate as NO3-N	2.4	=	None
CCGC_0112	10/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0112	10/Mar/2014	Potassium	4.4	=	D
CCGC_0112	10/Mar/2014	Sodium	121	=	D
CCGC_0112	10/Mar/2014	SpecificConductivity	1475	=	None
CCGC_0112	10/Mar/2014	Sulfate	333	=	None
CCGC_0112	10/Mar/2014	Total Dissolved Solids	1011	=	None
CCGC_0113	11/Mar/2014	Alkalinity as CaCO3	209	=	None
CCGC_0113	11/Mar/2014	Bicarbonate	255	=	None
CCGC_0113	11/Mar/2014	Calcium	68	=	D
CCGC_0113	11/Mar/2014	Chloride	258	=	None
CCGC_0113	11/Mar/2014	Hardness as CaCO3	277	=	None
CCGC_0113	11/Mar/2014	Magnesium	26	=	D
CCGC_0113	11/Mar/2014	Nitrate + Nitrite as N	13.5	=	None
CCGC_0113	11/Mar/2014	Nitrate as NO3-N	13.4	=	None
CCGC_0113	11/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0113	11/Mar/2014	Potassium	24	=	D
CCGC_0113	11/Mar/2014	Sodium	196	=	D
CCGC_0113	11/Mar/2014	SpecificConductivity	1582	=	None
CCGC_0113	11/Mar/2014	Sulfate	82	=	None
CCGC_0113	11/Mar/2014	Total Dissolved Solids	828	=	None
CCGC_0114	11/Mar/2014	Alkalinity as CaCO3	303	=	None
CCGC_0114	11/Mar/2014	Bicarbonate	370	=	None
CCGC_0114	11/Mar/2014	Calcium	186	=	D
CCGC_0114	11/Mar/2014	Chloride	91	=	None
CCGC_0114	11/Mar/2014	Hardness as CaCO3	670	=	None
CCGC_0114	11/Mar/2014	Magnesium	50	=	D
CCGC_0114	11/Mar/2014	Nitrate + Nitrite as N	0.2	=	None
CCGC_0114	11/Mar/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0114	11/Mar/2014	Nitrite as NO2-N	0.2	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0114	11/Mar/2014	Potassium	5.8	=	D
CCGC_0114	11/Mar/2014	Sodium	30	=	D
CCGC_0114	11/Mar/2014	SpecificConductivity	1330	=	None
CCGC_0114	11/Mar/2014	Sulfate	256	=	None
CCGC_0114	11/Mar/2014	Total Dissolved Solids	897	=	None
CCGC_0115	11/Mar/2014	Alkalinity as CaCO3	97	=	None
CCGC_0115	11/Mar/2014	Bicarbonate	118	=	None
CCGC_0115	11/Mar/2014	Calcium	99	=	D
CCGC_0115	11/Mar/2014	Chloride	158	=	None
CCGC_0115	11/Mar/2014	Hardness as CaCO3	408	=	None
CCGC_0115	11/Mar/2014	Magnesium	39	=	D
CCGC_0115	11/Mar/2014	Nitrate + Nitrite as N	38.8	=	None
CCGC_0115	11/Mar/2014	Nitrate as NO3-N	38.7	=	None
CCGC_0115	11/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0115	11/Mar/2014	Potassium	2.5	=	D
CCGC_0115	11/Mar/2014	Sodium	76	=	D
CCGC_0115	11/Mar/2014	SpecificConductivity	1140	=	None
CCGC_0115	11/Mar/2014	Sulfate	48	=	None
CCGC_0115	11/Mar/2014	Total Dissolved Solids	648	=	None
CCGC_0116	11/Mar/2014	Alkalinity as CaCO3	145	=	None
CCGC_0116	11/Mar/2014	Bicarbonate	177	=	None
CCGC_0116	11/Mar/2014	Calcium	86	=	D
CCGC_0116	11/Mar/2014	Chloride	70	=	None
CCGC_0116	11/Mar/2014	Hardness as CaCO3	359	=	None
CCGC_0116	11/Mar/2014	Magnesium	35	=	D
CCGC_0116	11/Mar/2014	Nitrate + Nitrite as N	39.6	=	None
CCGC_0116	11/Mar/2014	Nitrate as NO3-N	39.4	=	None
CCGC_0116	11/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0116	11/Mar/2014	Potassium	3.6	=	D
CCGC_0116	11/Mar/2014	Sodium	97	=	D
CCGC_0116	11/Mar/2014	SpecificConductivity	1105	=	None
CCGC_0116	11/Mar/2014	Sulfate	121	=	None
CCGC_0116	11/Mar/2014	Total Dissolved Solids	700	=	None
CCGC_0117	11/Mar/2014	Alkalinity as CaCO3	171	=	None
CCGC_0117	11/Mar/2014	Bicarbonate	209	=	None
CCGC_0117	11/Mar/2014	Calcium	25	=	D
CCGC_0117	11/Mar/2014	Chloride	59	=	None
CCGC_0117	11/Mar/2014	Hardness as CaCO3	99	=	None
CCGC_0117	11/Mar/2014	Magnesium	9	=	D
CCGC_0117	11/Mar/2014	Nitrate + Nitrite as N	0.3	=	None
CCGC_0117	11/Mar/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0117	11/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0117	11/Mar/2014	Potassium	3.3	=	D
CCGC_0117	11/Mar/2014	Sodium	123	=	D
CCGC_0117	11/Mar/2014	SpecificConductivity	706	=	None
CCGC_0117	11/Mar/2014	Sulfate	71	=	None
CCGC_0117	11/Mar/2014	Total Dissolved Solids	436	=	None
CCGC_0118	11/Mar/2014	Alkalinity as CaCO3	328	=	None
CCGC_0118	11/Mar/2014	Bicarbonate	400	=	None
CCGC_0118	11/Mar/2014	Calcium	161	=	D
CCGC_0118	11/Mar/2014	Chloride	173	=	None
CCGC_0118	11/Mar/2014	Hardness as CaCO3	629	=	None
CCGC_0118	11/Mar/2014	Magnesium	55	=	D
CCGC_0118	11/Mar/2014	Nitrate + Nitrite as N	0.1	=	None
CCGC_0118	11/Mar/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0118	11/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0118	11/Mar/2014	Potassium	5.5	=	D

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0118	11/Mar/2014	Sodium	128	=	D
CCGC_0118	11/Mar/2014	SpecificConductivity	1551	=	None
CCGC_0118	11/Mar/2014	Sulfate	202	=	None
CCGC_0118	11/Mar/2014	Total Dissolved Solids	954	=	None
CCGC_0120	11/Mar/2014	Alkalinity as CaCO3	218	=	None
CCGC_0120	11/Mar/2014	Bicarbonate	266	=	None
CCGC_0120	11/Mar/2014	Calcium	166	=	D
CCGC_0120	11/Mar/2014	Chloride	154	=	None
CCGC_0120	11/Mar/2014	Hardness as CaCO3	600	=	None
CCGC_0120	11/Mar/2014	Magnesium	45	=	D
CCGC_0120	11/Mar/2014	Nitrate + Nitrite as N	3.1	=	None
CCGC_0120	11/Mar/2014	Nitrate as NO3-N	3	=	None
CCGC_0120	11/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0120	11/Mar/2014	Potassium	5.9	=	D
CCGC_0120	11/Mar/2014	Sodium	79	=	D
CCGC_0120	11/Mar/2014	SpecificConductivity	1330	=	None
CCGC_0120	11/Mar/2014	Sulfate	221	=	None
CCGC_0120	11/Mar/2014	Total Dissolved Solids	857	=	None
CCGC_0121	12/Mar/2014	Alkalinity as CaCO3	144	=	None
CCGC_0121	12/Mar/2014	Bicarbonate	176	=	None
CCGC_0121	12/Mar/2014	Calcium	157	=	D
CCGC_0121	12/Mar/2014	Chloride	143	=	None
CCGC_0121	12/Mar/2014	Hardness as CaCO3	532	=	None
CCGC_0121	12/Mar/2014	Magnesium	34	=	D
CCGC_0121	12/Mar/2014	Nitrate + Nitrite as N	47.3	=	None
CCGC_0121	12/Mar/2014	Nitrate as NO3-N	47.2	=	None
CCGC_0121	12/Mar/2014	Nitrite as NO2-N	0.1	=	None
CCGC_0121	12/Mar/2014	Potassium	2.5	=	D
CCGC_0121	12/Mar/2014	Sodium	83	=	D
CCGC_0121	12/Mar/2014	SpecificConductivity	1365	=	None
CCGC_0121	12/Mar/2014	Sulfate	103	=	None
CCGC_0121	12/Mar/2014	Total Dissolved Solids	928	=	None
CCGC_0122	12/Mar/2014	Alkalinity as CaCO3	272	=	None
CCGC_0122	12/Mar/2014	Bicarbonate	332	=	None
CCGC_0122	12/Mar/2014	Calcium	158	=	D
CCGC_0122	12/Mar/2014	Chloride	144	=	None
CCGC_0122	12/Mar/2014	Hardness as CaCO3	670	=	None
CCGC_0122	12/Mar/2014	Magnesium	67	=	D
CCGC_0122	12/Mar/2014	Nitrate + Nitrite as N	24	=	None
CCGC_0122	12/Mar/2014	Nitrate as NO3-N	23.9	=	None
CCGC_0122	12/Mar/2014	Nitrite as NO2-N	0.1	=	None
CCGC_0122	12/Mar/2014	Potassium	4.9	=	D
CCGC_0122	12/Mar/2014	Sodium	136	=	D
CCGC_0122	12/Mar/2014	SpecificConductivity	1723	=	None
CCGC_0122	12/Mar/2014	Sulfate	290	=	None
CCGC_0122	12/Mar/2014	Total Dissolved Solids	1143	=	None
CCGC_0123	12/Mar/2014	Alkalinity as CaCO3	374	=	None
CCGC_0123	12/Mar/2014	Bicarbonate	456	=	None
CCGC_0123	12/Mar/2014	Calcium	238	=	D
CCGC_0123	12/Mar/2014	Chloride	133	=	None
CCGC_0123	12/Mar/2014	Hardness as CaCO3	1101	=	None
CCGC_0123	12/Mar/2014	Magnesium	123	=	D
CCGC_0123	12/Mar/2014	Nitrate + Nitrite as N	56.3	=	None
CCGC_0123	12/Mar/2014	Nitrate as NO3-N	56.2	=	None
CCGC_0123	12/Mar/2014	Nitrite as NO2-N	0.1	=	None
CCGC_0123	12/Mar/2014	Potassium	4.9	=	D
CCGC_0123	12/Mar/2014	Sodium	147	=	D

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0123	12/Mar/2014	SpecificConductivity	2281	=	None
CCGC_0123	12/Mar/2014	Sulfate	452	=	None
CCGC_0123	12/Mar/2014	Total Dissolved Solids	1628	=	None
CCGC_0124	12/Mar/2014	Alkalinity as CaCO3	204	=	None
CCGC_0124	12/Mar/2014	Bicarbonate	249	=	None
CCGC_0124	12/Mar/2014	Calcium	123	=	D
CCGC_0124	12/Mar/2014	Chloride	91	=	None
CCGC_0124	12/Mar/2014	Hardness as CaCO3	414	=	None
CCGC_0124	12/Mar/2014	Magnesium	26	=	D
CCGC_0124	12/Mar/2014	Nitrate + Nitrite as N	26	=	None
CCGC_0124	12/Mar/2014	Nitrate as NO3-N	25.7	=	None
CCGC_0124	12/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0124	12/Mar/2014	Potassium	1.8	=	D
CCGC_0124	12/Mar/2014	Sodium	71	=	D
CCGC_0124	12/Mar/2014	SpecificConductivity	1068	=	None
CCGC_0124	12/Mar/2014	Sulfate	71	=	None
CCGC_0124	12/Mar/2014	Total Dissolved Solids	657	=	None
CCGC_0125	12/Mar/2014	Alkalinity as CaCO3	153	=	None
CCGC_0125	12/Mar/2014	Bicarbonate	187	=	None
CCGC_0125	12/Mar/2014	Calcium	123	=	D
CCGC_0125	12/Mar/2014	Chloride	64	=	None
CCGC_0125	12/Mar/2014	Hardness as CaCO3	410	=	None
CCGC_0125	12/Mar/2014	Magnesium	25	=	D
CCGC_0125	12/Mar/2014	Nitrate + Nitrite as N	40.3	=	None
CCGC_0125	12/Mar/2014	Nitrate as NO3-N	40	=	None
CCGC_0125	12/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0125	12/Mar/2014	Potassium	2.5	=	D
CCGC_0125	12/Mar/2014	Sodium	53	=	D
CCGC_0125	12/Mar/2014	SpecificConductivity	996	=	None
CCGC_0125	12/Mar/2014	Sulfate	61	=	None
CCGC_0125	12/Mar/2014	Total Dissolved Solids	591	=	None
CCGC_0126	12/Mar/2014	Alkalinity as CaCO3	180	=	None
CCGC_0126	12/Mar/2014	Bicarbonate	220	=	None
CCGC_0126	12/Mar/2014	Calcium	44	=	D
CCGC_0126	12/Mar/2014	Chloride	36	=	None
CCGC_0126	12/Mar/2014	Hardness as CaCO3	155	=	None
CCGC_0126	12/Mar/2014	Magnesium	11	=	D
CCGC_0126	12/Mar/2014	Nitrate + Nitrite as N	0.7	=	None
CCGC_0126	12/Mar/2014	Nitrate as NO3-N	0.3	=	None
CCGC_0126	12/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0126	12/Mar/2014	Potassium	2.8	=	D
CCGC_0126	12/Mar/2014	Sodium	53	=	D
CCGC_0126	12/Mar/2014	SpecificConductivity	496	=	None
CCGC_0126	12/Mar/2014	Sulfate	7	=	None
CCGC_0126	12/Mar/2014	Total Dissolved Solids	294	=	None
CCGC_0127	12/Mar/2014	Alkalinity as CaCO3	193	=	None
CCGC_0127	12/Mar/2014	Bicarbonate	235	=	None
CCGC_0127	12/Mar/2014	Calcium	51	=	D
CCGC_0127	12/Mar/2014	Chloride	32	=	None
CCGC_0127	12/Mar/2014	Hardness as CaCO3	189	=	None
CCGC_0127	12/Mar/2014	Magnesium	15	=	D
CCGC_0127	12/Mar/2014	Nitrate + Nitrite as N	0.9	=	None
CCGC_0127	12/Mar/2014	Nitrate as NO3-N	0.5	=	None
CCGC_0127	12/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0127	12/Mar/2014	Potassium	2.6	=	D
CCGC_0127	12/Mar/2014	Sodium	42	=	D
CCGC_0127	12/Mar/2014	SpecificConductivity	503	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0127	12/Mar/2014	Sulfate	6	=	None
CCGC_0127	12/Mar/2014	Total Dissolved Solids	303	=	None
CCGC_0128	12/Mar/2014	Alkalinity as CaCO3	179	=	None
CCGC_0128	12/Mar/2014	Bicarbonate	218	=	None
CCGC_0128	12/Mar/2014	Calcium	48	=	D
CCGC_0128	12/Mar/2014	Chloride	34	=	None
CCGC_0128	12/Mar/2014	Hardness as CaCO3	169	=	None
CCGC_0128	12/Mar/2014	Magnesium	12	=	D
CCGC_0128	12/Mar/2014	Nitrate + Nitrite as N	0.8	=	None
CCGC_0128	12/Mar/2014	Nitrate as NO3-N	0.4	=	None
CCGC_0128	12/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0128	12/Mar/2014	Potassium	2.7	=	D
CCGC_0128	12/Mar/2014	Sodium	47	=	D
CCGC_0128	12/Mar/2014	SpecificConductivity	486	=	None
CCGC_0128	12/Mar/2014	Sulfate	6	=	None
CCGC_0128	12/Mar/2014	Total Dissolved Solids	294	=	None
CCGC_0129	12/Mar/2014	Alkalinity as CaCO3	256	=	None
CCGC_0129	12/Mar/2014	Bicarbonate	312	=	None
CCGC_0129	12/Mar/2014	Calcium	97	=	D
CCGC_0129	12/Mar/2014	Chloride	47	=	None
CCGC_0129	12/Mar/2014	Hardness as CaCO3	333	=	None
CCGC_0129	12/Mar/2014	Magnesium	22	=	D
CCGC_0129	12/Mar/2014	Nitrate + Nitrite as N	0.4	=	None
CCGC_0129	12/Mar/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0129	12/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0129	12/Mar/2014	Potassium	2.4	=	D
CCGC_0129	12/Mar/2014	Sodium	46	=	D
CCGC_0129	12/Mar/2014	SpecificConductivity	775	=	None
CCGC_0129	12/Mar/2014	Sulfate	58	=	None
CCGC_0129	12/Mar/2014	Total Dissolved Solids	454	=	None
CCGC_0131	13/Mar/2014	Alkalinity as CaCO3	349	=	None
CCGC_0131	13/Mar/2014	Bicarbonate	426	=	None
CCGC_0131	13/Mar/2014	Calcium	179	=	D
CCGC_0131	13/Mar/2014	Chloride	217	=	None
CCGC_0131	13/Mar/2014	Hardness as CaCO3	706	=	None
CCGC_0131	13/Mar/2014	Magnesium	63	=	D
CCGC_0131	13/Mar/2014	Nitrate + Nitrite as N	17.9	=	None
CCGC_0131	13/Mar/2014	Nitrate as NO3-N	17.9	=	None
CCGC_0131	13/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0131	13/Mar/2014	Potassium	5.8	=	D
CCGC_0131	13/Mar/2014	Sodium	124	=	D
CCGC_0131	13/Mar/2014	SpecificConductivity	1762	=	None
CCGC_0131	13/Mar/2014	Sulfate	149	=	None
CCGC_0131	13/Mar/2014	Total Dissolved Solids	1046	=	None
CCGC_0132	13/Mar/2014	Alkalinity as CaCO3	283	=	None
CCGC_0132	13/Mar/2014	Bicarbonate	345	=	None
CCGC_0132	13/Mar/2014	Calcium	125	=	D
CCGC_0132	13/Mar/2014	Chloride	95	=	None
CCGC_0132	13/Mar/2014	Hardness as CaCO3	489	=	None
CCGC_0132	13/Mar/2014	Magnesium	43	=	D
CCGC_0132	13/Mar/2014	Nitrate + Nitrite as N	0.2	=	None
CCGC_0132	13/Mar/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0132	13/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0132	13/Mar/2014	Potassium	4.4	=	D
CCGC_0132	13/Mar/2014	Sodium	90	=	D
CCGC_0132	13/Mar/2014	SpecificConductivity	1169	=	None
CCGC_0132	13/Mar/2014	Sulfate	183	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0132	13/Mar/2014	Total Dissolved Solids	766	=	None
CCGC_0133	13/Mar/2014	Alkalinity as CaCO3	199	=	None
CCGC_0133	13/Mar/2014	Bicarbonate	243	=	None
CCGC_0133	13/Mar/2014	Calcium	91	=	D
CCGC_0133	13/Mar/2014	Chloride	32	=	None
CCGC_0133	13/Mar/2014	Hardness as CaCO3	347	=	None
CCGC_0133	13/Mar/2014	Magnesium	29	=	D
CCGC_0133	13/Mar/2014	Nitrate + Nitrite as N	4.4	=	None
CCGC_0133	13/Mar/2014	Nitrate as NO3-N	4	=	None
CCGC_0133	13/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0133	13/Mar/2014	Potassium	3.5	=	D
CCGC_0133	13/Mar/2014	Sodium	39	=	D
CCGC_0133	13/Mar/2014	SpecificConductivity	815	=	None
CCGC_0133	13/Mar/2014	Sulfate	149	=	None
CCGC_0133	13/Mar/2014	Total Dissolved Solids	546	=	None
CCGC_0134	13/Mar/2014	Alkalinity as CaCO3	305	=	None
CCGC_0134	13/Mar/2014	Bicarbonate	372	=	None
CCGC_0134	13/Mar/2014	Calcium	129	=	D
CCGC_0134	13/Mar/2014	Chloride	43	=	None
CCGC_0134	13/Mar/2014	Hardness as CaCO3	532	=	None
CCGC_0134	13/Mar/2014	Magnesium	51	=	D
CCGC_0134	13/Mar/2014	Nitrate + Nitrite as N	0.8	=	None
CCGC_0134	13/Mar/2014	Nitrate as NO3-N	0.4	=	None
CCGC_0134	13/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0134	13/Mar/2014	Potassium	4.5	=	D
CCGC_0134	13/Mar/2014	Sodium	80	=	D
CCGC_0134	13/Mar/2014	SpecificConductivity	1184	=	None
CCGC_0134	13/Mar/2014	Sulfate	255	=	None
CCGC_0134	13/Mar/2014	Total Dissolved Solids	786	=	None
CCGC_0135	13/Mar/2014	Alkalinity as CaCO3	216	=	None
CCGC_0135	13/Mar/2014	Bicarbonate	264	=	None
CCGC_0135	13/Mar/2014	Calcium	98	=	D
CCGC_0135	13/Mar/2014	Chloride	32	=	None
CCGC_0135	13/Mar/2014	Hardness as CaCO3	364	=	None
CCGC_0135	13/Mar/2014	Magnesium	29	=	D
CCGC_0135	13/Mar/2014	Nitrate + Nitrite as N	4.7	=	None
CCGC_0135	13/Mar/2014	Nitrate as NO3-N	4.3	=	None
CCGC_0135	13/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0135	13/Mar/2014	Potassium	3.8	=	D
CCGC_0135	13/Mar/2014	Sodium	47	=	D
CCGC_0135	13/Mar/2014	SpecificConductivity	840	=	None
CCGC_0135	13/Mar/2014	Sulfate	150	=	None
CCGC_0135	13/Mar/2014	Total Dissolved Solids	548	=	None
CCGC_0136	14/Mar/2014	Alkalinity as CaCO3	216	=	None
CCGC_0136	14/Mar/2014	Bicarbonate	264	=	None
CCGC_0136	14/Mar/2014	Calcium	119	=	D
CCGC_0136	14/Mar/2014	Chloride	61	=	None
CCGC_0136	14/Mar/2014	Hardness as CaCO3	417	=	None
CCGC_0136	14/Mar/2014	Magnesium	29	=	D
CCGC_0136	14/Mar/2014	Nitrate + Nitrite as N	2.6	=	None
CCGC_0136	14/Mar/2014	Nitrate as NO3-N	2.3	=	None
CCGC_0136	14/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0136	14/Mar/2014	Potassium	4.5	=	D
CCGC_0136	14/Mar/2014	Sodium	57	=	D
CCGC_0136	14/Mar/2014	SpecificConductivity	941	=	None
CCGC_0136	14/Mar/2014	Sulfate	147	=	None
CCGC_0136	14/Mar/2014	Total Dissolved Solids	597	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0137	14/Mar/2014	Alkalinity as CaCO3	193	=	None
CCGC_0137	14/Mar/2014	Bicarbonate	235	=	None
CCGC_0137	14/Mar/2014	Calcium	90	=	D
CCGC_0137	14/Mar/2014	Chloride	55	=	None
CCGC_0137	14/Mar/2014	Hardness as CaCO3	324	=	None
CCGC_0137	14/Mar/2014	Magnesium	24	=	D
CCGC_0137	14/Mar/2014	Nitrate + Nitrite as N	1.6	=	None
CCGC_0137	14/Mar/2014	Nitrate as NO3-N	1.3	=	None
CCGC_0137	14/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0137	14/Mar/2014	Potassium	3.2	=	D
CCGC_0137	14/Mar/2014	Sodium	58	=	D
CCGC_0137	14/Mar/2014	SpecificConductivity	816	=	None
CCGC_0137	14/Mar/2014	Sulfate	128	=	None
CCGC_0137	14/Mar/2014	Total Dissolved Solids	531	=	None
CCGC_0138	14/Mar/2014	Alkalinity as CaCO3	232	=	None
CCGC_0138	14/Mar/2014	Bicarbonate	283	=	None
CCGC_0138	14/Mar/2014	Calcium	266	=	D
CCGC_0138	14/Mar/2014	Chloride	290	=	None
CCGC_0138	14/Mar/2014	Hardness as CaCO3	1068	=	None
CCGC_0138	14/Mar/2014	Magnesium	98	=	D
CCGC_0138	14/Mar/2014	Nitrate + Nitrite as N	156	=	None
CCGC_0138	14/Mar/2014	Nitrate as NO3-N	156	=	None
CCGC_0138	14/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0138	14/Mar/2014	Potassium	7.5	=	D
CCGC_0138	14/Mar/2014	Sodium	273	=	D
CCGC_0138	14/Mar/2014	SpecificConductivity	3023	=	None
CCGC_0138	14/Mar/2014	Sulfate	285	=	None
CCGC_0138	14/Mar/2014	Total Dissolved Solids	2146	=	None
CCGC_0139	14/Mar/2014	Alkalinity as CaCO3	122	=	None
CCGC_0139	14/Mar/2014	Alkalinity as CaCO3	122	=	None
CCGC_0139	14/Mar/2014	Bicarbonate	149	=	None
CCGC_0139	14/Mar/2014	Bicarbonate	149	=	None
CCGC_0139	14/Mar/2014	Calcium	99	=	D
CCGC_0139	14/Mar/2014	Calcium	99	=	D
CCGC_0139	14/Mar/2014	Chloride	113	=	None
CCGC_0139	14/Mar/2014	Chloride	113	=	None
CCGC_0139	14/Mar/2014	Hardness as CaCO3	400	=	None
CCGC_0139	14/Mar/2014	Hardness as CaCO3	400	=	None
CCGC_0139	14/Mar/2014	Magnesium	37	=	D
CCGC_0139	14/Mar/2014	Magnesium	37	=	D
CCGC_0139	14/Mar/2014	Nitrate + Nitrite as N	43.2	=	None
CCGC_0139	14/Mar/2014	Nitrate + Nitrite as N	43.2	=	None
CCGC_0139	14/Mar/2014	Nitrate as NO3-N	43	=	None
CCGC_0139	14/Mar/2014	Nitrate as NO3-N	43	=	None
CCGC_0139	14/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0139	14/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0139	14/Mar/2014	Potassium	3	=	D
CCGC_0139	14/Mar/2014	Potassium	3	=	D
CCGC_0139	14/Mar/2014	Sodium	72	=	D
CCGC_0139	14/Mar/2014	Sodium	72	=	D
CCGC_0139	14/Mar/2014	SpecificConductivity	1122	=	None
CCGC_0139	14/Mar/2014	SpecificConductivity	1122	=	None
CCGC_0139	14/Mar/2014	Sulfate	63	=	None
CCGC_0139	14/Mar/2014	Sulfate	63	=	None
CCGC_0139	14/Mar/2014	Total Dissolved Solids	711	=	None
CCGC_0139	14/Mar/2014	Total Dissolved Solids	711	=	None
CCGC_0140	14/Mar/2014	Alkalinity as CaCO3	167	=	None
CCGC_0140	14/Mar/2014	Bicarbonate	204	=	None
CCGC_0140	14/Mar/2014	Calcium	34	=	D
CCGC_0140	14/Mar/2014	Chloride	62	=	None
CCGC_0140	14/Mar/2014	Hardness as CaCO3	147	=	None
CCGC_0140	14/Mar/2014	Magnesium	15	=	D
CCGC_0140	14/Mar/2014	Nitrate + Nitrite as N	1.3	=	None
CCGC_0140	14/Mar/2014	Nitrate as NO3-N	1	=	None
CCGC_0140	14/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0140	14/Mar/2014	Potassium	2.7	=	D
CCGC_0140	14/Mar/2014	Sodium	81	=	D
CCGC_0140	14/Mar/2014	SpecificConductivity	589	=	None
CCGC_0140	14/Mar/2014	Sulfate	18	=	None
CCGC_0140	14/Mar/2014	Total Dissolved Solids	343	=	None
CCGC_0141	14/Mar/2014	Alkalinity as CaCO3	108	=	None
CCGC_0141	14/Mar/2014	Bicarbonate	132	=	None
CCGC_0141	14/Mar/2014	Calcium	33	=	D
CCGC_0141	14/Mar/2014	Chloride	44	=	None
CCGC_0141	14/Mar/2014	Hardness as CaCO3	140	=	None
CCGC_0141	14/Mar/2014	Magnesium	14	=	D
CCGC_0141	14/Mar/2014	Nitrate + Nitrite as N	1.7	=	None
CCGC_0141	14/Mar/2014	Nitrate as NO3-N	1.3	=	None
CCGC_0141	14/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0141	14/Mar/2014	Potassium	2.2	=	D
CCGC_0141	14/Mar/2014	Sodium	47	=	D
CCGC_0141	14/Mar/2014	SpecificConductivity	459	=	None
CCGC_0141	14/Mar/2014	Sulfate	38	=	None
CCGC_0141	14/Mar/2014	Total Dissolved Solids	291	=	None
CCGC_0142	10/Mar/2014	Alkalinity as CaCO3	236	=	None
CCGC_0142	10/Mar/2014	Bicarbonate	288	=	None
CCGC_0142	10/Mar/2014	Calcium	160	=	D
CCGC_0142	10/Mar/2014	Chloride	117	=	None
CCGC_0142	10/Mar/2014	Hardness as CaCO3	667	=	None
CCGC_0142	10/Mar/2014	Magnesium	65	=	D
CCGC_0142	10/Mar/2014	Nitrate + Nitrite as N	7	=	None
CCGC_0142	10/Mar/2014	Nitrate as NO3-N	6.9	=	None
CCGC_0142	10/Mar/2014	Nitrite as NO2-N	0.1	=	None
CCGC_0142	10/Mar/2014	Potassium	5	=	D
CCGC_0142	10/Mar/2014	Sodium	80	=	D
CCGC_0142	10/Mar/2014	SpecificConductivity	1455	=	None
CCGC_0142	10/Mar/2014	Sulfate	343	=	None
CCGC_0142	10/Mar/2014	Total Dissolved Solids	1008	=	None
CCGC_0143	10/Mar/2014	Alkalinity as CaCO3	178	=	None
CCGC_0143	10/Mar/2014	Bicarbonate	217	=	None
CCGC_0143	10/Mar/2014	Calcium	98	=	D
CCGC_0143	10/Mar/2014	Chloride	22	=	None
CCGC_0143	10/Mar/2014	Hardness as CaCO3	352	=	None
CCGC_0143	10/Mar/2014	Magnesium	26	=	D
CCGC_0143	10/Mar/2014	Nitrate + Nitrite as N	21.1	=	None
CCGC_0143	10/Mar/2014	Nitrate as NO3-N	20.8	=	None
CCGC_0143	10/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0143	10/Mar/2014	Potassium	3.8	=	D
CCGC_0143	10/Mar/2014	Sodium	39	=	D
CCGC_0143	10/Mar/2014	SpecificConductivity	760	=	None
CCGC_0143	10/Mar/2014	Sulfate	114	=	None
CCGC_0143	10/Mar/2014	Total Dissolved Solids	480	=	None
CCGC_0144	10/Mar/2014	Alkalinity as CaCO3	226	=	None
CCGC_0144	10/Mar/2014	Bicarbonate	276	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0144	10/Mar/2014	Calcium	112	=	D
CCGC_0144	10/Mar/2014	Chloride	95	=	None
CCGC_0144	10/Mar/2014	Hardness as CaCO3	477	=	None
CCGC_0144	10/Mar/2014	Magnesium	48	=	D
CCGC_0144	10/Mar/2014	Nitrate + Nitrite as N	0.5	=	None
CCGC_0144	10/Mar/2014	Nitrate as NO3-N	0.3	=	None
CCGC_0144	10/Mar/2014	Nitrite as NO2-N	0.1	=	None
CCGC_0144	10/Mar/2014	Potassium	4.1	=	D
CCGC_0144	10/Mar/2014	Sodium	63	=	D
CCGC_0144	10/Mar/2014	SpecificConductivity	1086	=	None
CCGC_0144	10/Mar/2014	Sulfate	223	=	None
CCGC_0144	10/Mar/2014	Total Dissolved Solids	763	=	None
CCGC_0145	10/Mar/2014	Alkalinity as CaCO3	240	=	None
CCGC_0145	10/Mar/2014	Bicarbonate	293	=	None
CCGC_0145	10/Mar/2014	Calcium	109	=	D
CCGC_0145	10/Mar/2014	Chloride	35	=	None
CCGC_0145	10/Mar/2014	Hardness as CaCO3	408	=	None
CCGC_0145	10/Mar/2014	Magnesium	33	=	D
CCGC_0145	10/Mar/2014	Nitrate + Nitrite as N	4.5	=	None
CCGC_0145	10/Mar/2014	Nitrate as NO3-N	4.2	=	None
CCGC_0145	10/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0145	10/Mar/2014	Potassium	3.6	=	D
CCGC_0145	10/Mar/2014	Sodium	38	=	D
CCGC_0145	10/Mar/2014	SpecificConductivity	878	=	None
CCGC_0145	10/Mar/2014	Sulfate	164	=	None
CCGC_0145	10/Mar/2014	Total Dissolved Solids	588	=	None
CCGC_0146	10/Mar/2014	Alkalinity as CaCO3	235	=	None
CCGC_0146	10/Mar/2014	Bicarbonate	287	=	None
CCGC_0146	10/Mar/2014	Calcium	85	=	D
CCGC_0146	10/Mar/2014	Chloride	67	=	None
CCGC_0146	10/Mar/2014	Hardness as CaCO3	360	=	None
CCGC_0146	10/Mar/2014	Magnesium	36	=	D
CCGC_0146	10/Mar/2014	Nitrate + Nitrite as N	5.2	=	None
CCGC_0146	10/Mar/2014	Nitrate as NO3-N	5	=	None
CCGC_0146	10/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0146	10/Mar/2014	Potassium	3.8	=	D
CCGC_0146	10/Mar/2014	Sodium	81	=	D
CCGC_0146	10/Mar/2014	SpecificConductivity	970	=	None
CCGC_0146	10/Mar/2014	Sulfate	154	=	None
CCGC_0146	10/Mar/2014	Total Dissolved Solids	623	=	None
CCGC_0150	11/Mar/2014	Alkalinity as CaCO3	66	=	None
CCGC_0150	11/Mar/2014	Bicarbonate	81	=	None
CCGC_0150	11/Mar/2014	Calcium	46	=	D
CCGC_0150	11/Mar/2014	Chloride	122	=	None
CCGC_0150	11/Mar/2014	Hardness as CaCO3	197	=	None
CCGC_0150	11/Mar/2014	Magnesium	20	=	D
CCGC_0150	11/Mar/2014	Nitrate + Nitrite as N	8.2	=	None
CCGC_0150	11/Mar/2014	Nitrate as NO3-N	8.1	=	None
CCGC_0150	11/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0150	11/Mar/2014	Potassium	3.6	=	D
CCGC_0150	11/Mar/2014	Sodium	88	=	D
CCGC_0150	11/Mar/2014	SpecificConductivity	775	=	None
CCGC_0150	11/Mar/2014	Sulfate	68	=	None
CCGC_0150	11/Mar/2014	Total Dissolved Solids	463	=	None
CCGC_0151	12/Mar/2014	Alkalinity as CaCO3	199	=	None
CCGC_0151	12/Mar/2014	Bicarbonate	243	=	None
CCGC_0151	12/Mar/2014	Calcium	96	=	D
CCGC_0151	12/Mar/2014	Chloride	66	=	None
CCGC_0151	12/Mar/2014	Hardness as CaCO3	351	=	None
CCGC_0151	12/Mar/2014	Magnesium	27	=	D
CCGC_0151	12/Mar/2014	Nitrate + Nitrite as N	4.7	=	None
CCGC_0151	12/Mar/2014	Nitrate as NO3-N	4.4	=	None
CCGC_0151	12/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0151	12/Mar/2014	Potassium	3.8	=	D
CCGC_0151	12/Mar/2014	Sodium	54	=	D
CCGC_0151	12/Mar/2014	SpecificConductivity	880	=	None
CCGC_0151	12/Mar/2014	Sulfate	108	=	None
CCGC_0151	12/Mar/2014	Total Dissolved Solids	563	=	None
CCGC_0152	11/Mar/2014	Alkalinity as CaCO3	126	=	None
CCGC_0152	11/Mar/2014	Bicarbonate	154	=	None
CCGC_0152	11/Mar/2014	Calcium	59	=	D
CCGC_0152	11/Mar/2014	Chloride	98	=	None
CCGC_0152	11/Mar/2014	Hardness as CaCO3	263	=	None
CCGC_0152	11/Mar/2014	Magnesium	28	=	D
CCGC_0152	11/Mar/2014	Nitrate + Nitrite as N	4.7	=	None
CCGC_0152	11/Mar/2014	Nitrate as NO3-N	4.5	=	None
CCGC_0152	11/Mar/2014	Nitrite as NO2-N	0.1	=	None
CCGC_0152	11/Mar/2014	Potassium	3.6	=	D
CCGC_0152	11/Mar/2014	Sodium	69	=	D
CCGC_0152	11/Mar/2014	SpecificConductivity	812	=	None
CCGC_0152	11/Mar/2014	Sulfate	86	=	None
CCGC_0152	11/Mar/2014	Total Dissolved Solids	480	=	None
CCGC_0153	11/Mar/2014	Alkalinity as CaCO3	228	=	None
CCGC_0153	11/Mar/2014	Bicarbonate	278	=	None
CCGC_0153	11/Mar/2014	Calcium	472	=	D
CCGC_0153	11/Mar/2014	Chloride	453	=	None
CCGC_0153	11/Mar/2014	Hardness as CaCO3	1969	=	None
CCGC_0153	11/Mar/2014	Magnesium	192	=	D
CCGC_0153	11/Mar/2014	Nitrate + Nitrite as N	54.1	=	None
CCGC_0153	11/Mar/2014	Nitrate as NO3-N	54	=	None
CCGC_0153	11/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0153	11/Mar/2014	Potassium	12	=	D
CCGC_0153	11/Mar/2014	Sodium	481	=	D
CCGC_0153	11/Mar/2014	SpecificConductivity	4603	=	None
CCGC_0153	11/Mar/2014	Sulfate	1485	=	D
CCGC_0153	11/Mar/2014	Total Dissolved Solids	3634	=	None
CCGC_0155	11/Mar/2014	Alkalinity as CaCO3	181	=	None
CCGC_0155	11/Mar/2014	Bicarbonate	221	=	None
CCGC_0155	11/Mar/2014	Calcium	141	=	D
CCGC_0155	11/Mar/2014	Chloride	52	=	None
CCGC_0155	11/Mar/2014	Hardness as CaCO3	500	=	None
CCGC_0155	11/Mar/2014	Magnesium	36	=	D
CCGC_0155	11/Mar/2014	Nitrate + Nitrite as N	17.3	=	None
CCGC_0155	11/Mar/2014	Nitrate as NO3-N	17	=	None
CCGC_0155	11/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0155	11/Mar/2014	Potassium	5.3	=	D
CCGC_0155	11/Mar/2014	Sodium	62	=	D
CCGC_0155	11/Mar/2014	SpecificConductivity	1127	=	None
CCGC_0155	11/Mar/2014	Sulfate	235	=	None
CCGC_0155	11/Mar/2014	Total Dissolved Solids	763	=	None
CCGC_0156	11/Mar/2014	Alkalinity as CaCO3	225	=	None
CCGC_0156	11/Mar/2014	Bicarbonate	275	=	None
CCGC_0156	11/Mar/2014	Calcium	209	=	D
CCGC_0156	11/Mar/2014	Chloride	98	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0156	11/Mar/2014	Hardness as CaCO3	872	=	None
CCGC_0156	11/Mar/2014	Magnesium	85	=	D
CCGC_0156	11/Mar/2014	Nitrate + Nitrite as N	41.3	=	None
CCGC_0156	11/Mar/2014	Nitrate as NO3-N	41.1	=	None
CCGC_0156	11/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0156	11/Mar/2014	Potassium	4.8	=	D
CCGC_0156	11/Mar/2014	Sodium	86	=	D
CCGC_0156	11/Mar/2014	SpecificConductivity	1724	=	None
CCGC_0156	11/Mar/2014	Sulfate	379	=	None
CCGC_0156	11/Mar/2014	Total Dissolved Solids	1226	=	None
CCGC_0157	11/Mar/2014	Alkalinity as CaCO3	277	=	None
CCGC_0157	11/Mar/2014	Bicarbonate	338	=	None
CCGC_0157	11/Mar/2014	Calcium	197	=	D
CCGC_0157	11/Mar/2014	Chloride	124	=	None
CCGC_0157	11/Mar/2014	Hardness as CaCO3	825	=	None
CCGC_0157	11/Mar/2014	Magnesium	81	=	D
CCGC_0157	11/Mar/2014	Nitrate + Nitrite as N	24	=	None
CCGC_0157	11/Mar/2014	Nitrate as NO3-N	23.9	=	None
CCGC_0157	11/Mar/2014	Nitrite as NO2-N	0.1	=	None
CCGC_0157	11/Mar/2014	Potassium	4.5	=	D
CCGC_0157	11/Mar/2014	Sodium	120	=	D
CCGC_0157	11/Mar/2014	SpecificConductivity	1818	=	None
CCGC_0157	11/Mar/2014	Sulfate	393	=	None
CCGC_0157	11/Mar/2014	Total Dissolved Solids	1217	=	None
CCGC_0158	11/Mar/2014	Alkalinity as CaCO3	284	=	None
CCGC_0158	11/Mar/2014	Bicarbonate	346	=	None
CCGC_0158	11/Mar/2014	Calcium	108	=	D
CCGC_0158	11/Mar/2014	Chloride	83	=	None
CCGC_0158	11/Mar/2014	Hardness as CaCO3	492	=	None
CCGC_0158	11/Mar/2014	Magnesium	54	=	D
CCGC_0158	11/Mar/2014	Nitrate + Nitrite as N	14.3	=	None
CCGC_0158	11/Mar/2014	Nitrate as NO3-N	14.1	=	None
CCGC_0158	11/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0158	11/Mar/2014	Potassium	3.4	=	D
CCGC_0158	11/Mar/2014	Sodium	140	=	D
CCGC_0158	11/Mar/2014	SpecificConductivity	1388	=	None
CCGC_0158	11/Mar/2014	Sulfate	239	=	None
CCGC_0158	11/Mar/2014	Total Dissolved Solids	871	=	None
CCGC_0159	12/Mar/2014	Alkalinity as CaCO3	161	=	None
CCGC_0159	12/Mar/2014	Bicarbonate	196	=	None
CCGC_0159	12/Mar/2014	Calcium	63	=	D
CCGC_0159	12/Mar/2014	Chloride	22	=	None
CCGC_0159	12/Mar/2014	Hardness as CaCO3	248	=	None
CCGC_0159	12/Mar/2014	Magnesium	22	=	D
CCGC_0159	12/Mar/2014	Nitrate + Nitrite as N	2.6	=	None
CCGC_0159	12/Mar/2014	Nitrate as NO3-N	2.1	=	None
CCGC_0159	12/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0159	12/Mar/2014	Potassium	2.4	=	D
CCGC_0159	12/Mar/2014	Sodium	33	=	D
CCGC_0159	12/Mar/2014	SpecificConductivity	576	=	None
CCGC_0159	12/Mar/2014	Sulfate	81	=	None
CCGC_0159	12/Mar/2014	Total Dissolved Solids	374	=	None
CCGC_0160	12/Mar/2014	Alkalinity as CaCO3	140	=	None
CCGC_0160	12/Mar/2014	Bicarbonate	171	=	None
CCGC_0160	12/Mar/2014	Calcium	125	=	D
CCGC_0160	12/Mar/2014	Chloride	19	=	None
CCGC_0160	12/Mar/2014	Hardness as CaCO3	444	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0160	12/Mar/2014	Magnesium	32	=	D
CCGC_0160	12/Mar/2014	Nitrate + Nitrite as N	46.8	=	None
CCGC_0160	12/Mar/2014	Nitrate as NO3-N	46.3	=	None
CCGC_0160	12/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0160	12/Mar/2014	Potassium	3.5	=	D
CCGC_0160	12/Mar/2014	Sodium	34	=	D
CCGC_0160	12/Mar/2014	SpecificConductivity	980	=	None
CCGC_0160	12/Mar/2014	Sulfate	123	=	None
CCGC_0160	12/Mar/2014	Total Dissolved Solids	668	=	None
CCGC_0161	12/Mar/2014	Alkalinity as CaCO3	191	=	None
CCGC_0161	12/Mar/2014	Bicarbonate	233	=	None
CCGC_0161	12/Mar/2014	Calcium	93	=	D
CCGC_0161	12/Mar/2014	Chloride	24	=	None
CCGC_0161	12/Mar/2014	Hardness as CaCO3	327	=	None
CCGC_0161	12/Mar/2014	Magnesium	23	=	D
CCGC_0161	12/Mar/2014	Nitrate + Nitrite as N	25.8	=	None
CCGC_0161	12/Mar/2014	Nitrate as NO3-N	25.4	=	None
CCGC_0161	12/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0161	12/Mar/2014	Potassium	4.5	=	D
CCGC_0161	12/Mar/2014	Sodium	73	=	D
CCGC_0161	12/Mar/2014	SpecificConductivity	904	=	None
CCGC_0161	12/Mar/2014	Sulfate	126	=	None
CCGC_0161	12/Mar/2014	Total Dissolved Solids	614	=	None
CCGC_0162	11/Mar/2014	Alkalinity as CaCO3	204	=	None
CCGC_0162	11/Mar/2014	Bicarbonate	249	=	None
CCGC_0162	11/Mar/2014	Calcium	72	=	D
CCGC_0162	11/Mar/2014	Chloride	33	=	None
CCGC_0162	11/Mar/2014	Hardness as CaCO3	316	=	None
CCGC_0162	11/Mar/2014	Magnesium	33	=	D
CCGC_0162	11/Mar/2014	Nitrate + Nitrite as N	10.7	=	None
CCGC_0162	11/Mar/2014	Nitrate as NO3-N	10.4	=	None
CCGC_0162	11/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0162	11/Mar/2014	Potassium	2	=	D
CCGC_0162	11/Mar/2014	Sodium	58	=	D
CCGC_0162	11/Mar/2014	SpecificConductivity	802	=	None
CCGC_0162	11/Mar/2014	Sulfate	105	=	None
CCGC_0162	11/Mar/2014	Total Dissolved Solids	508	=	None
CCGC_0163	11/Mar/2014	Alkalinity as CaCO3	248	=	None
CCGC_0163	11/Mar/2014	Bicarbonate	303	=	None
CCGC_0163	11/Mar/2014	Calcium	494	=	D
CCGC_0163	11/Mar/2014	Chloride	365	=	None
CCGC_0163	11/Mar/2014	Hardness as CaCO3	2115	=	None
CCGC_0163	11/Mar/2014	Magnesium	214	=	D
CCGC_0163	11/Mar/2014	Nitrate + Nitrite as N	109	=	None
CCGC_0163	11/Mar/2014	Nitrate as NO3-N	109	=	None
CCGC_0163	11/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0163	11/Mar/2014	Potassium	12	=	D
CCGC_0163	11/Mar/2014	Sodium	424	=	D
CCGC_0163	11/Mar/2014	SpecificConductivity	4616	=	None
CCGC_0163	11/Mar/2014	Sulfate	1486	=	D
CCGC_0163	11/Mar/2014	Total Dissolved Solids	3780	=	None
CCGC_0164	11/Mar/2014	Alkalinity as CaCO3	196	=	None
CCGC_0164	11/Mar/2014	Bicarbonate	239	=	None
CCGC_0164	11/Mar/2014	Calcium	226	=	D
CCGC_0164	11/Mar/2014	Chloride	231	=	None
CCGC_0164	11/Mar/2014	Hardness as CaCO3	795	=	None
CCGC_0164	11/Mar/2014	Magnesium	56	=	D

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0164	11/Mar/2014	Nitrate + Nitrite as N	49.9	=	None
CCGC_0164	11/Mar/2014	Nitrate as NO3-N	49.8	=	None
CCGC_0164	11/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0164	11/Mar/2014	Potassium	5.5	=	D
CCGC_0164	11/Mar/2014	Sodium	83	=	D
CCGC_0164	11/Mar/2014	SpecificConductivity	1831	=	None
CCGC_0164	11/Mar/2014	Sulfate	160	=	None
CCGC_0164	11/Mar/2014	Total Dissolved Solids	1283	=	None
CCGC_0165	12/Mar/2014	Alkalinity as CaCO3	222	=	None
CCGC_0165	12/Mar/2014	Bicarbonate	271	=	None
CCGC_0165	12/Mar/2014	Calcium	115	=	D
CCGC_0165	12/Mar/2014	Chloride	177	=	None
CCGC_0165	12/Mar/2014	Hardness as CaCO3	522	=	None
CCGC_0165	12/Mar/2014	Magnesium	57	=	D
CCGC_0165	12/Mar/2014	Nitrate + Nitrite as N	22	=	None
CCGC_0165	12/Mar/2014	Nitrate as NO3-N	21.8	=	None
CCGC_0165	12/Mar/2014	Nitrite as NO2-N	0.1	=	None
CCGC_0165	12/Mar/2014	Potassium	3.8	=	D
CCGC_0165	12/Mar/2014	Sodium	169	=	D
CCGC_0165	12/Mar/2014	SpecificConductivity	1630	=	None
CCGC_0165	12/Mar/2014	Sulfate	230	=	None
CCGC_0165	12/Mar/2014	Total Dissolved Solids	1040	=	None
CCGC_0166	13/Mar/2014	Alkalinity as CaCO3	146	=	None
CCGC_0166	13/Mar/2014	Bicarbonate	178	=	None
CCGC_0166	13/Mar/2014	Calcium	61	=	D
CCGC_0166	13/Mar/2014	Chloride	28	=	None
CCGC_0166	13/Mar/2014	Hardness as CaCO3	247	=	None
CCGC_0166	13/Mar/2014	Magnesium	23	=	D
CCGC_0166	13/Mar/2014	Nitrate + Nitrite as N	6.8	=	None
CCGC_0166	13/Mar/2014	Nitrate as NO3-N	6.4	=	None
CCGC_0166	13/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0166	13/Mar/2014	Potassium	1.6	=	D
CCGC_0166	13/Mar/2014	Sodium	33	=	D
CCGC_0166	13/Mar/2014	SpecificConductivity	574	=	None
CCGC_0166	13/Mar/2014	Sulfate	86	=	None
CCGC_0166	13/Mar/2014	Total Dissolved Solids	366	=	None
CCGC_0167	13/Mar/2014	Alkalinity as CaCO3	264	=	None
CCGC_0167	13/Mar/2014	Bicarbonate	322	=	None
CCGC_0167	13/Mar/2014	Calcium	128	=	D
CCGC_0167	13/Mar/2014	Chloride	41	=	None
CCGC_0167	13/Mar/2014	Hardness as CaCO3	530	=	None
CCGC_0167	13/Mar/2014	Magnesium	51	=	D
CCGC_0167	13/Mar/2014	Nitrate + Nitrite as N	40.5	=	None
CCGC_0167	13/Mar/2014	Nitrate as NO3-N	40.2	=	None
CCGC_0167	13/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0167	13/Mar/2014	Potassium	2.9	=	D
CCGC_0167	13/Mar/2014	Sodium	110	=	D
CCGC_0167	13/Mar/2014	SpecificConductivity	1357	=	None
CCGC_0167	13/Mar/2014	Sulfate	214	=	None
CCGC_0167	13/Mar/2014	Total Dissolved Solids	928	=	None
CCGC_0168	13/Mar/2014	Alkalinity as CaCO3	217	=	None
CCGC_0168	13/Mar/2014	Bicarbonate	265	=	None
CCGC_0168	13/Mar/2014	Calcium	108	=	D
CCGC_0168	13/Mar/2014	Chloride	36	=	None
CCGC_0168	13/Mar/2014	Hardness as CaCO3	439	=	None
CCGC_0168	13/Mar/2014	Magnesium	41	=	D
CCGC_0168	13/Mar/2014	Nitrate + Nitrite as N	25.5	=	None
CCGC_0168	13/Mar/2014	Nitrate as NO3-N	25.1	=	None
CCGC_0168	13/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0168	13/Mar/2014	Potassium	2.7	=	D
CCGC_0168	13/Mar/2014	Sodium	62	=	D
CCGC_0168	13/Mar/2014	SpecificConductivity	1038	=	None
CCGC_0168	13/Mar/2014	Sulfate	152	=	None
CCGC_0168	13/Mar/2014	Total Dissolved Solids	694	=	None
CCGC_0169	13/Mar/2014	Alkalinity as CaCO3	136	=	None
CCGC_0169	13/Mar/2014	Bicarbonate	166	=	None
CCGC_0169	13/Mar/2014	Calcium	55	=	D
CCGC_0169	13/Mar/2014	Chloride	21	=	None
CCGC_0169	13/Mar/2014	Hardness as CaCO3	228	=	None
CCGC_0169	13/Mar/2014	Magnesium	22	=	D
CCGC_0169	13/Mar/2014	Nitrate + Nitrite as N	5	=	None
CCGC_0169	13/Mar/2014	Nitrate as NO3-N	4.6	=	None
CCGC_0169	13/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0169	13/Mar/2014	Potassium	1.8	=	D
CCGC_0169	13/Mar/2014	Sodium	33	=	D
CCGC_0169	13/Mar/2014	SpecificConductivity	540	=	None
CCGC_0169	13/Mar/2014	Sulfate	72	=	None
CCGC_0169	13/Mar/2014	Total Dissolved Solids	328	=	None
CCGC_0170	13/Mar/2014	Alkalinity as CaCO3	241	=	None
CCGC_0170	13/Mar/2014	Bicarbonate	294	=	None
CCGC_0170	13/Mar/2014	Calcium	378	=	D
CCGC_0170	13/Mar/2014	Chloride	526	=	None
CCGC_0170	13/Mar/2014	Hardness as CaCO3	1467	=	None
CCGC_0170	13/Mar/2014	Magnesium	127	=	D
CCGC_0170	13/Mar/2014	Nitrate + Nitrite as N	52	=	None
CCGC_0170	13/Mar/2014	Nitrate as NO3-N	51.9	=	None
CCGC_0170	13/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0170	13/Mar/2014	Potassium	7.9	=	D
CCGC_0170	13/Mar/2014	Sodium	331	=	D
CCGC_0170	13/Mar/2014	SpecificConductivity	3646	=	None
CCGC_0170	13/Mar/2014	Sulfate	726	=	None
CCGC_0170	13/Mar/2014	Total Dissolved Solids	2617	=	None
CCGC_0171	13/Mar/2014	Alkalinity as CaCO3	270	=	None
CCGC_0171	13/Mar/2014	Bicarbonate	329	=	None
CCGC_0171	13/Mar/2014	Calcium	282	=	D
CCGC_0171	13/Mar/2014	Chloride	384	=	None
CCGC_0171	13/Mar/2014	Hardness as CaCO3	1470	=	None
CCGC_0171	13/Mar/2014	Magnesium	186	=	D
CCGC_0171	13/Mar/2014	Nitrate + Nitrite as N	32.9	=	None
CCGC_0171	13/Mar/2014	Nitrate as NO3-N	32.9	=	None
CCGC_0171	13/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0171	13/Mar/2014	Potassium	8.5	=	D
CCGC_0171	13/Mar/2014	Sodium	496	=	D
CCGC_0171	13/Mar/2014	SpecificConductivity	3969	=	None
CCGC_0171	13/Mar/2014	Sulfate	1275	=	D
CCGC_0171	13/Mar/2014	Total Dissolved Solids	3057	=	None
CCGC_0172	13/Mar/2014	Alkalinity as CaCO3	221	=	None
CCGC_0172	13/Mar/2014	Bicarbonate	270	=	None
CCGC_0172	13/Mar/2014	Calcium	173	=	D
CCGC_0172	13/Mar/2014	Chloride	205	=	None
CCGC_0172	13/Mar/2014	Hardness as CaCO3	823	=	None
CCGC_0172	13/Mar/2014	Magnesium	95	=	D
CCGC_0172	13/Mar/2014	Nitrate + Nitrite as N	<0.1	ND	None
CCGC_0172	13/Mar/2014	Nitrate as NO3-N	<0.1	ND	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0172	13/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0172	13/Mar/2014	Potassium	7.6	=	D
CCGC_0172	13/Mar/2014	Sodium	271	=	D
CCGC_0172	13/Mar/2014	SpecificConductivity	2440	=	None
CCGC_0172	13/Mar/2014	Sulfate	749	=	None
CCGC_0172	13/Mar/2014	Total Dissolved Solids	1754	=	None
CCGC_0173	14/Mar/2014	Alkalinity as CaCO3	116	=	None
CCGC_0173	14/Mar/2014	Bicarbonate	142	=	None
CCGC_0173	14/Mar/2014	Calcium	360	=	D
CCGC_0173	14/Mar/2014	Chloride	319	=	None
CCGC_0173	14/Mar/2014	Hardness as CaCO3	1335	=	None
CCGC_0173	14/Mar/2014	Magnesium	106	=	D
CCGC_0173	14/Mar/2014	Nitrate + Nitrite as N	37.6	=	None
CCGC_0173	14/Mar/2014	Nitrate as NO3-N	37.5	=	None
CCGC_0173	14/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0173	14/Mar/2014	Potassium	4	=	D
CCGC_0173	14/Mar/2014	Sodium	84	=	D
CCGC_0173	14/Mar/2014	SpecificConductivity	2372	=	None
CCGC_0173	14/Mar/2014	Sulfate	537	=	None
CCGC_0173	14/Mar/2014	Total Dissolved Solids	1840	=	None
CCGC_0174	14/Mar/2014	Alkalinity as CaCO3	167	=	None
CCGC_0174	14/Mar/2014	Bicarbonate	204	=	None
CCGC_0174	14/Mar/2014	Calcium	143	=	D
CCGC_0174	14/Mar/2014	Chloride	196	=	None
CCGC_0174	14/Mar/2014	Hardness as CaCO3	584	=	None
CCGC_0174	14/Mar/2014	Magnesium	55	=	D
CCGC_0174	14/Mar/2014	Nitrate + Nitrite as N	17.7	=	None
CCGC_0174	14/Mar/2014	Nitrate as NO3-N	17.6	=	None
CCGC_0174	14/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0174	14/Mar/2014	Potassium	3.6	=	D
CCGC_0174	14/Mar/2014	Sodium	92	=	D
CCGC_0174	14/Mar/2014	SpecificConductivity	1470	=	None
CCGC_0174	14/Mar/2014	Sulfate	208	=	None
CCGC_0174	14/Mar/2014	Total Dissolved Solids	937	=	None
CCGC_0175	14/Mar/2014	Alkalinity as CaCO3	204	=	None
CCGC_0175	14/Mar/2014	Bicarbonate	249	=	None
CCGC_0175	14/Mar/2014	Calcium	288	=	D
CCGC_0175	14/Mar/2014	Chloride	202	=	None
CCGC_0175	14/Mar/2014	Hardness as CaCO3	995	=	None
CCGC_0175	14/Mar/2014	Magnesium	67	=	D
CCGC_0175	14/Mar/2014	Nitrate + Nitrite as N	37.9	=	None
CCGC_0175	14/Mar/2014	Nitrate as NO3-N	37.8	=	None
CCGC_0175	14/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0175	14/Mar/2014	Potassium	7.1	=	D
CCGC_0175	14/Mar/2014	Sodium	92	=	D
CCGC_0175	14/Mar/2014	SpecificConductivity	1963	=	None
CCGC_0175	14/Mar/2014	Sulfate	271	=	None
CCGC_0175	14/Mar/2014	Total Dissolved Solids	1387	=	None
CCGC_0176	14/Mar/2014	Alkalinity as CaCO3	214	=	None
CCGC_0176	14/Mar/2014	Bicarbonate	261	=	None
CCGC_0176	14/Mar/2014	Calcium	228	=	D
CCGC_0176	14/Mar/2014	Chloride	194	=	None
CCGC_0176	14/Mar/2014	Hardness as CaCO3	792	=	None
CCGC_0176	14/Mar/2014	Magnesium	54	=	D
CCGC_0176	14/Mar/2014	Nitrate + Nitrite as N	40.4	=	None
CCGC_0176	14/Mar/2014	Nitrate as NO3-N	40.4	=	None
CCGC_0176	14/Mar/2014	Nitrite as NO2-N	<0.1	ND	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0176	14/Mar/2014	Potassium	6.2	=	D
CCGC_0176	14/Mar/2014	Sodium	113	=	D
CCGC_0176	14/Mar/2014	SpecificConductivity	1830	=	None
CCGC_0176	14/Mar/2014	Sulfate	273	=	None
CCGC_0176	14/Mar/2014	Total Dissolved Solids	1200	=	None
CCGC_0177	14/Mar/2014	Alkalinity as CaCO3	246	=	None
CCGC_0177	14/Mar/2014	Alkalinity as CaCO3	246	=	None
CCGC_0177	14/Mar/2014	Bicarbonate	300	=	None
CCGC_0177	14/Mar/2014	Bicarbonate	300	=	None
CCGC_0177	14/Mar/2014	Calcium	211	=	D
CCGC_0177	14/Mar/2014	Calcium	211	=	D
CCGC_0177	14/Mar/2014	Chloride	156	=	None
CCGC_0177	14/Mar/2014	Chloride	156	=	None
CCGC_0177	14/Mar/2014	Hardness as CaCO3	737	=	None
CCGC_0177	14/Mar/2014	Hardness as CaCO3	737	=	None
CCGC_0177	14/Mar/2014	Magnesium	51	=	D
CCGC_0177	14/Mar/2014	Magnesium	51	=	D
CCGC_0177	14/Mar/2014	Nitrate + Nitrite as N	20.4	=	None
CCGC_0177	14/Mar/2014	Nitrate + Nitrite as N	20.4	=	None
CCGC_0177	14/Mar/2014	Nitrate as NO3-N	20.3	=	None
CCGC_0177	14/Mar/2014	Nitrate as NO3-N	20.3	=	None
CCGC_0177	14/Mar/2014	Nitrite as NO2-N	0.1	=	None
CCGC_0177	14/Mar/2014	Nitrite as NO2-N	0.1	=	None
CCGC_0177	14/Mar/2014	Potassium	7.6	=	D
CCGC_0177	14/Mar/2014	Potassium	7.6	=	D
CCGC_0177	14/Mar/2014	Sodium	98	=	D
CCGC_0177	14/Mar/2014	Sodium	98	=	D
CCGC_0177	14/Mar/2014	SpecificConductivity	1580	=	None
CCGC_0177	14/Mar/2014	SpecificConductivity	1580	=	None
CCGC_0177	14/Mar/2014	Sulfate	242	=	None
CCGC_0177	14/Mar/2014	Sulfate	242	=	None
CCGC_0177	14/Mar/2014	Total Dissolved Solids	1017	=	None
CCGC_0177	14/Mar/2014	Total Dissolved Solids	1017	=	None
CCGC_0178	27/Aug/2014	Alkalinity as CaCO3	248	=	None
CCGC_0178	12/Mar/2014	Alkalinity as CaCO3	236	=	None
CCGC_0178	12/Mar/2014	Bicarbonate	288	=	None
CCGC_0178	27/Aug/2014	Bicarbonate	303	=	None
CCGC_0178	12/Mar/2014	Calcium	107	=	D
CCGC_0178	27/Aug/2014	Calcium	100	=	D
CCGC_0178	27/Aug/2014	Chloride	50	=	None
CCGC_0178	12/Mar/2014	Chloride	46	=	None
CCGC_0178	27/Aug/2014	Hardness as CaCO3	344	=	None
CCGC_0178	12/Mar/2014	Hardness as CaCO3	362	=	None
CCGC_0178	27/Aug/2014	Magnesium	23	=	D
CCGC_0178	12/Mar/2014	Magnesium	23	=	D
CCGC_0178	12/Mar/2014	Nitrate + Nitrite as N	10.1	=	None
CCGC_0178	27/Aug/2014	Nitrate + Nitrite as N	10.6	=	None
CCGC_0178	12/Mar/2014	Nitrate as NO3-N	9.7	=	None
CCGC_0178	27/Aug/2014	Nitrate as NO3-N	10.2	=	None
CCGC_0178	27/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0178	12/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0178	27/Aug/2014	Potassium	1	=	D
CCGC_0178	12/Mar/2014	Potassium	1.5	=	D
CCGC_0178	12/Mar/2014	Sodium	39	=	D
CCGC_0178	27/Aug/2014	Sodium	37	=	D
CCGC_0178	12/Mar/2014	SpecificConductivity	792	=	None
CCGC_0178	27/Aug/2014	SpecificConductivity	791	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0178	27/Aug/2014	Sulfate	50	=	None
CCGC_0178	12/Mar/2014	Sulfate	47	=	None
CCGC_0178	27/Aug/2014	Total Dissolved Solids	486	=	None
CCGC_0178	12/Mar/2014	Total Dissolved Solids	471	=	None
CCGC_0179	12/Mar/2014	Alkalinity as CaCO3	268	=	None
CCGC_0179	12/Mar/2014	Bicarbonate	327	=	None
CCGC_0179	12/Mar/2014	Calcium	162	=	D
CCGC_0179	12/Mar/2014	Chloride	95	=	None
CCGC_0179	12/Mar/2014	Hardness as CaCO3	672	=	None
CCGC_0179	12/Mar/2014	Magnesium	65	=	D
CCGC_0179	12/Mar/2014	Nitrate + Nitrite as N	24	=	None
CCGC_0179	12/Mar/2014	Nitrate as NO3-N	23.7	=	None
CCGC_0179	12/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0179	12/Mar/2014	Potassium	4	=	D
CCGC_0179	12/Mar/2014	Sodium	119	=	D
CCGC_0179	12/Mar/2014	SpecificConductivity	1594	=	None
CCGC_0179	12/Mar/2014	Sulfate	313	=	None
CCGC_0179	12/Mar/2014	Total Dissolved Solids	1111	=	None
CCGC_0180	12/Mar/2014	Alkalinity as CaCO3	210	=	None
CCGC_0180	12/Mar/2014	Bicarbonate	256	=	None
CCGC_0180	12/Mar/2014	Calcium	69	=	D
CCGC_0180	12/Mar/2014	Chloride	22	=	None
CCGC_0180	12/Mar/2014	Hardness as CaCO3	292	=	None
CCGC_0180	12/Mar/2014	Magnesium	29	=	D
CCGC_0180	12/Mar/2014	Nitrate + Nitrite as N	0.7	=	None
CCGC_0180	12/Mar/2014	Nitrate as NO3-N	0.3	=	None
CCGC_0180	12/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0180	12/Mar/2014	Potassium	1.8	=	D
CCGC_0180	12/Mar/2014	Sodium	43	=	D
CCGC_0180	12/Mar/2014	SpecificConductivity	667	=	None
CCGC_0180	12/Mar/2014	Sulfate	90	=	None
CCGC_0180	12/Mar/2014	Total Dissolved Solids	426	=	None
CCGC_0181	12/Mar/2014	Alkalinity as CaCO3	210	=	None
CCGC_0181	12/Mar/2014	Bicarbonate	256	=	None
CCGC_0181	12/Mar/2014	Calcium	64	=	D
CCGC_0181	12/Mar/2014	Chloride	24	=	None
CCGC_0181	12/Mar/2014	Hardness as CaCO3	287	=	None
CCGC_0181	12/Mar/2014	Magnesium	31	=	D
CCGC_0181	12/Mar/2014	Nitrate + Nitrite as N	2.4	=	None
CCGC_0181	12/Mar/2014	Nitrate as NO3-N	1.9	=	None
CCGC_0181	12/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0181	12/Mar/2014	Potassium	1.6	=	D
CCGC_0181	12/Mar/2014	Sodium	59	=	D
CCGC_0181	12/Mar/2014	SpecificConductivity	732	=	None
CCGC_0181	12/Mar/2014	Sulfate	111	=	None
CCGC_0181	12/Mar/2014	Total Dissolved Solids	437	=	None
CCGC_0182	13/Mar/2014	Alkalinity as CaCO3	128	=	None
CCGC_0182	13/Mar/2014	Bicarbonate	156	=	None
CCGC_0182	13/Mar/2014	Calcium	57	=	D
CCGC_0182	13/Mar/2014	Chloride	15	=	None
CCGC_0182	13/Mar/2014	Hardness as CaCO3	200	=	None
CCGC_0182	13/Mar/2014	Magnesium	14	=	D
CCGC_0182	13/Mar/2014	Nitrate + Nitrite as N	0.6	=	None
CCGC_0182	13/Mar/2014	Nitrate as NO3-N	0.1	=	None
CCGC_0182	13/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0182	13/Mar/2014	Potassium	3.3	=	D
CCGC_0182	13/Mar/2014	Sodium	31	=	D
CCGC_0182	13/Mar/2014	SpecificConductivity	478	=	None
CCGC_0182	13/Mar/2014	Sulfate	75	=	None
CCGC_0182	13/Mar/2014	Total Dissolved Solids	306	=	None
CCGC_0183	13/Mar/2014	Alkalinity as CaCO3	280	=	None
CCGC_0183	13/Mar/2014	Bicarbonate	342	=	None
CCGC_0183	13/Mar/2014	Calcium	167	=	D
CCGC_0183	13/Mar/2014	Chloride	87	=	None
CCGC_0183	13/Mar/2014	Hardness as CaCO3	606	=	None
CCGC_0183	13/Mar/2014	Magnesium	46	=	D
CCGC_0183	13/Mar/2014	Nitrate + Nitrite as N	4.6	=	None
CCGC_0183	13/Mar/2014	Nitrate as NO3-N	4.4	=	None
CCGC_0183	13/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0183	13/Mar/2014	Potassium	6.4	=	D
CCGC_0183	13/Mar/2014	Sodium	95	=	D
CCGC_0183	13/Mar/2014	SpecificConductivity	1328	=	None
CCGC_0183	13/Mar/2014	Sulfate	262	=	None
CCGC_0183	13/Mar/2014	Total Dissolved Solids	886	=	None
CCGC_0184	13/Mar/2014	Alkalinity as CaCO3	193	=	None
CCGC_0184	13/Mar/2014	Bicarbonate	235	=	None
CCGC_0184	13/Mar/2014	Calcium	91	=	D
CCGC_0184	13/Mar/2014	Chloride	30	=	None
CCGC_0184	13/Mar/2014	Hardness as CaCO3	334	=	None
CCGC_0184	13/Mar/2014	Magnesium	26	=	D
CCGC_0184	13/Mar/2014	Nitrate + Nitrite as N	1.3	=	None
CCGC_0184	13/Mar/2014	Nitrate as NO3-N	0.9	=	None
CCGC_0184	13/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0184	13/Mar/2014	Potassium	3.5	=	D
CCGC_0184	13/Mar/2014	Sodium	36	=	D
CCGC_0184	13/Mar/2014	SpecificConductivity	734	=	None
CCGC_0184	13/Mar/2014	Sulfate	122	=	None
CCGC_0184	13/Mar/2014	Total Dissolved Solids	468	=	None
CCGC_0185	13/Mar/2014	Alkalinity as CaCO3	233	=	None
CCGC_0185	13/Mar/2014	Bicarbonate	284	=	None
CCGC_0185	13/Mar/2014	Calcium	105	=	D
CCGC_0185	13/Mar/2014	Chloride	34	=	None
CCGC_0185	13/Mar/2014	Hardness as CaCO3	402	=	None
CCGC_0185	13/Mar/2014	Magnesium	34	=	D
CCGC_0185	13/Mar/2014	Nitrate + Nitrite as N	1.6	=	None
CCGC_0185	13/Mar/2014	Nitrate as NO3-N	1.2	=	None
CCGC_0185	13/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0185	13/Mar/2014	Potassium	4.1	=	D
CCGC_0185	13/Mar/2014	Sodium	62	=	D
CCGC_0185	13/Mar/2014	SpecificConductivity	925	=	None
CCGC_0185	13/Mar/2014	Sulfate	187	=	None
CCGC_0185	13/Mar/2014	Total Dissolved Solids	611	=	None
CCGC_0186	14/Mar/2014	Alkalinity as CaCO3	220	=	None
CCGC_0186	14/Mar/2014	Bicarbonate	268	=	None
CCGC_0186	14/Mar/2014	Calcium	165	=	D
CCGC_0186	14/Mar/2014	Chloride	97	=	None
CCGC_0186	14/Mar/2014	Hardness as CaCO3	577	=	None
CCGC_0186	14/Mar/2014	Magnesium	40	=	D
CCGC_0186	14/Mar/2014	Nitrate + Nitrite as N	12	=	None
CCGC_0186	14/Mar/2014	Nitrate as NO3-N	11.8	=	None
CCGC_0186	14/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0186	14/Mar/2014	Potassium	5.9	=	D
CCGC_0186	14/Mar/2014	Sodium	64	=	D
CCGC_0186	14/Mar/2014	SpecificConductivity	1198	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0186	14/Mar/2014	Sulfate	191	=	None
CCGC_0186	14/Mar/2014	Total Dissolved Solids	754	=	None
CCGC_0187	14/Mar/2014	Alkalinity as CaCO3	196	=	None
CCGC_0187	14/Mar/2014	Bicarbonate	239	=	None
CCGC_0187	14/Mar/2014	Calcium	301	=	D
CCGC_0187	14/Mar/2014	Chloride	233	=	None
CCGC_0187	14/Mar/2014	Hardness as CaCO3	1089	=	None
CCGC_0187	14/Mar/2014	Magnesium	82	=	D
CCGC_0187	14/Mar/2014	Nitrate + Nitrite as N	58.1	=	None
CCGC_0187	14/Mar/2014	Nitrate as NO3-N	58	=	None
CCGC_0187	14/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0187	14/Mar/2014	Potassium	6.8	=	D
CCGC_0187	14/Mar/2014	Sodium	111	=	D
CCGC_0187	14/Mar/2014	SpecificConductivity	2159	=	None
CCGC_0187	14/Mar/2014	Sulfate	346	=	None
CCGC_0187	14/Mar/2014	Total Dissolved Solids	1586	=	None
CCGC_0188	19/Mar/2014	Alkalinity as CaCO3	200	=	None
CCGC_0188	19/Mar/2014	Bicarbonate	244	=	None
CCGC_0188	19/Mar/2014	Calcium	128	=	D
CCGC_0188	19/Mar/2014	Chloride	19	=	None
CCGC_0188	19/Mar/2014	Hardness as CaCO3	456	=	None
CCGC_0188	19/Mar/2014	Magnesium	33	=	D
CCGC_0188	19/Mar/2014	Nitrate + Nitrite as N	23.6	=	None
CCGC_0188	19/Mar/2014	Nitrate as NO3-N	23.1	=	None
CCGC_0188	19/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0188	19/Mar/2014	Potassium	3.6	=	D
CCGC_0188	19/Mar/2014	Sodium	33	=	D
CCGC_0188	19/Mar/2014	SpecificConductivity	984	=	None
CCGC_0188	19/Mar/2014	Sulfate	179	=	None
CCGC_0188	19/Mar/2014	Total Dissolved Solids	680	=	None
CCGC_0189	19/Mar/2014	Alkalinity as CaCO3	120	=	None
CCGC_0189	19/Mar/2014	Bicarbonate	146	=	None
CCGC_0189	19/Mar/2014	Calcium	57	=	D
CCGC_0189	19/Mar/2014	Chloride	10	=	None
CCGC_0189	19/Mar/2014	Hardness as CaCO3	200	=	None
CCGC_0189	19/Mar/2014	Magnesium	14	=	D
CCGC_0189	19/Mar/2014	Nitrate + Nitrite as N	6.8	=	None
CCGC_0189	19/Mar/2014	Nitrate as NO3-N	6.3	=	None
CCGC_0189	19/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0189	19/Mar/2014	Potassium	2.2	=	D
CCGC_0189	19/Mar/2014	Sodium	15	=	D
CCGC_0189	19/Mar/2014	SpecificConductivity	453	=	None
CCGC_0189	19/Mar/2014	Sulfate	58	=	None
CCGC_0189	19/Mar/2014	Total Dissolved Solids	306	=	None
CCGC_0190	19/Mar/2014	Alkalinity as CaCO3	124	=	None
CCGC_0190	19/Mar/2014	Bicarbonate	151	=	None
CCGC_0190	19/Mar/2014	Calcium	54	=	D
CCGC_0190	19/Mar/2014	Chloride	17	=	None
CCGC_0190	19/Mar/2014	Hardness as CaCO3	188	=	None
CCGC_0190	19/Mar/2014	Magnesium	13	=	D
CCGC_0190	19/Mar/2014	Nitrate + Nitrite as N	2.6	=	None
CCGC_0190	19/Mar/2014	Nitrate as NO3-N	2.2	=	None
CCGC_0190	19/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0190	19/Mar/2014	Potassium	2.6	=	D
CCGC_0190	19/Mar/2014	Sodium	20	=	D
CCGC_0190	19/Mar/2014	SpecificConductivity	442	=	None
CCGC_0190	19/Mar/2014	Sulfate	58	=	None
CCGC_0190	19/Mar/2014	Total Dissolved Solids	306	=	None
CCGC_0191	19/Mar/2014	Alkalinity as CaCO3	206	=	None
CCGC_0191	19/Mar/2014	Bicarbonate	251	=	None
CCGC_0191	19/Mar/2014	Calcium	140	=	D
CCGC_0191	19/Mar/2014	Chloride	26	=	None
CCGC_0191	19/Mar/2014	Hardness as CaCO3	539	=	None
CCGC_0191	19/Mar/2014	Magnesium	46	=	D
CCGC_0191	19/Mar/2014	Nitrate + Nitrite as N	43	=	None
CCGC_0191	19/Mar/2014	Nitrate as NO3-N	42.5	=	None
CCGC_0191	19/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0191	19/Mar/2014	Potassium	3.7	=	D
CCGC_0191	19/Mar/2014	Sodium	41	=	D
CCGC_0191	19/Mar/2014	SpecificConductivity	1173	=	None
CCGC_0191	19/Mar/2014	Sulfate	183	=	None
CCGC_0191	19/Mar/2014	Total Dissolved Solids	808	=	None
CCGC_0193	19/Mar/2014	Alkalinity as CaCO3	314	=	None
CCGC_0193	19/Mar/2014	Bicarbonate	383	=	None
CCGC_0193	19/Mar/2014	Calcium	213	=	D
CCGC_0193	19/Mar/2014	Chloride	207	=	None
CCGC_0193	19/Mar/2014	Hardness as CaCO3	931	=	None
CCGC_0193	19/Mar/2014	Magnesium	97	=	D
CCGC_0193	19/Mar/2014	Nitrate + Nitrite as N	45.8	=	None
CCGC_0193	19/Mar/2014	Nitrate as NO3-N	45.7	=	None
CCGC_0193	19/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0193	19/Mar/2014	Potassium	4.7	=	D
CCGC_0193	19/Mar/2014	Sodium	174	=	D
CCGC_0193	19/Mar/2014	SpecificConductivity	2270	=	None
CCGC_0193	19/Mar/2014	Sulfate	426	=	None
CCGC_0193	19/Mar/2014	Total Dissolved Solids	1671	=	None
CCGC_0194	19/Mar/2014	Alkalinity as CaCO3	151	=	None
CCGC_0194	19/Mar/2014	Bicarbonate	184	=	None
CCGC_0194	19/Mar/2014	Calcium	163	=	D
CCGC_0194	19/Mar/2014	Chloride	210	=	None
CCGC_0194	19/Mar/2014	Hardness as CaCO3	716	=	None
CCGC_0194	19/Mar/2014	Magnesium	75	=	D
CCGC_0194	19/Mar/2014	Nitrate + Nitrite as N	102.6	=	None
CCGC_0194	19/Mar/2014	Nitrate as NO3-N	100.5	=	None
CCGC_0194	19/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0194	19/Mar/2014	Potassium	4	=	D
CCGC_0194	19/Mar/2014	Sodium	98	=	D
CCGC_0194	19/Mar/2014	SpecificConductivity	1997	=	None
CCGC_0194	19/Mar/2014	Sulfate	115	=	None
CCGC_0194	19/Mar/2014	Total Dissolved Solids	1380	=	None
CCGC_0195	19/Mar/2014	Alkalinity as CaCO3	247	=	None
CCGC_0195	19/Mar/2014	Bicarbonate	301	=	None
CCGC_0195	19/Mar/2014	Calcium	184	=	D
CCGC_0195	19/Mar/2014	Chloride	157	=	None
CCGC_0195	19/Mar/2014	Hardness as CaCO3	731	=	None
CCGC_0195	19/Mar/2014	Magnesium	66	=	D
CCGC_0195	19/Mar/2014	Nitrate + Nitrite as N	69.6	=	None
CCGC_0195	19/Mar/2014	Nitrate as NO3-N	69.4	=	None
CCGC_0195	19/Mar/2014	Nitrite as NO2-N	0.1	=	None
CCGC_0195	19/Mar/2014	Potassium	2.2	=	D
CCGC_0195	19/Mar/2014	Sodium	139	=	D
CCGC_0195	19/Mar/2014	SpecificConductivity	1962	=	None
CCGC_0195	19/Mar/2014	Sulfate	236	=	None
CCGC_0195	19/Mar/2014	Total Dissolved Solids	1286	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0196	19/Mar/2014	Alkalinity as CaCO3	125	=	None
CCGC_0196	19/Mar/2014	Bicarbonate	153	=	None
CCGC_0196	19/Mar/2014	Calcium	77	=	D
CCGC_0196	19/Mar/2014	Chloride	11	=	None
CCGC_0196	19/Mar/2014	Hardness as CaCO3	258	=	None
CCGC_0196	19/Mar/2014	Magnesium	16	=	D
CCGC_0196	19/Mar/2014	Nitrate + Nitrite as N	17.3	=	None
CCGC_0196	19/Mar/2014	Nitrate as NO3-N	16.8	=	None
CCGC_0196	19/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0196	19/Mar/2014	Potassium	2.1	=	D
CCGC_0196	19/Mar/2014	Sodium	16	=	D
CCGC_0196	19/Mar/2014	SpecificConductivity	606	=	None
CCGC_0196	19/Mar/2014	Sulfate	83	=	None
CCGC_0196	19/Mar/2014	Total Dissolved Solids	386	=	None
CCGC_0197	19/Mar/2014	Alkalinity as CaCO3	129	=	None
CCGC_0197	19/Mar/2014	Bicarbonate	157	=	None
CCGC_0197	19/Mar/2014	Calcium	57	=	D
CCGC_0197	19/Mar/2014	Chloride	20	=	None
CCGC_0197	19/Mar/2014	Hardness as CaCO3	200	=	None
CCGC_0197	19/Mar/2014	Magnesium	14	=	D
CCGC_0197	19/Mar/2014	Nitrate + Nitrite as N	15	=	None
CCGC_0197	19/Mar/2014	Nitrate as NO3-N	14.5	=	None
CCGC_0197	19/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0197	19/Mar/2014	Potassium	2.2	=	D
CCGC_0197	19/Mar/2014	Sodium	15	=	D
CCGC_0197	19/Mar/2014	SpecificConductivity	656	=	None
CCGC_0197	19/Mar/2014	Sulfate	101	=	None
CCGC_0197	19/Mar/2014	Total Dissolved Solids	431	=	None
CCGC_0198	19/Mar/2014	Alkalinity as CaCO3	168	=	None
CCGC_0198	19/Mar/2014	Bicarbonate	205	=	None
CCGC_0198	19/Mar/2014	Calcium	84	=	D
CCGC_0198	19/Mar/2014	Chloride	91	=	None
CCGC_0198	19/Mar/2014	Hardness as CaCO3	325	=	None
CCGC_0198	19/Mar/2014	Magnesium	28	=	D
CCGC_0198	19/Mar/2014	Nitrate + Nitrite as N	16.8	=	None
CCGC_0198	19/Mar/2014	Nitrate as NO3-N	16.5	=	None
CCGC_0198	19/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0198	19/Mar/2014	Potassium	3.2	=	D
CCGC_0198	19/Mar/2014	Sodium	44	=	D
CCGC_0198	19/Mar/2014	SpecificConductivity	686	=	None
CCGC_0198	19/Mar/2014	Sulfate	44	=	None
CCGC_0198	19/Mar/2014	Total Dissolved Solids	526	=	None
CCGC_0200	20/Mar/2014	Alkalinity as CaCO3	211	=	None
CCGC_0200	20/Mar/2014	Bicarbonate	257	=	None
CCGC_0200	20/Mar/2014	Calcium	210	=	D
CCGC_0200	20/Mar/2014	Chloride	431	=	None
CCGC_0200	20/Mar/2014	Hardness as CaCO3	841	=	None
CCGC_0200	20/Mar/2014	Magnesium	77	=	D
CCGC_0200	20/Mar/2014	Nitrate + Nitrite as N	<0.1	ND	None
CCGC_0200	20/Mar/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0200	20/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0200	20/Mar/2014	Potassium	4.7	=	D
CCGC_0200	20/Mar/2014	Sodium	220	=	D
CCGC_0200	20/Mar/2014	SpecificConductivity	2584	=	None
CCGC_0200	20/Mar/2014	Sulfate	443	=	None
CCGC_0200	20/Mar/2014	Total Dissolved Solids	1697	=	None
CCGC_0201	20/Mar/2014	Alkalinity as CaCO3	258	=	None
CCGC_0201	20/Mar/2014	Bicarbonate	315	=	None
CCGC_0201	20/Mar/2014	Calcium	299	=	D
CCGC_0201	20/Mar/2014	Chloride	538	=	None
CCGC_0201	20/Mar/2014	Hardness as CaCO3	1257	=	None
CCGC_0201	20/Mar/2014	Magnesium	124	=	D
CCGC_0201	20/Mar/2014	Nitrate + Nitrite as N	32.9	=	None
CCGC_0201	20/Mar/2014	Nitrate as NO3-N	32.9	=	None
CCGC_0201	20/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0201	20/Mar/2014	Potassium	8.2	=	D
CCGC_0201	20/Mar/2014	Sodium	266	=	D
CCGC_0201	20/Mar/2014	SpecificConductivity	3340	=	None
CCGC_0201	20/Mar/2014	Sulfate	594	=	None
CCGC_0201	20/Mar/2014	Total Dissolved Solids	2403	=	None
CCGC_0203	20/Mar/2014	Alkalinity as CaCO3	206	=	None
CCGC_0203	20/Mar/2014	Bicarbonate	251	=	None
CCGC_0203	20/Mar/2014	Calcium	330	=	D
CCGC_0203	20/Mar/2014	Chloride	348	=	None
CCGC_0203	20/Mar/2014	Hardness as CaCO3	1495	=	None
CCGC_0203	20/Mar/2014	Magnesium	163	=	D
CCGC_0203	20/Mar/2014	Nitrate + Nitrite as N	39.5	=	None
CCGC_0203	20/Mar/2014	Nitrate as NO3-N	39.4	=	None
CCGC_0203	20/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0203	20/Mar/2014	Potassium	10	=	D
CCGC_0203	20/Mar/2014	Sodium	342	=	D
CCGC_0203	20/Mar/2014	SpecificConductivity	3803	=	None
CCGC_0203	20/Mar/2014	Sulfate	1220	=	None
CCGC_0203	20/Mar/2014	Total Dissolved Solids	2968	=	None
CCGC_0204	20/Mar/2014	Alkalinity as CaCO3	220	=	None
CCGC_0204	20/Mar/2014	Bicarbonate	268	=	None
CCGC_0204	20/Mar/2014	Calcium	147	=	D
CCGC_0204	20/Mar/2014	Chloride	223	=	None
CCGC_0204	20/Mar/2014	Hardness as CaCO3	614	=	None
CCGC_0204	20/Mar/2014	Magnesium	60	=	D
CCGC_0204	20/Mar/2014	Nitrate + Nitrite as N	45.7	=	None
CCGC_0204	20/Mar/2014	Nitrate as NO3-N	45.6	=	None
CCGC_0204	20/Mar/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0204	20/Mar/2014	Potassium	5.9	=	D
CCGC_0204	20/Mar/2014	Sodium	148	=	D
CCGC_0204	20/Mar/2014	SpecificConductivity	1902	=	None
CCGC_0204	20/Mar/2014	Sulfate	212	=	None
CCGC_0204	20/Mar/2014	Total Dissolved Solids	1180	=	None
CCGC_0206	19/Mar/2014	Alkalinity as CaCO3	204	=	None
CCGC_0206	19/Mar/2014	Bicarbonate	249	=	None
CCGC_0206	19/Mar/2014	Calcium	145	=	D
CCGC_0206	19/Mar/2014	Chloride	61	=	None
CCGC_0206	19/Mar/2014	Hardness as CaCO3	514	=	None
CCGC_0206	19/Mar/2014	Magnesium	37	=	D
CCGC_0206	19/Mar/2014	Nitrate + Nitrite as N	36.9	=	None
CCGC_0206	19/Mar/2014	Nitrate as NO3-N	36.6	=	None
CCGC_0206	19/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0206	19/Mar/2014	Potassium	3.6	=	D
CCGC_0206	19/Mar/2014	Sodium	49	=	D
CCGC_0206	19/Mar/2014	SpecificConductivity	1161	=	None
CCGC_0206	19/Mar/2014	Sulfate	157	=	None
CCGC_0206	19/Mar/2014	Total Dissolved Solids	806	=	None
CCGC_0207	19/Mar/2014	Alkalinity as CaCO3	168	=	None
CCGC_0207	19/Mar/2014	Bicarbonate	205	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0207	19/Mar/2014	Calcium	106	=	D
CCGC_0207	19/Mar/2014	Chloride	28	=	None
CCGC_0207	19/Mar/2014	Hardness as CaCO3	376	=	None
CCGC_0207	19/Mar/2014	Magnesium	27	=	D
CCGC_0207	19/Mar/2014	Nitrate + Nitrite as N	20	=	None
CCGC_0207	19/Mar/2014	Nitrate as NO3-N	19.6	=	None
CCGC_0207	19/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0207	19/Mar/2014	Potassium	2.5	=	D
CCGC_0207	19/Mar/2014	Sodium	28	=	D
CCGC_0207	19/Mar/2014	SpecificConductivity	828	=	None
CCGC_0207	19/Mar/2014	Sulfate	130	=	None
CCGC_0207	19/Mar/2014	Total Dissolved Solids	567	=	None
CCGC_0365	29/Apr/2014	Alkalinity as CaCO3	208	=	None
CCGC_0365	29/Apr/2014	Bicarbonate	254	=	None
CCGC_0365	29/Apr/2014	Calcium	90	=	D
CCGC_0365	29/Apr/2014	Chloride	57	=	None
CCGC_0365	29/Apr/2014	Hardness as CaCO3	303	=	None
CCGC_0365	29/Apr/2014	Magnesium	19	=	D
CCGC_0365	29/Apr/2014	Nitrate + Nitrite as N	13.8	=	None
CCGC_0365	29/Apr/2014	Nitrate as NO3-N	13.4	=	None
CCGC_0365	29/Apr/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0365	29/Apr/2014	Potassium	2.3	=	D
CCGC_0365	29/Apr/2014	Sodium	38	=	D
CCGC_0365	29/Apr/2014	SpecificConductivity	762	=	None
CCGC_0365	29/Apr/2014	Sulfate	33	=	None
CCGC_0365	29/Apr/2014	Total Dissolved Solids	428	=	None
CCGC_0378	01/May/2014	Alkalinity as CaCO3	55	=	None
CCGC_0378	01/May/2014	Bicarbonate	67	=	None
CCGC_0378	01/May/2014	Calcium	15	=	D
CCGC_0378	01/May/2014	Chloride	79	=	None
CCGC_0378	01/May/2014	Hardness as CaCO3	87	=	None
CCGC_0378	01/May/2014	Magnesium	12	=	D
CCGC_0378	01/May/2014	Nitrate + Nitrite as N	1.8	=	None
CCGC_0378	01/May/2014	Nitrate as NO3-N	1.5	=	None
CCGC_0378	01/May/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0378	01/May/2014	Potassium	2.2	=	D
CCGC_0378	01/May/2014	Sodium	48	=	D
CCGC_0378	01/May/2014	SpecificConductivity	417	=	None
CCGC_0378	01/May/2014	Sulfate	5	=	None
CCGC_0378	01/May/2014	Total Dissolved Solids	268	=	None
CCGC_0386	06/Aug/2014	Alkalinity as CaCO3	203	=	None
CCGC_0386	06/Aug/2014	Bicarbonate	248	=	None
CCGC_0386	06/Aug/2014	Calcium	288	=	D
CCGC_0386	06/Aug/2014	Chloride	165	=	None
CCGC_0386	06/Aug/2014	Hardness as CaCO3	1152	=	None
CCGC_0386	06/Aug/2014	Magnesium	105	=	D
CCGC_0386	06/Aug/2014	Nitrate + Nitrite as N	0.2	=	None
CCGC_0386	06/Aug/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0386	06/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0386	06/Aug/2014	Potassium	4.8	=	D
CCGC_0386	06/Aug/2014	Sodium	42	=	D
CCGC_0386	06/Aug/2014	SpecificConductivity	2085	=	None
CCGC_0386	06/Aug/2014	Sulfate	782	=	None
CCGC_0386	06/Aug/2014	Total Dissolved Solids	1688	=	None
CCGC_0387	06/Aug/2014	Alkalinity as CaCO3	85	=	None
CCGC_0387	06/Aug/2014	Bicarbonate	104	=	None
CCGC_0387	06/Aug/2014	Calcium	90	=	D

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0387	06/Aug/2014	Chloride	88	=	None
CCGC_0387	06/Aug/2014	Hardness as CaCO3	361	=	None
CCGC_0387	06/Aug/2014	Magnesium	33	=	D
CCGC_0387	06/Aug/2014	Nitrate + Nitrite as N	9.4	=	None
CCGC_0387	06/Aug/2014	Nitrate as NO3-N	9.2	=	None
CCGC_0387	06/Aug/2014	Nitrite as NO2-N	0.1	=	None
CCGC_0387	06/Aug/2014	Potassium	2.9	=	D
CCGC_0387	06/Aug/2014	Sodium	34	=	D
CCGC_0387	06/Aug/2014	SpecificConductivity	873	=	None
CCGC_0387	06/Aug/2014	Sulfate	184	=	None
CCGC_0387	06/Aug/2014	Total Dissolved Solids	588	=	None
CCGC_0390	06/Aug/2014	Alkalinity as CaCO3	228	=	None
CCGC_0390	06/Aug/2014	Bicarbonate	278	=	None
CCGC_0390	06/Aug/2014	Calcium	83	=	D
CCGC_0390	06/Aug/2014	Chloride	35	=	None
CCGC_0390	06/Aug/2014	Hardness as CaCO3	364	=	None
CCGC_0390	06/Aug/2014	Magnesium	38	=	D
CCGC_0390	06/Aug/2014	Nitrate + Nitrite as N	14.2	=	None
CCGC_0390	06/Aug/2014	Nitrate as NO3-N	13.9	=	None
CCGC_0390	06/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0390	06/Aug/2014	Potassium	1.9	=	D
CCGC_0390	06/Aug/2014	Sodium	42	=	D
CCGC_0390	06/Aug/2014	SpecificConductivity	882	=	None
CCGC_0390	06/Aug/2014	Sulfate	135	=	None
CCGC_0390	06/Aug/2014	Total Dissolved Solids	594	=	None
CCGC_0391	06/Aug/2014	Alkalinity as CaCO3	285	=	None
CCGC_0391	06/Aug/2014	Bicarbonate	348	=	None
CCGC_0391	06/Aug/2014	Calcium	318	=	D
CCGC_0391	06/Aug/2014	Chloride	245	=	None
CCGC_0391	06/Aug/2014	Hardness as CaCO3	1301	=	None
CCGC_0391	06/Aug/2014	Magnesium	123	=	D
CCGC_0391	06/Aug/2014	Nitrate + Nitrite as N	51.7	=	None
CCGC_0391	06/Aug/2014	Nitrate as NO3-N	51.4	=	None
CCGC_0391	06/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0391	06/Aug/2014	Potassium	4.9	=	D
CCGC_0391	06/Aug/2014	Sodium	238	=	D
CCGC_0391	06/Aug/2014	SpecificConductivity	3189	=	None
CCGC_0391	06/Aug/2014	Sulfate	1040	=	D
CCGC_0391	06/Aug/2014	Total Dissolved Solids	2528	=	None
CCGC_0392	06/Aug/2014	Alkalinity as CaCO3	292	=	None
CCGC_0392	06/Aug/2014	Bicarbonate	356	=	None
CCGC_0392	06/Aug/2014	Calcium	168	=	D
CCGC_0392	06/Aug/2014	Chloride	158	=	None
CCGC_0392	06/Aug/2014	Hardness as CaCO3	765	=	None
CCGC_0392	06/Aug/2014	Magnesium	84	=	D
CCGC_0392	06/Aug/2014	Nitrate + Nitrite as N	70.9	=	None
CCGC_0392	06/Aug/2014	Nitrate as NO3-N	70.6	=	None
CCGC_0392	06/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0392	06/Aug/2014	Potassium	4.3	=	D
CCGC_0392	06/Aug/2014	Sodium	144	=	D
CCGC_0392	06/Aug/2014	SpecificConductivity	2069	=	None
CCGC_0392	06/Aug/2014	Sulfate	336	=	None
CCGC_0392	06/Aug/2014	Total Dissolved Solids	1471	=	None
CCGC_0393	06/Aug/2014	Alkalinity as CaCO3	230	=	None
CCGC_0393	06/Aug/2014	Bicarbonate	281	=	None
CCGC_0393	06/Aug/2014	Calcium	123	=	D
CCGC_0393	06/Aug/2014	Chloride	72	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0393	06/Aug/2014	Hardness as CaCO3	534	=	None
CCGC_0393	06/Aug/2014	Magnesium	55	=	D
CCGC_0393	06/Aug/2014	Nitrate + Nitrite as N	27.8	=	None
CCGC_0393	06/Aug/2014	Nitrate as NO3-N	27.5	=	None
CCGC_0393	06/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0393	06/Aug/2014	Potassium	3.2	=	D
CCGC_0393	06/Aug/2014	Sodium	88	=	D
CCGC_0393	06/Aug/2014	SpecificConductivity	1363	=	None
CCGC_0393	06/Aug/2014	Sulfate	294	=	None
CCGC_0393	06/Aug/2014	Total Dissolved Solids	966	=	None
CCGC_0394	06/Aug/2014	Alkalinity as CaCO3	342	=	None
CCGC_0394	06/Aug/2014	Alkalinity as CaCO3	342	=	None
CCGC_0394	06/Aug/2014	Bicarbonate	417	=	None
CCGC_0394	06/Aug/2014	Bicarbonate	417	=	None
CCGC_0394	06/Aug/2014	Calcium	359	=	D
CCGC_0394	06/Aug/2014	Calcium	359	=	D
CCGC_0394	06/Aug/2014	Chloride	281	=	None
CCGC_0394	06/Aug/2014	Chloride	281	=	None
CCGC_0394	06/Aug/2014	Hardness as CaCO3	1559	=	None
CCGC_0394	06/Aug/2014	Hardness as CaCO3	1559	=	None
CCGC_0394	06/Aug/2014	Magnesium	161	=	D
CCGC_0394	06/Aug/2014	Magnesium	161	=	D
CCGC_0394	06/Aug/2014	Nitrate + Nitrite as N	81.9	=	None
CCGC_0394	06/Aug/2014	Nitrate + Nitrite as N	81.9	=	None
CCGC_0394	06/Aug/2014	Nitrate as NO3-N	81.7	=	None
CCGC_0394	06/Aug/2014	Nitrate as NO3-N	81.7	=	None
CCGC_0394	06/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0394	06/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0394	06/Aug/2014	Potassium	6.6	=	D
CCGC_0394	06/Aug/2014	Potassium	6.6	=	D
CCGC_0394	06/Aug/2014	Sodium	297	=	D
CCGC_0394	06/Aug/2014	Sodium	297	=	D
CCGC_0394	06/Aug/2014	SpecificConductivity	3703	=	None
CCGC_0394	06/Aug/2014	SpecificConductivity	3703	=	None
CCGC_0394	06/Aug/2014	Sulfate	1140	=	D
CCGC_0394	06/Aug/2014	Sulfate	1140	=	D
CCGC_0394	06/Aug/2014	Total Dissolved Solids	3025	=	None
CCGC_0394	06/Aug/2014	Total Dissolved Solids	3025	=	None
CCGC_0395	06/Aug/2014	Alkalinity as CaCO3	283	=	None
CCGC_0395	06/Aug/2014	Bicarbonate	345	=	None
CCGC_0395	06/Aug/2014	Calcium	447	=	D
CCGC_0395	06/Aug/2014	Chloride	327	=	None
CCGC_0395	06/Aug/2014	Hardness as CaCO3	1944	=	None
CCGC_0395	06/Aug/2014	Magnesium	201	=	D
CCGC_0395	06/Aug/2014	Nitrate + Nitrite as N	110	=	None
CCGC_0395	06/Aug/2014	Nitrate as NO3-N	110	=	None
CCGC_0395	06/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0395	06/Aug/2014	Potassium	8.3	=	D
CCGC_0395	06/Aug/2014	Sodium	317	=	D
CCGC_0395	06/Aug/2014	SpecificConductivity	4233	=	None
CCGC_0395	06/Aug/2014	Sulfate	1400	=	D
CCGC_0395	06/Aug/2014	Total Dissolved Solids	3532	=	None
CCGC_0396	06/Aug/2014	Alkalinity as CaCO3	343	=	None
CCGC_0396	06/Aug/2014	Bicarbonate	418	=	None
CCGC_0396	06/Aug/2014	Calcium	320	=	D
CCGC_0396	06/Aug/2014	Chloride	260	=	None
CCGC_0396	06/Aug/2014	Hardness as CaCO3	1338	=	None
CCGC_0396	06/Aug/2014	Magnesium	131	=	D
CCGC_0396	06/Aug/2014	Nitrate + Nitrite as N	32.9	=	None
CCGC_0396	06/Aug/2014	Nitrate as NO3-N	32.6	=	None
CCGC_0396	06/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0396	06/Aug/2014	Potassium	6.8	=	D
CCGC_0396	06/Aug/2014	Sodium	240	=	D
CCGC_0396	06/Aug/2014	SpecificConductivity	3080	=	None
CCGC_0396	06/Aug/2014	Sulfate	967	=	D
CCGC_0396	06/Aug/2014	Total Dissolved Solids	2420	=	None
CCGC_0397	07/Aug/2014	Alkalinity as CaCO3	156	=	None
CCGC_0397	07/Aug/2014	Bicarbonate	190	=	None
CCGC_0397	07/Aug/2014	Calcium	70	=	D
CCGC_0397	07/Aug/2014	Chloride	140	=	None
CCGC_0397	07/Aug/2014	Hardness as CaCO3	372	=	None
CCGC_0397	07/Aug/2014	Magnesium	48	=	D
CCGC_0397	07/Aug/2014	Nitrate + Nitrite as N	49.5	=	None
CCGC_0397	07/Aug/2014	Nitrate as NO3-N	49.3	=	None
CCGC_0397	07/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0397	07/Aug/2014	Potassium	4.3	=	D
CCGC_0397	07/Aug/2014	Sodium	114	=	D
CCGC_0397	07/Aug/2014	SpecificConductivity	1252	=	None
CCGC_0397	07/Aug/2014	Sulfate	58	=	None
CCGC_0397	07/Aug/2014	Total Dissolved Solids	765	=	None
CCGC_0398	07/Aug/2014	Alkalinity as CaCO3	171	=	None
CCGC_0398	07/Aug/2014	Bicarbonate	209	=	None
CCGC_0398	07/Aug/2014	Calcium	107	=	D
CCGC_0398	07/Aug/2014	Chloride	74	=	None
CCGC_0398	07/Aug/2014	Hardness as CaCO3	395	=	None
CCGC_0398	07/Aug/2014	Magnesium	31	=	D
CCGC_0398	07/Aug/2014	Nitrate + Nitrite as N	33.8	=	None
CCGC_0398	07/Aug/2014	Nitrate as NO3-N	33.6	=	None
CCGC_0398	07/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0398	07/Aug/2014	Potassium	3.6	=	D
CCGC_0398	07/Aug/2014	Sodium	98	=	D
CCGC_0398	07/Aug/2014	SpecificConductivity	1161	=	None
CCGC_0398	07/Aug/2014	Sulfate	180	=	None
CCGC_0398	07/Aug/2014	Total Dissolved Solids	782	=	None
CCGC_0399	07/Aug/2014	Alkalinity as CaCO3	231	=	None
CCGC_0399	07/Aug/2014	Bicarbonate	282	=	None
CCGC_0399	07/Aug/2014	Calcium	93	=	D
CCGC_0399	07/Aug/2014	Chloride	30	=	None
CCGC_0399	07/Aug/2014	Hardness as CaCO3	360	=	None
CCGC_0399	07/Aug/2014	Magnesium	31	=	D
CCGC_0399	07/Aug/2014	Nitrate + Nitrite as N	2.6	=	None
CCGC_0399	07/Aug/2014	Nitrate as NO3-N	2.2	=	None
CCGC_0399	07/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0399	07/Aug/2014	Potassium	3.6	=	D
CCGC_0399	07/Aug/2014	Sodium	42	=	D
CCGC_0399	07/Aug/2014	SpecificConductivity	784	=	None
CCGC_0399	07/Aug/2014	Sulfate	135	=	None
CCGC_0399	07/Aug/2014	Total Dissolved Solids	542	=	None
CCGC_0400	07/Aug/2014	Alkalinity as CaCO3	201	=	None
CCGC_0400	07/Aug/2014	Bicarbonate	245	=	None
CCGC_0400	07/Aug/2014	Calcium	35	=	D
CCGC_0400	07/Aug/2014	Chloride	204	=	None
CCGC_0400	07/Aug/2014	Hardness as CaCO3	124	=	None
CCGC_0400	07/Aug/2014	Magnesium	9	=	D

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0400	07/Aug/2014	Nitrate + Nitrite as N	0.2	=	None
CCGC_0400	07/Aug/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0400	07/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0400	07/Aug/2014	Potassium	2.5	=	D
CCGC_0400	07/Aug/2014	Sodium	185	=	D
CCGC_0400	07/Aug/2014	SpecificConductivity	1091	=	None
CCGC_0400	07/Aug/2014	Sulfate	26	=	None
CCGC_0400	07/Aug/2014	Total Dissolved Solids	638	=	None
CCGC_0401	07/Aug/2014	Alkalinity as CaCO3	198	=	None
CCGC_0401	07/Aug/2014	Bicarbonate	242	=	None
CCGC_0401	07/Aug/2014	Calcium	55	=	D
CCGC_0401	07/Aug/2014	Chloride	114	=	None
CCGC_0401	07/Aug/2014	Hardness as CaCO3	203	=	None
CCGC_0401	07/Aug/2014	Magnesium	16	=	D
CCGC_0401	07/Aug/2014	Nitrate + Nitrite as N	0.9	=	None
CCGC_0401	07/Aug/2014	Nitrate as NO3-N	0.6	=	None
CCGC_0401	07/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0401	07/Aug/2014	Potassium	3.3	=	D
CCGC_0401	07/Aug/2014	Sodium	98	=	D
CCGC_0401	07/Aug/2014	SpecificConductivity	798	=	None
CCGC_0401	07/Aug/2014	Sulfate	26	=	None
CCGC_0401	07/Aug/2014	Total Dissolved Solids	482	=	None
CCGC_0402	07/Aug/2014	Alkalinity as CaCO3	99	=	None
CCGC_0402	07/Aug/2014	Bicarbonate	121	=	None
CCGC_0402	07/Aug/2014	Calcium	100	=	D
CCGC_0402	07/Aug/2014	Chloride	108	=	None
CCGC_0402	07/Aug/2014	Hardness as CaCO3	406	=	None
CCGC_0402	07/Aug/2014	Magnesium	38	=	D
CCGC_0402	07/Aug/2014	Nitrate + Nitrite as N	56.1	=	None
CCGC_0402	07/Aug/2014	Nitrate as NO3-N	56	=	None
CCGC_0402	07/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0402	07/Aug/2014	Potassium	2.6	=	D
CCGC_0402	07/Aug/2014	Sodium	61	=	D
CCGC_0402	07/Aug/2014	SpecificConductivity	1122	=	None
CCGC_0402	07/Aug/2014	Sulfate	65	=	None
CCGC_0402	07/Aug/2014	Total Dissolved Solids	815	=	None
CCGC_0403	07/Aug/2014	Alkalinity as CaCO3	155	=	None
CCGC_0403	07/Aug/2014	Bicarbonate	189	=	None
CCGC_0403	07/Aug/2014	Calcium	80	=	D
CCGC_0403	07/Aug/2014	Chloride	96	=	None
CCGC_0403	07/Aug/2014	Hardness as CaCO3	315	=	None
CCGC_0403	07/Aug/2014	Magnesium	28	=	D
CCGC_0403	07/Aug/2014	Nitrate + Nitrite as N	22.4	=	None
CCGC_0403	07/Aug/2014	Nitrate as NO3-N	22.2	=	None
CCGC_0403	07/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0403	07/Aug/2014	Potassium	3.4	=	D
CCGC_0403	07/Aug/2014	Sodium	59	=	D
CCGC_0403	07/Aug/2014	SpecificConductivity	885	=	None
CCGC_0403	07/Aug/2014	Sulfate	58	=	None
CCGC_0403	07/Aug/2014	Total Dissolved Solids	542	=	None
CCGC_0404	07/Aug/2014	Alkalinity as CaCO3	145	=	None
CCGC_0404	07/Aug/2014	Bicarbonate	177	=	None
CCGC_0404	07/Aug/2014	Calcium	158	=	D
CCGC_0404	07/Aug/2014	Chloride	269	=	None
CCGC_0404	07/Aug/2014	Hardness as CaCO3	609	=	None
CCGC_0404	07/Aug/2014	Magnesium	52	=	D
CCGC_0404	07/Aug/2014	Nitrate + Nitrite as N	38.9	=	None
CCGC_0404	07/Aug/2014	Nitrate as NO3-N	38.7	=	None
CCGC_0404	07/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0404	07/Aug/2014	Potassium	3.1	=	D
CCGC_0404	07/Aug/2014	Sodium	65	=	D
CCGC_0404	07/Aug/2014	SpecificConductivity	1551	=	None
CCGC_0404	07/Aug/2014	Sulfate	64	=	None
CCGC_0404	07/Aug/2014	Total Dissolved Solids	1075	=	None
CCGC_0405	07/Aug/2014	Alkalinity as CaCO3	200	=	None
CCGC_0405	07/Aug/2014	Bicarbonate	244	=	None
CCGC_0405	07/Aug/2014	Calcium	89	=	D
CCGC_0405	07/Aug/2014	Chloride	99	=	None
CCGC_0405	07/Aug/2014	Hardness as CaCO3	333	=	None
CCGC_0405	07/Aug/2014	Magnesium	27	=	D
CCGC_0405	07/Aug/2014	Nitrate + Nitrite as N	3.6	=	None
CCGC_0405	07/Aug/2014	Nitrate as NO3-N	3.3	=	None
CCGC_0405	07/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0405	07/Aug/2014	Potassium	3.1	=	D
CCGC_0405	07/Aug/2014	Sodium	50	=	D
CCGC_0405	07/Aug/2014	SpecificConductivity	838	=	None
CCGC_0405	07/Aug/2014	Sulfate	67	=	None
CCGC_0405	07/Aug/2014	Total Dissolved Solids	510	=	None
CCGC_0406	07/Aug/2014	Alkalinity as CaCO3	179	=	None
CCGC_0406	07/Aug/2014	Bicarbonate	218	=	None
CCGC_0406	07/Aug/2014	Calcium	80	=	D
CCGC_0406	07/Aug/2014	Chloride	43	=	None
CCGC_0406	07/Aug/2014	Hardness as CaCO3	299	=	None
CCGC_0406	07/Aug/2014	Magnesium	24	=	D
CCGC_0406	07/Aug/2014	Nitrate + Nitrite as N	3	=	None
CCGC_0406	07/Aug/2014	Nitrate as NO3-N	2.7	=	None
CCGC_0406	07/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0406	07/Aug/2014	Potassium	3.6	=	D
CCGC_0406	07/Aug/2014	Sodium	57	=	D
CCGC_0406	07/Aug/2014	SpecificConductivity	790	=	None
CCGC_0406	07/Aug/2014	Sulfate	154	=	None
CCGC_0406	07/Aug/2014	Total Dissolved Solids	548	=	None
CCGC_0430	08/Aug/2014	Alkalinity as CaCO3	124	=	None
CCGC_0430	08/Aug/2014	Bicarbonate	151	=	None
CCGC_0430	08/Aug/2014	Calcium	62	=	D
CCGC_0430	08/Aug/2014	Chloride	7	=	None
CCGC_0430	08/Aug/2014	Hardness as CaCO3	217	=	None
CCGC_0430	08/Aug/2014	Magnesium	15	=	D
CCGC_0430	08/Aug/2014	Nitrate + Nitrite as N	10.9	=	None
CCGC_0430	08/Aug/2014	Nitrate as NO3-N	10.7	=	None
CCGC_0430	08/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0430	08/Aug/2014	Potassium	2.6	=	D
CCGC_0430	08/Aug/2014	Sodium	15	=	D
CCGC_0430	08/Aug/2014	SpecificConductivity	493	=	None
CCGC_0430	08/Aug/2014	Sulfate	67	=	None
CCGC_0430	08/Aug/2014	Total Dissolved Solids	308	=	None
CCGC_0431	08/Aug/2014	Alkalinity as CaCO3	214	=	None
CCGC_0431	08/Aug/2014	Bicarbonate	261	=	None
CCGC_0431	08/Aug/2014	Calcium	145	=	D
CCGC_0431	08/Aug/2014	Chloride	87	=	None
CCGC_0431	08/Aug/2014	Hardness as CaCO3	514	=	None
CCGC_0431	08/Aug/2014	Magnesium	37	=	D
CCGC_0431	08/Aug/2014	Nitrate + Nitrite as N	35.6	=	None
CCGC_0431	08/Aug/2014	Nitrate as NO3-N	35.3	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0431	08/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0431	08/Aug/2014	Potassium	4.4	=	D
CCGC_0431	08/Aug/2014	Sodium	48	=	D
CCGC_0431	08/Aug/2014	SpecificConductivity	1211	=	None
CCGC_0431	08/Aug/2014	Sulfate	141	=	None
CCGC_0431	08/Aug/2014	Total Dissolved Solids	768	=	None
CCGC_0432	08/Aug/2014	Alkalinity as CaCO3	179	=	None
CCGC_0432	08/Aug/2014	Bicarbonate	218	=	None
CCGC_0432	08/Aug/2014	Calcium	224	=	D
CCGC_0432	08/Aug/2014	Chloride	286	=	None
CCGC_0432	08/Aug/2014	Hardness as CaCO3	881	=	None
CCGC_0432	08/Aug/2014	Magnesium	78	=	D
CCGC_0432	08/Aug/2014	Nitrate + Nitrite as N	53.3	=	None
CCGC_0432	08/Aug/2014	Nitrate as NO3-N	53.1	=	None
CCGC_0432	08/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0432	08/Aug/2014	Potassium	5.5	=	D
CCGC_0432	08/Aug/2014	Sodium	230	=	D
CCGC_0432	08/Aug/2014	SpecificConductivity	2575	=	None
CCGC_0432	08/Aug/2014	Sulfate	544	=	None
CCGC_0432	08/Aug/2014	Total Dissolved Solids	1765	=	None
CCGC_0433	08/Aug/2014	Alkalinity as CaCO3	205	=	None
CCGC_0433	08/Aug/2014	Bicarbonate	250	=	None
CCGC_0433	08/Aug/2014	Calcium	160	=	D
CCGC_0433	08/Aug/2014	Chloride	512	=	None
CCGC_0433	08/Aug/2014	Hardness as CaCO3	692	=	None
CCGC_0433	08/Aug/2014	Magnesium	71	=	D
CCGC_0433	08/Aug/2014	Nitrate + Nitrite as N	36.1	=	None
CCGC_0433	08/Aug/2014	Nitrate as NO3-N	36	=	None
CCGC_0433	08/Aug/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0433	08/Aug/2014	Potassium	6	=	None
CCGC_0433	08/Aug/2014	Sodium	271	=	D
CCGC_0433	08/Aug/2014	SpecificConductivity	2654	=	None
CCGC_0433	08/Aug/2014	Sulfate	217	=	None
CCGC_0433	08/Aug/2014	Total Dissolved Solids	1530	=	None
CCGC_0441	14/Aug/2014	Alkalinity as CaCO3	265	=	None
CCGC_0441	14/Aug/2014	Bicarbonate	323	=	None
CCGC_0441	14/Aug/2014	Calcium	105	=	D
CCGC_0441	14/Aug/2014	Chloride	56	=	None
CCGC_0441	14/Aug/2014	Hardness as CaCO3	373	=	None
CCGC_0441	14/Aug/2014	Magnesium	27	=	D
CCGC_0441	14/Aug/2014	Nitrate + Nitrite as N	0.6	=	None
CCGC_0441	14/Aug/2014	Nitrate as NO3-N	0.2	=	None
CCGC_0441	14/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0441	14/Aug/2014	Potassium	4.3	=	D
CCGC_0441	14/Aug/2014	Sodium	36	=	D
CCGC_0441	14/Aug/2014	SpecificConductivity	850	=	None
CCGC_0441	14/Aug/2014	Sulfate	103	=	None
CCGC_0441	14/Aug/2014	Total Dissolved Solids	568	=	None
CCGC_0442	14/Aug/2014	Alkalinity as CaCO3	153	=	None
CCGC_0442	14/Aug/2014	Alkalinity as CaCO3	153	=	None
CCGC_0442	14/Aug/2014	Alkalinity as CaCO3	153	=	None
CCGC_0442	14/Aug/2014	Bicarbonate	187	=	None
CCGC_0442	14/Aug/2014	Bicarbonate	187	=	None
CCGC_0442	14/Aug/2014	Bicarbonate	187	=	None
CCGC_0442	14/Aug/2014	Calcium	60	=	D
CCGC_0442	14/Aug/2014	Calcium	60	=	D
CCGC_0442	14/Aug/2014	Calcium	60	=	D
CCGC_0442	14/Aug/2014	Chloride	21	=	None
CCGC_0442	14/Aug/2014	Chloride	21	=	None
CCGC_0442	14/Aug/2014	Chloride	21	=	None
CCGC_0442	14/Aug/2014	Hardness as CaCO3	207	=	None
CCGC_0442	14/Aug/2014	Hardness as CaCO3	207	=	None
CCGC_0442	14/Aug/2014	Hardness as CaCO3	207	=	None
CCGC_0442	14/Aug/2014	Magnesium	14	=	D
CCGC_0442	14/Aug/2014	Magnesium	14	=	D
CCGC_0442	14/Aug/2014	Magnesium	14	=	D
CCGC_0442	14/Aug/2014	Nitrate + Nitrite as N	0.4	=	None
CCGC_0442	14/Aug/2014	Nitrate + Nitrite as N	0.4	=	None
CCGC_0442	14/Aug/2014	Nitrate + Nitrite as N	0.4	=	None
CCGC_0442	14/Aug/2014	Nitrate as NO3-N	0.2	=	None
CCGC_0442	14/Aug/2014	Nitrate as NO3-N	0.2	=	None
CCGC_0442	14/Aug/2014	Nitrate as NO3-N	0.2	=	None
CCGC_0442	14/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0442	14/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0442	14/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0442	14/Aug/2014	Potassium	3.3	=	D
CCGC_0442	14/Aug/2014	Potassium	3.3	=	D
CCGC_0442	14/Aug/2014	Potassium	3.3	=	D
CCGC_0442	14/Aug/2014	Sodium	28	=	D
CCGC_0442	14/Aug/2014	Sodium	28	=	D
CCGC_0442	14/Aug/2014	Sodium	28	=	D
CCGC_0442	14/Aug/2014	SpecificConductivity	503	=	None
CCGC_0442	14/Aug/2014	SpecificConductivity	503	=	None
CCGC_0442	14/Aug/2014	SpecificConductivity	503	=	None
CCGC_0442	14/Aug/2014	Sulfate	73	=	None
CCGC_0442	14/Aug/2014	Sulfate	73	=	None
CCGC_0442	14/Aug/2014	Sulfate	73	=	None
CCGC_0442	14/Aug/2014	Total Dissolved Solids	334	=	None
CCGC_0442	14/Aug/2014	Total Dissolved Solids	334	=	None
CCGC_0442	14/Aug/2014	Total Dissolved Solids	334	=	None
CCGC_0443	14/Aug/2014	Alkalinity as CaCO3	185	=	None
CCGC_0443	14/Aug/2014	Bicarbonate	226	=	None
CCGC_0443	14/Aug/2014	Calcium	84	=	D
CCGC_0443	14/Aug/2014	Chloride	36	=	None
CCGC_0443	14/Aug/2014	Hardness as CaCO3	313	=	None
CCGC_0443	14/Aug/2014	Magnesium	25	=	D
CCGC_0443	14/Aug/2014	Nitrate + Nitrite as N	0.3	=	None
CCGC_0443	14/Aug/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0443	14/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0443	14/Aug/2014	Potassium	4	=	D
CCGC_0443	14/Aug/2014	Sodium	42	=	D
CCGC_0443	14/Aug/2014	SpecificConductivity	733	=	None
CCGC_0443	14/Aug/2014	Sulfate	146	=	None
CCGC_0443	14/Aug/2014	Total Dissolved Solids	486	=	None
CCGC_0444	14/Aug/2014	Alkalinity as CaCO3	134	=	None
CCGC_0444	14/Aug/2014	Alkalinity as CaCO3	134	=	None
CCGC_0444	14/Aug/2014	Bicarbonate	163	=	None
CCGC_0444	14/Aug/2014	Bicarbonate	163	=	None
CCGC_0444	14/Aug/2014	Calcium	51	=	D
CCGC_0444	14/Aug/2014	Calcium	51	=	D
CCGC_0444	14/Aug/2014	Chloride	14	=	None
CCGC_0444	14/Aug/2014	Chloride	14	=	None
CCGC_0444	14/Aug/2014	Hardness as CaCO3	177	=	None
CCGC_0444	14/Aug/2014	Hardness as CaCO3	177	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0444	14/Aug/2014	Magnesium	12	=	D
CCGC_0444	14/Aug/2014	Magnesium	12	=	D
CCGC_0444	14/Aug/2014	Nitrate + Nitrite as N	0.4	=	None
CCGC_0444	14/Aug/2014	Nitrate + Nitrite as N	0.4	=	None
CCGC_0444	14/Aug/2014	Nitrate as NO3-N	0.1	=	None
CCGC_0444	14/Aug/2014	Nitrate as NO3-N	0.1	=	None
CCGC_0444	14/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0444	14/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0444	14/Aug/2014	Potassium	3.1	=	D
CCGC_0444	14/Aug/2014	Potassium	3.1	=	D
CCGC_0444	14/Aug/2014	Sodium	26	=	D
CCGC_0444	14/Aug/2014	Sodium	26	=	D
CCGC_0444	14/Aug/2014	SpecificConductivity	443	=	None
CCGC_0444	14/Aug/2014	SpecificConductivity	443	=	None
CCGC_0444	14/Aug/2014	Sulfate	69	=	None
CCGC_0444	14/Aug/2014	Sulfate	69	=	None
CCGC_0444	14/Aug/2014	Total Dissolved Solids	306	=	None
CCGC_0444	14/Aug/2014	Total Dissolved Solids	306	=	None
CCGC_0471	27/Aug/2014	Alkalinity as CaCO3	137	=	None
CCGC_0471	27/Aug/2014	Bicarbonate	167	=	None
CCGC_0471	27/Aug/2014	Calcium	161	=	D
CCGC_0471	27/Aug/2014	Chloride	150	=	None
CCGC_0471	27/Aug/2014	Hardness as CaCO3	567	=	None
CCGC_0471	27/Aug/2014	Magnesium	40	=	D
CCGC_0471	27/Aug/2014	Nitrate + Nitrite as N	56.4	=	None
CCGC_0471	27/Aug/2014	Nitrate as NO3-N	56.2	=	None
CCGC_0471	27/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0471	27/Aug/2014	Potassium	2	=	D
CCGC_0471	27/Aug/2014	Sodium	51	=	D
CCGC_0471	27/Aug/2014	SpecificConductivity	1359	=	None
CCGC_0471	27/Aug/2014	Sulfate	105	=	None
CCGC_0471	27/Aug/2014	Total Dissolved Solids	983	=	None
CCGC_0473	27/Aug/2014	Alkalinity as CaCO3	161	=	None
CCGC_0473	27/Aug/2014	Bicarbonate	196	=	None
CCGC_0473	27/Aug/2014	Calcium	67	=	D
CCGC_0473	27/Aug/2014	Chloride	174	=	None
CCGC_0473	27/Aug/2014	Hardness as CaCO3	291	=	None
CCGC_0473	27/Aug/2014	Magnesium	30	=	D
CCGC_0473	27/Aug/2014	Nitrate + Nitrite as N	11.3	=	None
CCGC_0473	27/Aug/2014	Nitrate as NO3-N	11	=	None
CCGC_0473	27/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0473	27/Aug/2014	Potassium	2	=	D
CCGC_0473	27/Aug/2014	Sodium	95	=	D
CCGC_0473	27/Aug/2014	SpecificConductivity	1015	=	None
CCGC_0473	27/Aug/2014	Sulfate	34	=	None
CCGC_0473	27/Aug/2014	Total Dissolved Solids	600	=	None
CCGC_0474	27/Aug/2014	Alkalinity as CaCO3	206	=	None
CCGC_0474	27/Aug/2014	Bicarbonate	251	=	None
CCGC_0474	27/Aug/2014	Calcium	94	=	D
CCGC_0474	27/Aug/2014	Chloride	105	=	None
CCGC_0474	27/Aug/2014	Hardness as CaCO3	399	=	None
CCGC_0474	27/Aug/2014	Magnesium	40	=	D
CCGC_0474	27/Aug/2014	Nitrate + Nitrite as N	16.7	=	None
CCGC_0474	27/Aug/2014	Nitrate as NO3-N	16.3	=	None
CCGC_0474	27/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0474	27/Aug/2014	Potassium	3.8	=	D
CCGC_0474	27/Aug/2014	Sodium	86	=	D

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0474	27/Aug/2014	SpecificConductivity	1133	=	None
CCGC_0474	27/Aug/2014	Sulfate	156	=	None
CCGC_0474	27/Aug/2014	Total Dissolved Solids	703	=	None
CCGC_0475	28/Aug/2014	Alkalinity as CaCO3	315	=	None
CCGC_0475	28/Aug/2014	Bicarbonate	384	=	None
CCGC_0475	28/Aug/2014	Calcium	125	=	D
CCGC_0475	28/Aug/2014	Chloride	86	=	None
CCGC_0475	28/Aug/2014	Hardness as CaCO3	440	=	None
CCGC_0475	28/Aug/2014	Magnesium	31	=	D
CCGC_0475	28/Aug/2014	Nitrate + Nitrite as N	0.7	=	None
CCGC_0475	28/Aug/2014	Nitrate as NO3-N	0.3	=	None
CCGC_0475	28/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0475	28/Aug/2014	Potassium	4.8	=	D
CCGC_0475	28/Aug/2014	Sodium	56	=	D
CCGC_0475	28/Aug/2014	SpecificConductivity	1055	=	None
CCGC_0475	28/Aug/2014	Sulfate	134	=	None
CCGC_0475	28/Aug/2014	Total Dissolved Solids	691	=	None
CCGC_0476	28/Aug/2014	Alkalinity as CaCO3	166	=	None
CCGC_0476	28/Aug/2014	Bicarbonate	203	=	None
CCGC_0476	28/Aug/2014	Calcium	122	=	D
CCGC_0476	28/Aug/2014	Chloride	126	=	None
CCGC_0476	28/Aug/2014	Hardness as CaCO3	552	=	None
CCGC_0476	28/Aug/2014	Magnesium	60	=	D
CCGC_0476	28/Aug/2014	Nitrate + Nitrite as N	139	=	None
CCGC_0476	28/Aug/2014	Nitrate as NO3-N	141	=	D
CCGC_0476	28/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0476	28/Aug/2014	Potassium	4	=	D
CCGC_0476	28/Aug/2014	Sodium	182	=	D
CCGC_0476	28/Aug/2014	SpecificConductivity	1980	=	None
CCGC_0476	28/Aug/2014	Sulfate	127	=	None
CCGC_0476	28/Aug/2014	Total Dissolved Solids	1371	=	None
CCGC_0477	28/Aug/2014	Alkalinity as CaCO3	163	=	None
CCGC_0477	28/Aug/2014	Alkalinity as CaCO3	163	=	None
CCGC_0477	28/Aug/2014	Alkalinity as CaCO3	163	=	None
CCGC_0477	28/Aug/2014	Bicarbonate	199	=	None
CCGC_0477	28/Aug/2014	Bicarbonate	199	=	None
CCGC_0477	28/Aug/2014	Bicarbonate	199	=	None
CCGC_0477	28/Aug/2014	Calcium	52	=	D
CCGC_0477	28/Aug/2014	Calcium	52	=	D
CCGC_0477	28/Aug/2014	Calcium	52	=	D
CCGC_0477	28/Aug/2014	Chloride	340	=	None
CCGC_0477	28/Aug/2014	Chloride	340	=	None
CCGC_0477	28/Aug/2014	Chloride	340	=	None
CCGC_0477	28/Aug/2014	Hardness as CaCO3	274	=	None
CCGC_0477	28/Aug/2014	Hardness as CaCO3	274	=	None
CCGC_0477	28/Aug/2014	Hardness as CaCO3	274	=	None
CCGC_0477	28/Aug/2014	Magnesium	35	=	D
CCGC_0477	28/Aug/2014	Magnesium	35	=	D
CCGC_0477	28/Aug/2014	Magnesium	35	=	D
CCGC_0477	28/Aug/2014	Nitrate + Nitrite as N	5.8	=	None
CCGC_0477	28/Aug/2014	Nitrate + Nitrite as N	5.8	=	None
CCGC_0477	28/Aug/2014	Nitrate + Nitrite as N	5.8	=	None
CCGC_0477	28/Aug/2014	Nitrate as NO3-N	5.6	=	None
CCGC_0477	28/Aug/2014	Nitrate as NO3-N	5.6	=	None
CCGC_0477	28/Aug/2014	Nitrate as NO3-N	5.6	=	None
CCGC_0477	28/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0477	28/Aug/2014	Nitrite as NO2-N	0.2	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0477	28/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0477	28/Aug/2014	Potassium	3	=	D
CCGC_0477	28/Aug/2014	Potassium	3	=	D
CCGC_0477	28/Aug/2014	Potassium	3	=	D
CCGC_0477	28/Aug/2014	Sodium	179	=	D
CCGC_0477	28/Aug/2014	Sodium	179	=	D
CCGC_0477	28/Aug/2014	Sodium	179	=	D
CCGC_0477	28/Aug/2014	SpecificConductivity	1462	=	None
CCGC_0477	28/Aug/2014	SpecificConductivity	1462	=	None
CCGC_0477	28/Aug/2014	SpecificConductivity	1462	=	None
CCGC_0477	28/Aug/2014	Sulfate	22	=	None
CCGC_0477	28/Aug/2014	Sulfate	22	=	None
CCGC_0477	28/Aug/2014	Sulfate	22	=	None
CCGC_0477	28/Aug/2014	Total Dissolved Solids	803	=	None
CCGC_0477	28/Aug/2014	Total Dissolved Solids	803	=	None
CCGC_0477	28/Aug/2014	Total Dissolved Solids	803	=	None
CCGC_0483	27/Aug/2014	Alkalinity as CaCO3	167	=	None
CCGC_0483	27/Aug/2014	Bicarbonate	204	=	None
CCGC_0483	27/Aug/2014	Calcium	68	=	D
CCGC_0483	27/Aug/2014	Chloride	34	=	None
CCGC_0483	27/Aug/2014	Hardness as CaCO3	302	=	None
CCGC_0483	27/Aug/2014	Magnesium	32	=	D
CCGC_0483	27/Aug/2014	Nitrate + Nitrite as N	4	=	None
CCGC_0483	27/Aug/2014	Nitrate as NO3-N	3.6	=	None
CCGC_0483	27/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0483	27/Aug/2014	Potassium	1.9	=	D
CCGC_0483	27/Aug/2014	Sodium	39	=	D
CCGC_0483	27/Aug/2014	SpecificConductivity	698	=	None
CCGC_0483	27/Aug/2014	Sulfate	130	=	None
CCGC_0483	27/Aug/2014	Total Dissolved Solids	471	=	None
CCGC_0484	27/Aug/2014	Alkalinity as CaCO3	239	=	None
CCGC_0484	27/Aug/2014	Bicarbonate	292	=	None
CCGC_0484	27/Aug/2014	Calcium	136	=	D
CCGC_0484	27/Aug/2014	Chloride	300	=	None
CCGC_0484	27/Aug/2014	Hardness as CaCO3	776	=	None
CCGC_0484	27/Aug/2014	Magnesium	106	=	D
CCGC_0484	27/Aug/2014	Nitrate + Nitrite as N	10.7	=	None
CCGC_0484	27/Aug/2014	Nitrate as NO3-N	10.3	=	None
CCGC_0484	27/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0484	27/Aug/2014	Potassium	5.9	=	D
CCGC_0484	27/Aug/2014	Sodium	374	=	D
CCGC_0484	27/Aug/2014	SpecificConductivity	2635	=	None
CCGC_0484	27/Aug/2014	Sulfate	700	=	None
CCGC_0484	27/Aug/2014	Total Dissolved Solids	1814	=	None
CCGC_0487	26/Aug/2014	Alkalinity as CaCO3	181	=	None
CCGC_0487	26/Aug/2014	Bicarbonate	221	=	None
CCGC_0487	26/Aug/2014	Calcium	82	=	D
CCGC_0487	26/Aug/2014	Chloride	91	=	None
CCGC_0487	26/Aug/2014	Hardness as CaCO3	332	=	None
CCGC_0487	26/Aug/2014	Magnesium	31	=	D
CCGC_0487	26/Aug/2014	Nitrate + Nitrite as N	19.5	=	None
CCGC_0487	26/Aug/2014	Nitrate as NO3-N	19.2	=	None
CCGC_0487	26/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0487	26/Aug/2014	Potassium	1.5	=	D
CCGC_0487	26/Aug/2014	Sodium	61	=	D
CCGC_0487	26/Aug/2014	SpecificConductivity	896	=	None
CCGC_0487	26/Aug/2014	Sulfate	64	=	None
CCGC_0487	26/Aug/2014	Total Dissolved Solids	546	=	None
CCGC_0488	27/Aug/2014	Alkalinity as CaCO3	339	=	None
CCGC_0488	27/Aug/2014	Bicarbonate	414	=	None
CCGC_0488	27/Aug/2014	Calcium	82	=	D
CCGC_0488	27/Aug/2014	Chloride	78	=	None
CCGC_0488	27/Aug/2014	Hardness as CaCO3	394	=	None
CCGC_0488	27/Aug/2014	Magnesium	46	=	D
CCGC_0488	27/Aug/2014	Nitrate + Nitrite as N	4.2	=	None
CCGC_0488	27/Aug/2014	Nitrate as NO3-N	3.7	=	None
CCGC_0488	27/Aug/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0488	27/Aug/2014	Potassium	2.6	=	D
CCGC_0488	27/Aug/2014	Sodium	107	=	D
CCGC_0488	27/Aug/2014	SpecificConductivity	1086	=	None
CCGC_0488	27/Aug/2014	Sulfate	115	=	None
CCGC_0488	27/Aug/2014	Total Dissolved Solids	680	=	None
CCGC_0489	27/Aug/2014	Alkalinity as CaCO3	171	=	None
CCGC_0489	27/Aug/2014	Bicarbonate	209	=	None
CCGC_0489	27/Aug/2014	Calcium	258	=	D
CCGC_0489	27/Aug/2014	Chloride	424	=	None
CCGC_0489	27/Aug/2014	Hardness as CaCO3	1081	=	None
CCGC_0489	27/Aug/2014	Magnesium	106	=	D
CCGC_0489	27/Aug/2014	Nitrate + Nitrite as N	54.1	=	None
CCGC_0489	27/Aug/2014	Nitrate as NO3-N	53.9	=	None
CCGC_0489	27/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0489	27/Aug/2014	Potassium	4	=	D
CCGC_0489	27/Aug/2014	Sodium	104	=	D
CCGC_0489	27/Aug/2014	SpecificConductivity	2444	=	None
CCGC_0489	27/Aug/2014	Sulfate	272	=	None
CCGC_0489	27/Aug/2014	Total Dissolved Solids	1768	=	None
CCGC_0490	27/Aug/2014	Alkalinity as CaCO3	182	=	None
CCGC_0490	27/Aug/2014	Bicarbonate	222	=	None
CCGC_0490	27/Aug/2014	Calcium	92	=	D
CCGC_0490	27/Aug/2014	Chloride	22	=	None
CCGC_0490	27/Aug/2014	Hardness as CaCO3	324	=	None
CCGC_0490	27/Aug/2014	Magnesium	23	=	D
CCGC_0490	27/Aug/2014	Nitrate + Nitrite as N	26.6	=	None
CCGC_0490	27/Aug/2014	Nitrate as NO3-N	26.2	=	None
CCGC_0490	27/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0490	27/Aug/2014	Potassium	3.9	=	D
CCGC_0490	27/Aug/2014	Sodium	68	=	D
CCGC_0490	27/Aug/2014	SpecificConductivity	893	=	None
CCGC_0490	27/Aug/2014	Sulfate	145	=	None
CCGC_0490	27/Aug/2014	Total Dissolved Solids	611	=	None
CCGC_0491	27/Aug/2014	Alkalinity as CaCO3	296	=	None
CCGC_0491	27/Aug/2014	Bicarbonate	361	=	None
CCGC_0491	27/Aug/2014	Calcium	245	=	D
CCGC_0491	27/Aug/2014	Chloride	200	=	None
CCGC_0491	27/Aug/2014	Hardness as CaCO3	1147	=	None
CCGC_0491	27/Aug/2014	Magnesium	130	=	D
CCGC_0491	27/Aug/2014	Nitrate + Nitrite as N	90.3	=	None
CCGC_0491	27/Aug/2014	Nitrate as NO3-N	89.9	=	None
CCGC_0491	27/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0491	27/Aug/2014	Potassium	4.4	=	D
CCGC_0491	27/Aug/2014	Sodium	185	=	D
CCGC_0491	27/Aug/2014	SpecificConductivity	2630	=	None
CCGC_0491	27/Aug/2014	Sulfate	544	=	None
CCGC_0491	27/Aug/2014	Total Dissolved Solids	1968	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0492	27/Aug/2014	Alkalinity as CaCO3	247	=	None
CCGC_0492	27/Aug/2014	Bicarbonate	301	=	None
CCGC_0492	27/Aug/2014	Calcium	139	=	D
CCGC_0492	27/Aug/2014	Chloride	111	=	None
CCGC_0492	27/Aug/2014	Hardness as CaCO3	598	=	None
CCGC_0492	27/Aug/2014	Magnesium	61	=	D
CCGC_0492	27/Aug/2014	Nitrate + Nitrite as N	21.8	=	None
CCGC_0492	27/Aug/2014	Nitrate as NO3-N	21.4	=	None
CCGC_0492	27/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0492	27/Aug/2014	Potassium	3.8	=	D
CCGC_0492	27/Aug/2014	Sodium	122	=	D
CCGC_0492	27/Aug/2014	SpecificConductivity	1560	=	None
CCGC_0492	27/Aug/2014	Sulfate	348	=	None
CCGC_0492	27/Aug/2014	Total Dissolved Solids	1083	=	None
CCGC_0493	27/Aug/2014	Alkalinity as CaCO3	294	=	None
CCGC_0493	27/Aug/2014	Bicarbonate	359	=	None
CCGC_0493	27/Aug/2014	Calcium	281	=	D
CCGC_0493	27/Aug/2014	Chloride	235	=	None
CCGC_0493	27/Aug/2014	Hardness as CaCO3	1340	=	None
CCGC_0493	27/Aug/2014	Magnesium	155	=	D
CCGC_0493	27/Aug/2014	Nitrate + Nitrite as N	116	=	None
CCGC_0493	27/Aug/2014	Nitrate as NO3-N	117	=	D
CCGC_0493	27/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0493	27/Aug/2014	Potassium	4.7	=	D
CCGC_0493	27/Aug/2014	Sodium	215	=	D
CCGC_0493	27/Aug/2014	SpecificConductivity	3032	=	None
CCGC_0493	27/Aug/2014	Sulfate	635	=	None
CCGC_0493	27/Aug/2014	Total Dissolved Solids	2254	=	None
CCGC_0496	28/Aug/2014	Alkalinity as CaCO3	214	=	None
CCGC_0496	28/Aug/2014	Bicarbonate	261	=	None
CCGC_0496	28/Aug/2014	Calcium	69	=	D
CCGC_0496	28/Aug/2014	Chloride	82	=	None
CCGC_0496	28/Aug/2014	Hardness as CaCO3	271	=	None
CCGC_0496	28/Aug/2014	Magnesium	24	=	D
CCGC_0496	28/Aug/2014	Nitrate + Nitrite as N	5.6	=	None
CCGC_0496	28/Aug/2014	Nitrate as NO3-N	5.3	=	None
CCGC_0496	28/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0496	28/Aug/2014	Potassium	2.9	=	D
CCGC_0496	28/Aug/2014	Sodium	56	=	D
CCGC_0496	28/Aug/2014	SpecificConductivity	753	=	None
CCGC_0496	28/Aug/2014	Sulfate	32	=	None
CCGC_0496	28/Aug/2014	Total Dissolved Solids	443	=	None
CCGC_0498	28/Aug/2014	Alkalinity as CaCO3	280	=	None
CCGC_0498	28/Aug/2014	Bicarbonate	342	=	None
CCGC_0498	28/Aug/2014	Calcium	148	=	D
CCGC_0498	28/Aug/2014	Chloride	230	=	None
CCGC_0498	28/Aug/2014	Hardness as CaCO3	641	=	None
CCGC_0498	28/Aug/2014	Magnesium	66	=	D
CCGC_0498	28/Aug/2014	Nitrate + Nitrite as N	12	=	None
CCGC_0498	28/Aug/2014	Nitrate as NO3-N	11.6	=	None
CCGC_0498	28/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0498	28/Aug/2014	Potassium	4.2	=	D
CCGC_0498	28/Aug/2014	Sodium	221	=	D
CCGC_0498	28/Aug/2014	SpecificConductivity	2078	=	None
CCGC_0498	28/Aug/2014	Sulfate	461	=	None
CCGC_0498	28/Aug/2014	Total Dissolved Solids	1417	=	None
CCGC_0500	28/Aug/2014	Alkalinity as CaCO3	211	=	None
CCGC_0500	28/Aug/2014	Bicarbonate	257	=	None
CCGC_0500	28/Aug/2014	Calcium	171	=	D
CCGC_0500	28/Aug/2014	Chloride	260	=	None
CCGC_0500	28/Aug/2014	Hardness as CaCO3	744	=	None
CCGC_0500	28/Aug/2014	Magnesium	77	=	D
CCGC_0500	28/Aug/2014	Nitrate + Nitrite as N	58.2	=	None
CCGC_0500	28/Aug/2014	Nitrate as NO3-N	57.9	=	None
CCGC_0500	28/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0500	28/Aug/2014	Potassium	4.8	=	D
CCGC_0500	28/Aug/2014	Sodium	170	=	D
CCGC_0500	28/Aug/2014	SpecificConductivity	2063	=	None
CCGC_0500	28/Aug/2014	Sulfate	273	=	None
CCGC_0500	28/Aug/2014	Total Dissolved Solids	1331	=	None
CCGC_0502	28/Aug/2014	Alkalinity as CaCO3	269	=	None
CCGC_0502	28/Aug/2014	Bicarbonate	328	=	None
CCGC_0502	28/Aug/2014	Calcium	224	=	D
CCGC_0502	28/Aug/2014	Chloride	385	=	None
CCGC_0502	28/Aug/2014	Hardness as CaCO3	1292	=	None
CCGC_0502	28/Aug/2014	Magnesium	178	=	D
CCGC_0502	28/Aug/2014	Nitrate + Nitrite as N	19.4	=	None
CCGC_0502	28/Aug/2014	Nitrate as NO3-N	19	=	None
CCGC_0502	28/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0502	28/Aug/2014	Potassium	7.7	=	D
CCGC_0502	28/Aug/2014	Sodium	494	=	D
CCGC_0502	28/Aug/2014	SpecificConductivity	3796	=	None
CCGC_0502	28/Aug/2014	Sulfate	1290	=	D
CCGC_0502	28/Aug/2014	Total Dissolved Solids	2926	=	None
CCGC_0503	28/Aug/2014	Alkalinity as CaCO3	191	=	None
CCGC_0503	28/Aug/2014	Bicarbonate	233	=	None
CCGC_0503	28/Aug/2014	Calcium	211	=	D
CCGC_0503	28/Aug/2014	Chloride	130	=	None
CCGC_0503	28/Aug/2014	Hardness as CaCO3	745	=	None
CCGC_0503	28/Aug/2014	Magnesium	53	=	D
CCGC_0503	28/Aug/2014	Nitrate + Nitrite as N	64.9	=	None
CCGC_0503	28/Aug/2014	Nitrate as NO3-N	64.5	=	None
CCGC_0503	28/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0503	28/Aug/2014	Potassium	6	=	D
CCGC_0503	28/Aug/2014	Sodium	78	=	D
CCGC_0503	28/Aug/2014	SpecificConductivity	1690	=	None
CCGC_0503	28/Aug/2014	Sulfate	271	=	None
CCGC_0503	28/Aug/2014	Total Dissolved Solids	1191	=	None
CCGC_0505	28/Aug/2014	Alkalinity as CaCO3	207	=	None
CCGC_0505	28/Aug/2014	Bicarbonate	253	=	None
CCGC_0505	28/Aug/2014	Calcium	181	=	D
CCGC_0505	28/Aug/2014	Chloride	111	=	None
CCGC_0505	28/Aug/2014	Hardness as CaCO3	637	=	None
CCGC_0505	28/Aug/2014	Magnesium	45	=	D
CCGC_0505	28/Aug/2014	Nitrate + Nitrite as N	42.5	=	None
CCGC_0505	28/Aug/2014	Nitrate as NO3-N	42	=	None
CCGC_0505	28/Aug/2014	Nitrite as NO2-N	0.6	=	None
CCGC_0505	28/Aug/2014	Potassium	5	=	D
CCGC_0505	28/Aug/2014	Sodium	62	=	D
CCGC_0505	28/Aug/2014	SpecificConductivity	1417	=	None
CCGC_0505	28/Aug/2014	Sulfate	219	=	None
CCGC_0505	28/Aug/2014	Total Dissolved Solids	991	=	None
CCGC_0507	28/Aug/2014	Alkalinity as CaCO3	295	=	None
CCGC_0507	28/Aug/2014	Bicarbonate	360	=	None

FieldPoint Name	SampleDate	AnalyteName	Result	Res Qual Code	QACode
CCGC_0507	28/Aug/2014	Calcium	243	=	D
CCGC_0507	28/Aug/2014	Chloride	196	=	None
CCGC_0507	28/Aug/2014	Hardness as CaCO3	1163	=	None
CCGC_0507	28/Aug/2014	Magnesium	135	=	D
CCGC_0507	28/Aug/2014	Nitrate + Nitrite as N	78.5	=	None
CCGC_0507	28/Aug/2014	Nitrate as NO3-N	78.1	=	None
CCGC_0507	28/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0507	28/Aug/2014	Potassium	5.3	=	D
CCGC_0507	28/Aug/2014	Sodium	267	=	D
CCGC_0507	28/Aug/2014	SpecificConductivity	2861	=	None
CCGC_0507	28/Aug/2014	Sulfate	767	=	None
CCGC_0507	28/Aug/2014	Total Dissolved Solids	2194	=	None
CCGC_0508	28/Aug/2014	Alkalinity as CaCO3	157	=	None
CCGC_0508	28/Aug/2014	Bicarbonate	192	=	None
CCGC_0508	28/Aug/2014	Calcium	46	=	D
CCGC_0508	28/Aug/2014	Chloride	22	=	None
CCGC_0508	28/Aug/2014	Hardness as CaCO3	205	=	None
CCGC_0508	28/Aug/2014	Magnesium	22	=	D
CCGC_0508	28/Aug/2014	Nitrate + Nitrite as N	3	=	None
CCGC_0508	28/Aug/2014	Nitrate as NO3-N	2.6	=	None
CCGC_0508	28/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0508	28/Aug/2014	Potassium	1.5	=	D
CCGC_0508	28/Aug/2014	Sodium	45	=	D
CCGC_0508	28/Aug/2014	SpecificConductivity	546	=	None
CCGC_0508	28/Aug/2014	Sulfate	83	=	None
CCGC_0508	28/Aug/2014	Total Dissolved Solids	331	=	None
CCGC_0509	28/Aug/2014	Alkalinity as CaCO3	231	=	None
CCGC_0509	28/Aug/2014	Bicarbonate	282	=	None
CCGC_0509	28/Aug/2014	Calcium	123	=	D
CCGC_0509	28/Aug/2014	Chloride	69	=	None
CCGC_0509	28/Aug/2014	Hardness as CaCO3	558	=	None
CCGC_0509	28/Aug/2014	Magnesium	61	=	D
CCGC_0509	28/Aug/2014	Nitrate + Nitrite as N	32.8	=	None
CCGC_0509	28/Aug/2014	Nitrate as NO3-N	32.4	=	None
CCGC_0509	28/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0509	28/Aug/2014	Potassium	3.6	=	D
CCGC_0509	28/Aug/2014	Sodium	125	=	D
CCGC_0509	28/Aug/2014	SpecificConductivity	1521	=	None
CCGC_0509	28/Aug/2014	Sulfate	306	=	None
CCGC_0509	28/Aug/2014	Total Dissolved Solids	1063	=	None
CCGC_0510	28/Aug/2014	Alkalinity as CaCO3	143	=	None
CCGC_0510	28/Aug/2014	Bicarbonate	174	=	None
CCGC_0510	28/Aug/2014	Calcium	47	=	D
CCGC_0510	28/Aug/2014	Chloride	15	=	None
CCGC_0510	28/Aug/2014	Hardness as CaCO3	191	=	None
CCGC_0510	28/Aug/2014	Magnesium	18	=	D
CCGC_0510	28/Aug/2014	Nitrate + Nitrite as N	0.8	=	None
CCGC_0510	28/Aug/2014	Nitrate as NO3-N	0.5	=	None
CCGC_0510	28/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0510	28/Aug/2014	Potassium	1.1	=	D
CCGC_0510	28/Aug/2014	Sodium	24	=	D
CCGC_0510	28/Aug/2014	SpecificConductivity	428	=	None
CCGC_0510	28/Aug/2014	Sulfate	55	=	None
CCGC_0510	28/Aug/2014	Total Dissolved Solids	271	=	None
CCGC_0511	27/Aug/2014	Alkalinity as CaCO3	305	=	None
CCGC_0511	27/Aug/2014	Bicarbonate	372	=	None
CCGC_0511	27/Aug/2014	Calcium	183	=	D
CCGC_0511	27/Aug/2014	Chloride	378	=	None
CCGC_0511	27/Aug/2014	Hardness as CaCO3	893	=	None
CCGC_0511	27/Aug/2014	Magnesium	106	=	D
CCGC_0511	27/Aug/2014	Nitrate + Nitrite as N	45.1	=	None
CCGC_0511	27/Aug/2014	Nitrate as NO3-N	44.7	=	None
CCGC_0511	27/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0511	27/Aug/2014	Potassium	4	=	D
CCGC_0511	27/Aug/2014	Sodium	356	=	D
CCGC_0511	27/Aug/2014	SpecificConductivity	2924	=	None
CCGC_0511	27/Aug/2014	Sulfate	550	=	None
CCGC_0511	27/Aug/2014	Total Dissolved Solids	1963	=	None
CCGC_0512	26/Aug/2014	Alkalinity as CaCO3	200	=	None
CCGC_0512	26/Aug/2014	Bicarbonate	244	=	None
CCGC_0512	26/Aug/2014	Calcium	99	=	D
CCGC_0512	26/Aug/2014	Chloride	75	=	None
CCGC_0512	26/Aug/2014	Hardness as CaCO3	420	=	None
CCGC_0512	26/Aug/2014	Magnesium	42	=	D
CCGC_0512	26/Aug/2014	Nitrate + Nitrite as N	21.3	=	None
CCGC_0512	26/Aug/2014	Nitrate as NO3-N	21	=	None
CCGC_0512	26/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0512	26/Aug/2014	Potassium	2.5	=	D
CCGC_0512	26/Aug/2014	Sodium	71	=	D
CCGC_0512	26/Aug/2014	SpecificConductivity	1026	=	None
CCGC_0512	26/Aug/2014	Sulfate	143	=	None
CCGC_0512	26/Aug/2014	Total Dissolved Solids	671	=	None
CCGC_0513	27/Aug/2014	Alkalinity as CaCO3	212	=	None
CCGC_0513	27/Aug/2014	Bicarbonate	259	=	None
CCGC_0513	27/Aug/2014	Calcium	130	=	D
CCGC_0513	27/Aug/2014	Chloride	111	=	None
CCGC_0513	27/Aug/2014	Hardness as CaCO3	584	=	None
CCGC_0513	27/Aug/2014	Magnesium	63	=	D
CCGC_0513	27/Aug/2014	Nitrate + Nitrite as N	10.9	=	None
CCGC_0513	27/Aug/2014	Nitrate as NO3-N	10.6	=	None
CCGC_0513	27/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0513	27/Aug/2014	Potassium	2.4	=	D
CCGC_0513	27/Aug/2014	Sodium	98	=	D
CCGC_0513	27/Aug/2014	SpecificConductivity	1387	=	None
CCGC_0513	27/Aug/2014	Sulfate	330	=	None
CCGC_0513	27/Aug/2014	Total Dissolved Solids	951	=	None
CCGC_0514	28/Aug/2014	Alkalinity as CaCO3	179	=	None
CCGC_0514	28/Aug/2014	Bicarbonate	218	=	None
CCGC_0514	28/Aug/2014	Calcium	260	=	D
CCGC_0514	28/Aug/2014	Chloride	235	=	None
CCGC_0514	28/Aug/2014	Hardness as CaCO3	876	=	None
CCGC_0514	28/Aug/2014	Magnesium	55	=	D
CCGC_0514	28/Aug/2014	Nitrate + Nitrite as N	77.6	=	None
CCGC_0514	28/Aug/2014	Nitrate as NO3-N	77.4	=	None
CCGC_0514	28/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0514	28/Aug/2014	Potassium	4.3	=	D
CCGC_0514	28/Aug/2014	Sodium	123	=	D
CCGC_0514	28/Aug/2014	SpecificConductivity	2081	=	None
CCGC_0514	28/Aug/2014	Sulfate	277	=	None
CCGC_0514	28/Aug/2014	Total Dissolved Solids	1531	=	None

QA Code	Definition
D	EPA Flag - Analytes analyzed at a secondary dilution

FieldPointName	SampleDate	AnalyteName	Result	UnitName
CCGC_0001	24/Oct/2013	Oxidation-Reduction Potential	128.9	mV
CCGC_0001	24/Oct/2013	Oxygen, Dissolved	3.51	mg/L
CCGC_0001	24/Oct/2013	pH	7.35	none
CCGC_0001	24/Oct/2013	SpecificConductivity	1111	uS/cm
CCGC_0001	24/Oct/2013	Temperature	17.6	Deg C
CCGC_0002	24/Oct/2013	Oxidation-Reduction Potential	-57.3	mV
CCGC_0002	24/Oct/2013	Oxygen, Dissolved	5.19	mg/L
CCGC_0002	24/Oct/2013	pH	7.77	none
CCGC_0002	24/Oct/2013	SpecificConductivity	1456	uS/cm
CCGC_0002	24/Oct/2013	Temperature	17.18	Deg C
CCGC_0003	24/Oct/2013	Oxidation-Reduction Potential	111.1	mV
CCGC_0003	24/Oct/2013	Oxygen, Dissolved	2.27	mg/L
CCGC_0003	24/Oct/2013	pH	7.07	none
CCGC_0003	24/Oct/2013	SpecificConductivity	2141	uS/cm
CCGC_0003	24/Oct/2013	Temperature	18.4	Deg C
CCGC_0004	22/Oct/2013	Oxidation-Reduction Potential	122	mV
CCGC_0004	22/Oct/2013	Oxygen, Dissolved	3.3	mg/L
CCGC_0004	22/Oct/2013	pH	7.37	none
CCGC_0004	22/Oct/2013	SpecificConductivity	669	uS/cm
CCGC_0004	22/Oct/2013	Temperature	20.15	Deg C
CCGC_0005	21/Oct/2013	Oxidation-Reduction Potential	143.9	mV
CCGC_0005	21/Oct/2013	Oxygen, Dissolved	3.06	mg/L
CCGC_0005	21/Oct/2013	pH	7.39	none
CCGC_0005	21/Oct/2013	SpecificConductivity	1171	uS/cm
CCGC_0005	21/Oct/2013	Temperature	17.92	Deg C
CCGC_0006	25/Oct/2013	Oxidation-Reduction Potential	118.9	mV
CCGC_0006	25/Oct/2013	Oxygen, Dissolved	8.27	mg/L
CCGC_0006	25/Oct/2013	pH	7.17	none
CCGC_0006	25/Oct/2013	SpecificConductivity	1439	uS/cm
CCGC_0006	25/Oct/2013	Temperature	16.9	Deg C
CCGC_0007	21/Oct/2013	Oxidation-Reduction Potential	163.3	mV
CCGC_0007	21/Oct/2013	Oxygen, Dissolved	6.55	mg/L
CCGC_0007	21/Oct/2013	pH	6.97	none
CCGC_0007	21/Oct/2013	SpecificConductivity	690	uS/cm
CCGC_0007	21/Oct/2013	Temperature	20.07	Deg C
CCGC_0008	22/Oct/2013	Oxidation-Reduction Potential	120.2	mV
CCGC_0008	22/Oct/2013	Oxygen, Dissolved	7.97	mg/L
CCGC_0008	22/Oct/2013	pH	7.08	none
CCGC_0008	22/Oct/2013	SpecificConductivity	1768	uS/cm
CCGC_0008	22/Oct/2013	Temperature	17.9	Deg C
CCGC_0009	21/Oct/2013	Oxidation-Reduction Potential	164.2	mV
CCGC_0009	21/Oct/2013	Oxygen, Dissolved	0.14	mg/L
CCGC_0009	21/Oct/2013	pH	7.3	none
CCGC_0009	21/Oct/2013	SpecificConductivity	563	uS/cm
CCGC_0009	21/Oct/2013	Temperature	18.03	Deg C
CCGC_0010	21/Oct/2013	Oxidation-Reduction Potential	159.3	mV
CCGC_0010	21/Oct/2013	Oxygen, Dissolved	0.12	mg/L
CCGC_0010	21/Oct/2013	pH	7.27	none
CCGC_0010	21/Oct/2013	SpecificConductivity	1971	uS/cm
CCGC_0010	21/Oct/2013	Temperature	17.2	Deg C
CCGC_0011	25/Oct/2013	Oxidation-Reduction Potential	91.6	mV
CCGC_0011	25/Oct/2013	Oxygen, Dissolved	8.75	mg/L
CCGC_0011	25/Oct/2013	pH	7.34	none
CCGC_0011	25/Oct/2013	SpecificConductivity	819	uS/cm
CCGC_0011	25/Oct/2013	Temperature	16.2	Deg C
CCGC_0012	21/Oct/2013	Oxidation-Reduction Potential	120.9	mV
CCGC_0012	21/Oct/2013	Oxygen, Dissolved	3.34	mg/L

FieldPointName	SampleDate	AnalyteName	Result	UnitName
CCGC_0012	21/Oct/2013	pH	7.54	none
CCGC_0012	21/Oct/2013	SpecificConductivity	886	uS/cm
CCGC_0012	21/Oct/2013	Temperature	18.3	Deg C
CCGC_0013	25/Oct/2013	Oxidation-Reduction Potential	172.7	mV
CCGC_0013	25/Oct/2013	Oxygen, Dissolved	1.04	mg/L
CCGC_0013	25/Oct/2013	pH	7.3	none
CCGC_0013	25/Oct/2013	SpecificConductivity	895	uS/cm
CCGC_0013	25/Oct/2013	Temperature	17.3	Deg C
CCGC_0014	23/Oct/2013	Oxidation-Reduction Potential	118.2	mV
CCGC_0014	23/Oct/2013	Oxygen, Dissolved	5.37	mg/L
CCGC_0014	23/Oct/2013	pH	7.17	none
CCGC_0014	23/Oct/2013	SpecificConductivity	1556	uS/cm
CCGC_0014	23/Oct/2013	Temperature	22.3	Deg C
CCGC_0015	25/Oct/2013	Oxidation-Reduction Potential	46.4	mV
CCGC_0015	25/Oct/2013	Oxygen, Dissolved	1.38	mg/L
CCGC_0015	25/Oct/2013	pH	7.22	none
CCGC_0015	25/Oct/2013	SpecificConductivity	2298	uS/cm
CCGC_0015	25/Oct/2013	Temperature	16.9	Deg C
CCGC_0016	22/Oct/2013	Oxidation-Reduction Potential	98.9	mV
CCGC_0016	22/Oct/2013	Oxygen, Dissolved	0.4	mg/L
CCGC_0016	22/Oct/2013	pH	7.3	none
CCGC_0016	22/Oct/2013	SpecificConductivity	995	uS/cm
CCGC_0016	22/Oct/2013	Temperature	20.2	Deg C
CCGC_0017	21/Oct/2013	Oxidation-Reduction Potential	95.7	mV
CCGC_0017	21/Oct/2013	Oxygen, Dissolved	7.21	mg/L
CCGC_0017	21/Oct/2013	pH	7.22	none
CCGC_0017	21/Oct/2013	SpecificConductivity	2288	uS/cm
CCGC_0017	21/Oct/2013	Temperature	18.58	Deg C
CCGC_0018	21/Oct/2013	Oxidation-Reduction Potential	304.2	mV
CCGC_0018	21/Oct/2013	Oxygen, Dissolved	6.93	mg/L
CCGC_0018	21/Oct/2013	pH	6.59	none
CCGC_0018	21/Oct/2013	SpecificConductivity	1262	uS/cm
CCGC_0018	21/Oct/2013	Temperature	17.77	Deg C
CCGC_0019	24/Oct/2013	Oxidation-Reduction Potential	138.1	mV
CCGC_0019	24/Oct/2013	Oxygen, Dissolved	4.38	mg/L
CCGC_0019	24/Oct/2013	pH	7.32	none
CCGC_0019	24/Oct/2013	SpecificConductivity	547.5	uS/cm
CCGC_0019	24/Oct/2013	Temperature	15.1	Deg C
CCGC_0020	21/Oct/2013	Oxidation-Reduction Potential	120.2	mV
CCGC_0020	21/Oct/2013	Oxygen, Dissolved	6.11	mg/L
CCGC_0020	21/Oct/2013	pH	7.29	none
CCGC_0020	21/Oct/2013	SpecificConductivity	1013	uS/cm
CCGC_0020	21/Oct/2013	Temperature	20.7	Deg C
CCGC_0021	25/Oct/2013	Oxidation-Reduction Potential	161.6	mV
CCGC_0021	25/Oct/2013	Oxygen, Dissolved	5.55	mg/L
CCGC_0021	25/Oct/2013	pH	7.29	none
CCGC_0021	25/Oct/2013	SpecificConductivity	608	uS/cm
CCGC_0021	25/Oct/2013	Temperature	25	Deg C
CCGC_0022	25/Oct/2013	Oxidation-Reduction Potential	109.5	mV
CCGC_0022	25/Oct/2013	Oxygen, Dissolved	6.22	mg/L
CCGC_0022	25/Oct/2013	pH	7.03	none
CCGC_0022	25/Oct/2013	SpecificConductivity	2594	uS/cm
CCGC_0022	25/Oct/2013	Temperature	17.8	Deg C
CCGC_0023	21/Oct/2013	Oxidation-Reduction Potential	148.7	mV
CCGC_0023	21/Oct/2013	Oxygen, Dissolved	2.76	mg/L
CCGC_0023	21/Oct/2013	pH	7.3	none
CCGC_0023	21/Oct/2013	SpecificConductivity	722	uS/cm

FieldPointName	SampleDate	AnalyteName	Result	UnitName
CCGC_0023	21/Oct/2013	Temperature	21.76	Deg C
CCGC_0024	24/Oct/2013	Oxidation-Reduction Potential	-46	mV
CCGC_0024	24/Oct/2013	Oxygen, Dissolved	0.58	mg/L
CCGC_0024	24/Oct/2013	pH	7.47	none
CCGC_0024	24/Oct/2013	SpecificConductivity	530	uS/cm
CCGC_0024	24/Oct/2013	Temperature	18.67	Deg C
CCGC_0025	24/Oct/2013	Oxidation-Reduction Potential	-53.3	mV
CCGC_0025	24/Oct/2013	Oxygen, Dissolved	0.19	mg/L
CCGC_0025	24/Oct/2013	pH	7.8	none
CCGC_0025	24/Oct/2013	SpecificConductivity	857	uS/cm
CCGC_0025	24/Oct/2013	Temperature	14.6	Deg C
CCGC_0026	24/Oct/2013	Oxidation-Reduction Potential	125.8	mV
CCGC_0026	24/Oct/2013	Oxygen, Dissolved	5.89	mg/L
CCGC_0026	24/Oct/2013	pH	7.22	none
CCGC_0026	24/Oct/2013	SpecificConductivity	441.5	uS/cm
CCGC_0026	24/Oct/2013	Temperature	15.3	Deg C
CCGC_0027	24/Oct/2013	Oxidation-Reduction Potential	141.3	mV
CCGC_0027	24/Oct/2013	Oxygen, Dissolved	7.98	mg/L
CCGC_0027	24/Oct/2013	pH	7.34	none
CCGC_0027	24/Oct/2013	SpecificConductivity	735	uS/cm
CCGC_0027	24/Oct/2013	Temperature	16.4	Deg C
CCGC_0028	24/Oct/2013	Oxidation-Reduction Potential	156.2	mV
CCGC_0028	24/Oct/2013	Oxygen, Dissolved	9.21	mg/L
CCGC_0028	24/Oct/2013	pH	7.17	none
CCGC_0028	24/Oct/2013	SpecificConductivity	847	uS/cm
CCGC_0028	24/Oct/2013	Temperature	14.9	Deg C
CCGC_0029	24/Oct/2013	Oxidation-Reduction Potential	296.5	mV
CCGC_0029	24/Oct/2013	Oxygen, Dissolved	7.99	mg/L
CCGC_0029	24/Oct/2013	pH	7.42	none
CCGC_0029	24/Oct/2013	SpecificConductivity	401.7	uS/cm
CCGC_0029	24/Oct/2013	Temperature	15.7	Deg C
CCGC_0030	24/Oct/2013	Oxidation-Reduction Potential	116.5	mV
CCGC_0030	24/Oct/2013	Oxygen, Dissolved	4.49	mg/L
CCGC_0030	24/Oct/2013	pH	7.34	none
CCGC_0030	24/Oct/2013	SpecificConductivity	352	uS/cm
CCGC_0030	24/Oct/2013	Temperature	15	Deg C
CCGC_0031	22/Oct/2013	Oxidation-Reduction Potential	122.6	mV
CCGC_0031	22/Oct/2013	Oxygen, Dissolved	1.64	mg/L
CCGC_0031	22/Oct/2013	pH	7.38	none
CCGC_0031	22/Oct/2013	SpecificConductivity	1500	uS/cm
CCGC_0031	22/Oct/2013	Temperature	20.59	Deg C
CCGC_0032	25/Oct/2013	Oxidation-Reduction Potential	193.2	mV
CCGC_0032	25/Oct/2013	Oxygen, Dissolved	7.58	mg/L
CCGC_0032	25/Oct/2013	pH	7.54	none
CCGC_0032	25/Oct/2013	SpecificConductivity	2118	uS/cm
CCGC_0032	25/Oct/2013	Temperature	14.6	Deg C
CCGC_0033	22/Oct/2013	Oxidation-Reduction Potential	82	mV
CCGC_0033	22/Oct/2013	Oxygen, Dissolved	0.18	mg/L
CCGC_0033	22/Oct/2013	pH	6.93	none
CCGC_0033	22/Oct/2013	SpecificConductivity	1079	uS/cm
CCGC_0033	22/Oct/2013	Temperature	15.52	Deg C
CCGC_0034	22/Oct/2013	Oxidation-Reduction Potential	71.8	mV
CCGC_0034	22/Oct/2013	Oxygen, Dissolved	1.13	mg/L
CCGC_0034	22/Oct/2013	pH	6.89	none
CCGC_0034	22/Oct/2013	SpecificConductivity	776	uS/cm
CCGC_0034	22/Oct/2013	Temperature	19.73	Deg C
CCGC_0035	21/Oct/2013	Oxidation-Reduction Potential	96.7	mV
CCGC_0035	21/Oct/2013	Oxygen, Dissolved	0.35	mg/L
CCGC_0035	21/Oct/2013	pH	7.34	none
CCGC_0035	21/Oct/2013	SpecificConductivity	1648	uS/cm
CCGC_0035	21/Oct/2013	Temperature	15.71	Deg C
CCGC_0036	22/Oct/2013	Oxidation-Reduction Potential	44.6	mV
CCGC_0036	22/Oct/2013	Oxygen, Dissolved	2.19	mg/L
CCGC_0036	22/Oct/2013	pH	7.6	none
CCGC_0036	22/Oct/2013	SpecificConductivity	775	uS/cm
CCGC_0036	22/Oct/2013	Temperature	22.48	Deg C
CCGC_0037	22/Oct/2013	Oxidation-Reduction Potential	93.3	mV
CCGC_0037	22/Oct/2013	Oxygen, Dissolved	7.77	mg/L
CCGC_0037	22/Oct/2013	pH	7.13	none
CCGC_0037	22/Oct/2013	SpecificConductivity	3267	uS/cm
CCGC_0037	22/Oct/2013	Temperature	17.13	Deg C
CCGC_0038	22/Oct/2013	Oxidation-Reduction Potential	73.1	mV
CCGC_0038	22/Oct/2013	Oxygen, Dissolved	2.03	mg/L
CCGC_0038	22/Oct/2013	pH	7.54	none
CCGC_0038	22/Oct/2013	SpecificConductivity	842	uS/cm
CCGC_0038	22/Oct/2013	Temperature	23.83	Deg C
CCGC_0039	25/Oct/2013	Oxidation-Reduction Potential	99.6	mV
CCGC_0039	25/Oct/2013	Oxygen, Dissolved	0.17	mg/L
CCGC_0039	25/Oct/2013	pH	7.43	none
CCGC_0039	25/Oct/2013	SpecificConductivity	991	uS/cm
CCGC_0039	25/Oct/2013	Temperature	15.9	Deg C
CCGC_0040	24/Oct/2013	Oxidation-Reduction Potential	85.9	mV
CCGC_0040	24/Oct/2013	Oxygen, Dissolved	2.18	mg/L
CCGC_0040	24/Oct/2013	pH	7.08	none
CCGC_0040	24/Oct/2013	SpecificConductivity	1105	uS/cm
CCGC_0040	24/Oct/2013	Temperature	17.85	Deg C
CCGC_0041	24/Oct/2013	Oxidation-Reduction Potential	-12.5	mV
CCGC_0041	24/Oct/2013	Oxygen, Dissolved	2.68	mg/L
CCGC_0041	24/Oct/2013	pH	7.66	none
CCGC_0041	24/Oct/2013	SpecificConductivity	751	uS/cm
CCGC_0041	24/Oct/2013	Temperature	15.25	Deg C
CCGC_0042	24/Oct/2013	Oxidation-Reduction Potential	114.6	mV
CCGC_0042	24/Oct/2013	Oxygen, Dissolved	7.49	mg/L
CCGC_0042	24/Oct/2013	pH	7.46	none
CCGC_0042	24/Oct/2013	SpecificConductivity	476.9	uS/cm
CCGC_0042	24/Oct/2013	Temperature	18.7	Deg C
CCGC_0043	22/Oct/2013	Oxidation-Reduction Potential	210.6	mV
CCGC_0043	22/Oct/2013	Oxygen, Dissolved	1.18	mg/L
CCGC_0043	22/Oct/2013	pH	7.32	none
CCGC_0043	22/Oct/2013	SpecificConductivity	1486	uS/cm
CCGC_0043	22/Oct/2013	Temperature	17.7	Deg C
CCGC_0044	22/Oct/2013	Oxidation-Reduction Potential	160.6	mV
CCGC_0044	22/Oct/2013	Oxygen, Dissolved	1.84	mg/L
CCGC_0044	22/Oct/2013	pH	7.12	none
CCGC_0044	22/Oct/2013	SpecificConductivity	3055	uS/cm
CCGC_0044	22/Oct/2013	Temperature	17	Deg C
CCGC_0045	23/Oct/2013	Oxidation-Reduction Potential	131.9	mV
CCGC_0045	23/Oct/2013	Oxygen, Dissolved	1.68	mg/L
CCGC_0045	23/Oct/2013	pH	7.68	none
CCGC_0045	23/Oct/2013	SpecificConductivity	545	uS/cm
CCGC_0045	23/Oct/2013	Temperature	16.44	Deg C
CCGC_0046	23/Oct/2013	Oxidation-Reduction Potential	121.1	mV
CCGC_0046	23/Oct/2013	Oxygen, Dissolved	4.24	mg/L
CCGC_0046	23/Oct/2013	pH	7.6	none

FieldPointName	SampleDate	AnalyteName	Result	UnitName
CCGC_0046	23/Oct/2013	SpecificConductivity	554	uS/cm
CCGC_0046	23/Oct/2013	Temperature	16.78	Deg C
CCGC_0047	23/Oct/2013	Oxidation-Reduction Potential	110.9	mV
CCGC_0047	23/Oct/2013	Oxygen, Dissolved	1.72	mg/L
CCGC_0047	23/Oct/2013	pH	7.67	none
CCGC_0047	23/Oct/2013	SpecificConductivity	578	uS/cm
CCGC_0047	23/Oct/2013	Temperature	17.4	Deg C
CCGC_0048	23/Oct/2013	Oxidation-Reduction Potential	33	mV
CCGC_0048	23/Oct/2013	Oxygen, Dissolved	0.07	mg/L
CCGC_0048	23/Oct/2013	pH	7.43	none
CCGC_0048	23/Oct/2013	SpecificConductivity	688	uS/cm
CCGC_0048	23/Oct/2013	Temperature	16.64	Deg C
CCGC_0049	23/Oct/2013	Oxidation-Reduction Potential	115.5	mV
CCGC_0049	23/Oct/2013	Oxygen, Dissolved	0.05	mg/L
CCGC_0049	23/Oct/2013	pH	7.3	none
CCGC_0049	23/Oct/2013	SpecificConductivity	1273	uS/cm
CCGC_0049	23/Oct/2013	Temperature	15.88	Deg C
CCGC_0050	24/Oct/2013	Oxidation-Reduction Potential	138.6	mV
CCGC_0050	24/Oct/2013	Oxygen, Dissolved	8.47	mg/L
CCGC_0050	24/Oct/2013	pH	7.33	none
CCGC_0050	24/Oct/2013	SpecificConductivity	644	uS/cm
CCGC_0050	24/Oct/2013	Temperature	16.2	Deg C
CCGC_0051	24/Oct/2013	Oxidation-Reduction Potential	93.8	mV
CCGC_0051	24/Oct/2013	Oxygen, Dissolved	4.22	mg/L
CCGC_0051	24/Oct/2013	pH	7.47	none
CCGC_0051	24/Oct/2013	SpecificConductivity	439	uS/cm
CCGC_0051	24/Oct/2013	Temperature	19.2	Deg C
CCGC_0052	23/Oct/2013	Oxidation-Reduction Potential	147.6	mV
CCGC_0052	23/Oct/2013	Oxygen, Dissolved	7.69	mg/L
CCGC_0052	23/Oct/2013	pH	7.18	none
CCGC_0052	23/Oct/2013	SpecificConductivity	1689	uS/cm
CCGC_0052	23/Oct/2013	Temperature	16.7	Deg C
CCGC_0053	23/Oct/2013	Oxidation-Reduction Potential	109.8	mV
CCGC_0053	23/Oct/2013	Oxygen, Dissolved	3.56	mg/L
CCGC_0053	23/Oct/2013	pH	7.15	none
CCGC_0053	23/Oct/2013	SpecificConductivity	3896	uS/cm
CCGC_0053	23/Oct/2013	Temperature	18.8	Deg C
CCGC_0054	21/Oct/2013	Oxidation-Reduction Potential	166.9	mV
CCGC_0054	21/Oct/2013	Oxygen, Dissolved	0.08	mg/L
CCGC_0054	21/Oct/2013	pH	7.58	none
CCGC_0054	21/Oct/2013	SpecificConductivity	1783	uS/cm
CCGC_0054	21/Oct/2013	Temperature	16	Deg C
CCGC_0055	23/Oct/2013	Oxidation-Reduction Potential	108.7	mV
CCGC_0055	23/Oct/2013	Oxygen, Dissolved	5.33	mg/L
CCGC_0055	23/Oct/2013	pH	7.24	none
CCGC_0055	23/Oct/2013	SpecificConductivity	1942	uS/cm
CCGC_0055	23/Oct/2013	Temperature	18.99	Deg C
CCGC_0056	23/Oct/2013	Oxidation-Reduction Potential	118.2	mV
CCGC_0056	28/Aug/2014	Oxidation-Reduction Potential	132.4	mV
CCGC_0056	23/Oct/2013	Oxygen, Dissolved	0.18	mg/L
CCGC_0056	28/Aug/2014	Oxygen, Dissolved	0.27	mg/L
CCGC_0056	23/Oct/2013	pH	7.54	none
CCGC_0056	28/Aug/2014	pH	7.21	none
CCGC_0056	23/Oct/2013	SpecificConductivity	1699	uS/cm
CCGC_0056	28/Aug/2014	SpecificConductivity	1427	uS/cm
CCGC_0056	23/Oct/2013	Temperature	16.26	Deg C
CCGC_0056	28/Aug/2014	Temperature	20.4	Deg C

FieldPointName	SampleDate	AnalyteName	Result	UnitName
CCGC_0057	23/Oct/2013	Oxidation-Reduction Potential	105.4	mV
CCGC_0057	23/Oct/2013	Oxygen, Dissolved	1.09	mg/L
CCGC_0057	23/Oct/2013	pH	7.41	none
CCGC_0057	23/Oct/2013	SpecificConductivity	1224	uS/cm
CCGC_0057	23/Oct/2013	Temperature	15.18	Deg C
CCGC_0058	25/Oct/2013	Oxidation-Reduction Potential	167.4	mV
CCGC_0058	25/Oct/2013	Oxygen, Dissolved	0.6	mg/L
CCGC_0058	25/Oct/2013	pH	7.3	none
CCGC_0058	25/Oct/2013	SpecificConductivity	693	uS/cm
CCGC_0058	25/Oct/2013	Temperature	17	Deg C
CCGC_0059	23/Oct/2013	Oxidation-Reduction Potential	124.7	mV
CCGC_0059	28/Aug/2014	Oxidation-Reduction Potential	139.7	mV
CCGC_0059	23/Oct/2013	Oxygen, Dissolved	1.72	mg/L
CCGC_0059	28/Aug/2014	Oxygen, Dissolved	2.54	mg/L
CCGC_0059	23/Oct/2013	pH	7.11	none
CCGC_0059	28/Aug/2014	pH	7.14	none
CCGC_0059	23/Oct/2013	SpecificConductivity	1180	uS/cm
CCGC_0059	28/Aug/2014	SpecificConductivity	1144	uS/cm
CCGC_0059	23/Oct/2013	Temperature	15.95	Deg C
CCGC_0059	28/Aug/2014	Temperature	18.8	Deg C
CCGC_0060	21/Oct/2013	Oxidation-Reduction Potential	110	mV
CCGC_0060	21/Oct/2013	Oxygen, Dissolved	2.95	mg/L
CCGC_0060	21/Oct/2013	pH	7.58	none
CCGC_0060	21/Oct/2013	SpecificConductivity	590.9	uS/cm
CCGC_0060	21/Oct/2013	Temperature	16.5	Deg C
CCGC_0061	23/Oct/2013	Oxidation-Reduction Potential	117.7	mV
CCGC_0061	23/Oct/2013	Oxygen, Dissolved	8.35	mg/L
CCGC_0061	23/Oct/2013	pH	7.08	none
CCGC_0061	23/Oct/2013	SpecificConductivity	1972	uS/cm
CCGC_0061	23/Oct/2013	Temperature	17.4	Deg C
CCGC_0062	23/Oct/2013	Oxidation-Reduction Potential	90.6	mV
CCGC_0062	23/Oct/2013	Oxygen, Dissolved	1.69	mg/L
CCGC_0062	23/Oct/2013	pH	7.51	none
CCGC_0062	23/Oct/2013	SpecificConductivity	456.2	uS/cm
CCGC_0062	23/Oct/2013	Temperature	17.7	Deg C
CCGC_0063	23/Oct/2013	Oxidation-Reduction Potential	106.5	mV
CCGC_0063	23/Oct/2013	Oxygen, Dissolved	7.92	mg/L
CCGC_0063	23/Oct/2013	pH	7.11	none
CCGC_0063	23/Oct/2013	SpecificConductivity	1553	uS/cm
CCGC_0063	23/Oct/2013	Temperature	17.2	Deg C
CCGC_0064	22/Oct/2013	Oxidation-Reduction Potential	121.2	mV
CCGC_0064	22/Oct/2013	Oxygen, Dissolved	1.33	mg/L
CCGC_0064	22/Oct/2013	pH	7.56	none
CCGC_0064	22/Oct/2013	SpecificConductivity	498.7	uS/cm
CCGC_0064	22/Oct/2013	Temperature	17.6	Deg C
CCGC_0065	22/Oct/2013	Oxidation-Reduction Potential	219.2	mV
CCGC_0065	22/Oct/2013	Oxygen, Dissolved	6.83	mg/L
CCGC_0065	22/Oct/2013	pH	7.21	none
CCGC_0065	22/Oct/2013	SpecificConductivity	2064	uS/cm
CCGC_0065	22/Oct/2013	Temperature	17.7	Deg C
CCGC_0066	22/Oct/2013	Oxidation-Reduction Potential	24.8	mV
CCGC_0066	22/Oct/2013	Oxygen, Dissolved	1.25	mg/L
CCGC_0066	22/Oct/2013	pH	7.39	none
CCGC_0066	22/Oct/2013	SpecificConductivity	1023	uS/cm
CCGC_0066	22/Oct/2013	Temperature	17.8	Deg C
CCGC_0067	25/Oct/2013	Oxidation-Reduction Potential	122.9	mV
CCGC_0067	25/Oct/2013	Oxygen, Dissolved	0.24	mg/L

FieldPointName	SampleDate	AnalyteName	Result	UnitName
CCGC_0067	25/Oct/2013	pH	7.61	none
CCGC_0067	25/Oct/2013	SpecificConductivity	811	uS/cm
CCGC_0067	25/Oct/2013	Temperature	16.9	Deg C
CCGC_0068	22/Oct/2013	Oxidation-Reduction Potential	-33.8	mV
CCGC_0068	22/Oct/2013	Oxygen, Dissolved	0.08	mg/L
CCGC_0068	22/Oct/2013	pH	7.48	none
CCGC_0068	22/Oct/2013	SpecificConductivity	1768	uS/cm
CCGC_0068	22/Oct/2013	Temperature	18.31	Deg C
CCGC_0069	21/Oct/2013	Oxidation-Reduction Potential	84	mV
CCGC_0069	21/Oct/2013	Oxygen, Dissolved	0.75	mg/L
CCGC_0069	21/Oct/2013	pH	7.11	none
CCGC_0069	21/Oct/2013	SpecificConductivity	1061	uS/cm
CCGC_0069	21/Oct/2013	Temperature	18.8	Deg C
CCGC_0070	21/Oct/2013	Oxidation-Reduction Potential	189	mV
CCGC_0070	21/Oct/2013	Oxygen, Dissolved	0.08	mg/L
CCGC_0070	21/Oct/2013	pH	7.34	none
CCGC_0070	21/Oct/2013	SpecificConductivity	1021	uS/cm
CCGC_0070	21/Oct/2013	Temperature	17.89	Deg C
CCGC_0071	25/Oct/2013	Oxidation-Reduction Potential	140.3	mV
CCGC_0071	25/Oct/2013	Oxygen, Dissolved	3.35	mg/L
CCGC_0071	25/Oct/2013	pH	7.37	none
CCGC_0071	25/Oct/2013	SpecificConductivity	633	uS/cm
CCGC_0071	25/Oct/2013	Temperature	23.1	Deg C
CCGC_0072	23/Oct/2013	Oxidation-Reduction Potential	160.9	mV
CCGC_0072	23/Oct/2013	Oxygen, Dissolved	7.79	mg/L
CCGC_0072	23/Oct/2013	pH	7.22	none
CCGC_0072	23/Oct/2013	SpecificConductivity	379.7	uS/cm
CCGC_0072	23/Oct/2013	Temperature	14.1	Deg C
CCGC_0073	25/Oct/2013	Oxidation-Reduction Potential	149.9	mV
CCGC_0073	25/Oct/2013	Oxygen, Dissolved	9.48	mg/L
CCGC_0073	25/Oct/2013	pH	7.22	none
CCGC_0073	25/Oct/2013	SpecificConductivity	439.3	uS/cm
CCGC_0073	25/Oct/2013	Temperature	14	Deg C
CCGC_0074	23/Oct/2013	Oxidation-Reduction Potential	167.3	mV
CCGC_0074	23/Oct/2013	Oxygen, Dissolved	8.67	mg/L
CCGC_0074	23/Oct/2013	pH	7.1	none
CCGC_0074	23/Oct/2013	SpecificConductivity	1372	uS/cm
CCGC_0074	23/Oct/2013	Temperature	17	Deg C
CCGC_0075	23/Oct/2013	Oxidation-Reduction Potential	204	mV
CCGC_0075	23/Oct/2013	Oxygen, Dissolved	4.68	mg/L
CCGC_0075	23/Oct/2013	pH	7.29	none
CCGC_0075	23/Oct/2013	SpecificConductivity	1535	uS/cm
CCGC_0075	23/Oct/2013	Temperature	17.8	Deg C
CCGC_0107	10/Mar/2014	Oxidation-Reduction Potential	169.5	mV
CCGC_0107	10/Mar/2014	Oxygen, Dissolved	7.41	mg/L
CCGC_0107	10/Mar/2014	pH	6.67	none
CCGC_0107	10/Mar/2014	SpecificConductivity	2169	uS/cm
CCGC_0107	10/Mar/2014	Temperature	16.1	Deg C
CCGC_0108	10/Mar/2014	Oxidation-Reduction Potential	109.2	mV
CCGC_0108	10/Mar/2014	Oxygen, Dissolved	0.22	mg/L
CCGC_0108	10/Mar/2014	pH	7.1	none
CCGC_0108	10/Mar/2014	SpecificConductivity	1085	uS/cm
CCGC_0108	10/Mar/2014	Temperature	19.4	Deg C
CCGC_0109	10/Mar/2014	Oxidation-Reduction Potential	134	mV
CCGC_0109	10/Mar/2014	Oxygen, Dissolved	5.43	mg/L
CCGC_0109	10/Mar/2014	pH	7.32	none
CCGC_0109	10/Mar/2014	SpecificConductivity	459.7	uS/cm

FieldPointName	SampleDate	AnalyteName	Result	UnitName
CCGC_0109	10/Mar/2014	Temperature	19.7	Deg C
CCGC_0110	10/Mar/2014	Oxidation-Reduction Potential	120.3	mV
CCGC_0110	10/Mar/2014	Oxygen, Dissolved	0.65	mg/L
CCGC_0110	10/Mar/2014	pH	7.12	none
CCGC_0110	10/Mar/2014	SpecificConductivity	1702	uS/cm
CCGC_0110	10/Mar/2014	Temperature	18.3	Deg C
CCGC_0111	10/Mar/2014	Oxidation-Reduction Potential	133.3	mV
CCGC_0111	10/Mar/2014	Oxygen, Dissolved	7.94	mg/L
CCGC_0111	10/Mar/2014	pH	7.97	none
CCGC_0111	10/Mar/2014	SpecificConductivity	797	uS/cm
CCGC_0111	10/Mar/2014	Temperature	17.7	Deg C
CCGC_0112	10/Mar/2014	Oxidation-Reduction Potential	145.1	mV
CCGC_0112	10/Mar/2014	Oxygen, Dissolved	0.1	mg/L
CCGC_0112	10/Mar/2014	pH	7.22	none
CCGC_0112	10/Mar/2014	SpecificConductivity	1505	uS/cm
CCGC_0112	10/Mar/2014	Temperature	18.3	Deg C
CCGC_0113	11/Mar/2014	Oxidation-Reduction Potential	47.3	mV
CCGC_0113	11/Mar/2014	Oxygen, Dissolved	3.17	mg/L
CCGC_0113	11/Mar/2014	pH	7.51	none
CCGC_0113	11/Mar/2014	SpecificConductivity	1580	uS/cm
CCGC_0113	11/Mar/2014	Temperature	14.3	Deg C
CCGC_0114	11/Mar/2014	Oxidation-Reduction Potential	-88.7	mV
CCGC_0114	11/Mar/2014	Oxygen, Dissolved	0.1	mg/L
CCGC_0114	11/Mar/2014	pH	7.22	none
CCGC_0114	11/Mar/2014	SpecificConductivity	1300	uS/cm
CCGC_0114	11/Mar/2014	Temperature	11.2	Deg C
CCGC_0115	11/Mar/2014	Oxidation-Reduction Potential	140.7	mV
CCGC_0115	11/Mar/2014	Oxygen, Dissolved	9.07	mg/L
CCGC_0115	11/Mar/2014	pH	7.2	none
CCGC_0115	11/Mar/2014	SpecificConductivity	1128	uS/cm
CCGC_0115	11/Mar/2014	Temperature	17	Deg C
CCGC_0116	11/Mar/2014	Oxidation-Reduction Potential	82.2	mV
CCGC_0116	11/Mar/2014	Oxygen, Dissolved	7.79	mg/L
CCGC_0116	11/Mar/2014	pH	7.29	none
CCGC_0116	11/Mar/2014	SpecificConductivity	1083	uS/cm
CCGC_0116	11/Mar/2014	Temperature	15.3	Deg C
CCGC_0117	11/Mar/2014	Oxidation-Reduction Potential	92.2	mV
CCGC_0117	11/Mar/2014	Oxygen, Dissolved	0.06	mg/L
CCGC_0117	11/Mar/2014	pH	7.99	none
CCGC_0117	11/Mar/2014	SpecificConductivity	701	uS/cm
CCGC_0117	11/Mar/2014	Temperature	28.1	Deg C
CCGC_0118	11/Mar/2014	Oxidation-Reduction Potential	1.5	mV
CCGC_0118	11/Mar/2014	Oxygen, Dissolved	0.7	mg/L
CCGC_0118	11/Mar/2014	pH	7.3	none
CCGC_0118	11/Mar/2014	SpecificConductivity	83.1	uS/cm
CCGC_0118	11/Mar/2014	Temperature	16.9	Deg C
CCGC_0120	11/Mar/2014	Oxidation-Reduction Potential	415.5	mV
CCGC_0120	11/Mar/2014	Oxygen, Dissolved	8.63	mg/L
CCGC_0120	11/Mar/2014	pH	7.63	none
CCGC_0120	11/Mar/2014	SpecificConductivity	1327	uS/cm
CCGC_0120	11/Mar/2014	Temperature	16	Deg C
CCGC_0121	12/Mar/2014	Oxidation-Reduction Potential	222.5	mV
CCGC_0121	12/Mar/2014	Oxygen, Dissolved	6.95	mg/L
CCGC_0121	12/Mar/2014	pH	6.74	none
CCGC_0121	12/Mar/2014	SpecificConductivity	1352	uS/cm
CCGC_0121	12/Mar/2014	Temperature	16.7	Deg C
CCGC_0122	12/Mar/2014	Oxidation-Reduction Potential	210.1	mV

FieldPointName	SampleDate	AnalyteName	Result	UnitName
CCGC_0122	12/Mar/2014	Oxygen, Dissolved	2.58	mg/L
CCGC_0122	12/Mar/2014	pH	7.23	none
CCGC_0122	12/Mar/2014	SpecificConductivity	1679	uS/cm
CCGC_0122	12/Mar/2014	Temperature	16.9	Deg C
CCGC_0123	12/Mar/2014	Oxidation-Reduction Potential	243.3	mV
CCGC_0123	12/Mar/2014	Oxygen, Dissolved	6.41	mg/L
CCGC_0123	12/Mar/2014	pH	6.94	none
CCGC_0123	12/Mar/2014	SpecificConductivity	2265	uS/cm
CCGC_0123	12/Mar/2014	Temperature	15.4	Deg C
CCGC_0124	12/Mar/2014	Oxidation-Reduction Potential	263.4	mV
CCGC_0124	12/Mar/2014	Oxygen, Dissolved	6.19	mg/L
CCGC_0124	12/Mar/2014	pH	6.71	none
CCGC_0124	12/Mar/2014	SpecificConductivity	1041	uS/cm
CCGC_0124	12/Mar/2014	Temperature	13.3	Deg C
CCGC_0125	12/Mar/2014	Oxidation-Reduction Potential	236.6	mV
CCGC_0125	12/Mar/2014	Oxygen, Dissolved	9.79	mg/L
CCGC_0125	12/Mar/2014	pH	7.05	none
CCGC_0125	12/Mar/2014	SpecificConductivity	973	uS/cm
CCGC_0125	12/Mar/2014	Temperature	16.9	Deg C
CCGC_0126	12/Mar/2014	Oxidation-Reduction Potential	211.4	mV
CCGC_0126	12/Mar/2014	Oxygen, Dissolved	0.69	mg/L
CCGC_0126	12/Mar/2014	pH	7.45	none
CCGC_0126	12/Mar/2014	SpecificConductivity	482.3	uS/cm
CCGC_0126	12/Mar/2014	Temperature	16	Deg C
CCGC_0127	12/Mar/2014	Oxidation-Reduction Potential	199.9	mV
CCGC_0127	12/Mar/2014	Oxygen, Dissolved	2.08	mg/L
CCGC_0127	12/Mar/2014	pH	7.33	none
CCGC_0127	12/Mar/2014	SpecificConductivity	493.9	uS/cm
CCGC_0127	12/Mar/2014	Temperature	22.2	Deg C
CCGC_0128	12/Mar/2014	Oxidation-Reduction Potential	240.1	mV
CCGC_0128	12/Mar/2014	Oxygen, Dissolved	6.65	mg/L
CCGC_0128	12/Mar/2014	pH	7.54	none
CCGC_0128	12/Mar/2014	SpecificConductivity	477	uS/cm
CCGC_0128	12/Mar/2014	Temperature	21.1	Deg C
CCGC_0129	12/Mar/2014	Oxidation-Reduction Potential	-95.7	mV
CCGC_0129	12/Mar/2014	Oxygen, Dissolved	0.12	mg/L
CCGC_0129	12/Mar/2014	pH	7.1	none
CCGC_0129	12/Mar/2014	SpecificConductivity	711	uS/cm
CCGC_0129	12/Mar/2014	Temperature	16.8	Deg C
CCGC_0131	13/Mar/2014	Oxidation-Reduction Potential	225	mV
CCGC_0131	13/Mar/2014	Oxygen, Dissolved	5.72	mg/L
CCGC_0131	13/Mar/2014	pH	7.24	none
CCGC_0131	13/Mar/2014	SpecificConductivity	1717	uS/cm
CCGC_0131	13/Mar/2014	Temperature	16.2	Deg C
CCGC_0132	13/Mar/2014	Oxidation-Reduction Potential	222.2	mV
CCGC_0132	13/Mar/2014	Oxygen, Dissolved	6.4	mg/L
CCGC_0132	13/Mar/2014	pH	7.82	none
CCGC_0132	13/Mar/2014	SpecificConductivity	1158	uS/cm
CCGC_0132	13/Mar/2014	Temperature	13.9	Deg C
CCGC_0133	13/Mar/2014	Oxidation-Reduction Potential	185.4	mV
CCGC_0133	13/Mar/2014	Oxygen, Dissolved	2.38	mg/L
CCGC_0133	13/Mar/2014	pH	7.49	none
CCGC_0133	13/Mar/2014	SpecificConductivity	797	uS/cm
CCGC_0133	13/Mar/2014	Temperature	15.7	Deg C
CCGC_0134	13/Mar/2014	Oxidation-Reduction Potential	196.3	mV
CCGC_0134	13/Mar/2014	Oxygen, Dissolved	8.94	mg/L
CCGC_0134	13/Mar/2014	pH	7.95	none
CCGC_0134	13/Mar/2014	SpecificConductivity	1160	uS/cm
CCGC_0134	13/Mar/2014	Temperature	14.9	Deg C
CCGC_0135	13/Mar/2014	Oxidation-Reduction Potential	230.2	mV
CCGC_0135	13/Mar/2014	Oxygen, Dissolved	3.35	mg/L
CCGC_0135	13/Mar/2014	pH	7.46	none
CCGC_0135	13/Mar/2014	SpecificConductivity	829	uS/cm
CCGC_0135	13/Mar/2014	Temperature	15.6	Deg C
CCGC_0136	14/Mar/2014	Oxidation-Reduction Potential	251.5	mV
CCGC_0136	14/Mar/2014	Oxygen, Dissolved	1.5	mg/L
CCGC_0136	14/Mar/2014	pH	7.18	none
CCGC_0136	14/Mar/2014	SpecificConductivity	928	uS/cm
CCGC_0136	14/Mar/2014	Temperature	21.3	Deg C
CCGC_0137	14/Mar/2014	Oxidation-Reduction Potential	213.8	mV
CCGC_0137	14/Mar/2014	Oxygen, Dissolved	1.96	mg/L
CCGC_0137	14/Mar/2014	pH	7.4	none
CCGC_0137	14/Mar/2014	SpecificConductivity	822	uS/cm
CCGC_0137	14/Mar/2014	Temperature	18.9	Deg C
CCGC_0138	14/Mar/2014	Oxidation-Reduction Potential	187.8	mV
CCGC_0138	14/Mar/2014	Oxygen, Dissolved	9.26	mg/L
CCGC_0138	14/Mar/2014	pH	7.03	none
CCGC_0138	14/Mar/2014	SpecificConductivity	3032	uS/cm
CCGC_0138	14/Mar/2014	Temperature	16.6	Deg C
CCGC_0139	14/Mar/2014	Oxidation-Reduction Potential	193.3	mV
CCGC_0139	14/Mar/2014	Oxygen, Dissolved	7.69	mg/L
CCGC_0139	14/Mar/2014	pH	6.88	none
CCGC_0139	14/Mar/2014	SpecificConductivity	1104	uS/cm
CCGC_0139	14/Mar/2014	Temperature	17.7	Deg C
CCGC_0140	14/Mar/2014	Oxidation-Reduction Potential	260.1	mV
CCGC_0140	14/Mar/2014	Oxygen, Dissolved	6.04	mg/L
CCGC_0140	14/Mar/2014	pH	7.2	none
CCGC_0140	14/Mar/2014	SpecificConductivity	575.2	uS/cm
CCGC_0140	14/Mar/2014	Temperature	16.3	Deg C
CCGC_0141	14/Mar/2014	Oxidation-Reduction Potential	227.2	mV
CCGC_0141	14/Mar/2014	Oxygen, Dissolved	7.73	mg/L
CCGC_0141	14/Mar/2014	pH	6.93	none
CCGC_0141	14/Mar/2014	SpecificConductivity	459.8	uS/cm
CCGC_0141	14/Mar/2014	Temperature	16.7	Deg C
CCGC_0142	10/Mar/2014	Oxidation-Reduction Potential	137.9	mV
CCGC_0142	10/Mar/2014	Oxygen, Dissolved	5.27	mg/L
CCGC_0142	10/Mar/2014	pH	7.5	none
CCGC_0142	10/Mar/2014	SpecificConductivity	1452	uS/cm
CCGC_0142	10/Mar/2014	Temperature	17.6	Deg C
CCGC_0143	10/Mar/2014	Oxidation-Reduction Potential	150	mV
CCGC_0143	10/Mar/2014	Oxygen, Dissolved	7.63	mg/L
CCGC_0143	10/Mar/2014	pH	7.1	none
CCGC_0143	10/Mar/2014	SpecificConductivity	781	uS/cm
CCGC_0143	10/Mar/2014	Temperature	14.6	Deg C
CCGC_0144	10/Mar/2014	Oxidation-Reduction Potential	178.3	mV
CCGC_0144	10/Mar/2014	Oxygen, Dissolved	3.41	mg/L
CCGC_0144	10/Mar/2014	pH	7.09	none
CCGC_0144	10/Mar/2014	SpecificConductivity	1110	uS/cm
CCGC_0144	10/Mar/2014	Temperature	17.3	Deg C
CCGC_0145	10/Mar/2014	Oxidation-Reduction Potential	150.5	mV
CCGC_0145	10/Mar/2014	Oxygen, Dissolved	1.74	mg/L
CCGC_0145	10/Mar/2014	pH	7.05	none
CCGC_0145	10/Mar/2014	SpecificConductivity	873	uS/cm
CCGC_0145	10/Mar/2014	Temperature	19.1	Deg C

FieldPointName	SampleDate	AnalyteName	Result	UnitName
CCGC_0146	10/Mar/2014	Oxidation-Reduction Potential	118.9	mV
CCGC_0146	10/Mar/2014	Oxygen, Dissolved	0.2	mg/L
CCGC_0146	10/Mar/2014	pH	7.06	none
CCGC_0146	10/Mar/2014	SpecificConductivity	972	uS/cm
CCGC_0146	10/Mar/2014	Temperature	18.9	Deg C
CCGC_0150	11/Mar/2014	Oxidation-Reduction Potential	181.8	mV
CCGC_0150	11/Mar/2014	Oxygen, Dissolved	8.73	mg/L
CCGC_0150	11/Mar/2014	pH	6.51	none
CCGC_0150	11/Mar/2014	SpecificConductivity	801	uS/cm
CCGC_0150	11/Mar/2014	Temperature	12.5	Deg C
CCGC_0151	12/Mar/2014	Oxidation-Reduction Potential	116.8	mV
CCGC_0151	12/Mar/2014	Oxygen, Dissolved	8.95	mg/L
CCGC_0151	12/Mar/2014	pH	7.05	none
CCGC_0151	12/Mar/2014	SpecificConductivity	795	uS/cm
CCGC_0151	12/Mar/2014	Temperature	17.1	Deg C
CCGC_0152	11/Mar/2014	Oxidation-Reduction Potential	125.9	mV
CCGC_0152	11/Mar/2014	Oxygen, Dissolved	1.06	mg/L
CCGC_0152	11/Mar/2014	pH	6.79	none
CCGC_0152	11/Mar/2014	SpecificConductivity	803	uS/cm
CCGC_0152	11/Mar/2014	Temperature	17.4	Deg C
CCGC_0153	11/Mar/2014	Oxidation-Reduction Potential	128	mV
CCGC_0153	11/Mar/2014	Oxygen, Dissolved	9.89	mg/L
CCGC_0153	11/Mar/2014	pH	7.77	none
CCGC_0153	11/Mar/2014	SpecificConductivity	4354	uS/cm
CCGC_0153	11/Mar/2014	Temperature	16.8	Deg C
CCGC_0155	11/Mar/2014	Oxidation-Reduction Potential	146	mV
CCGC_0155	11/Mar/2014	Oxygen, Dissolved	2.14	mg/L
CCGC_0155	11/Mar/2014	pH	7.21	none
CCGC_0155	11/Mar/2014	SpecificConductivity	1121	uS/cm
CCGC_0155	11/Mar/2014	Temperature	14.3	Deg C
CCGC_0156	11/Mar/2014	Oxidation-Reduction Potential	127.5	mV
CCGC_0156	11/Mar/2014	Oxygen, Dissolved	2.65	mg/L
CCGC_0156	11/Mar/2014	pH	7.22	none
CCGC_0156	11/Mar/2014	SpecificConductivity	1754	uS/cm
CCGC_0156	11/Mar/2014	Temperature	16.2	Deg C
CCGC_0157	11/Mar/2014	Oxidation-Reduction Potential	129.7	mV
CCGC_0157	11/Mar/2014	Oxygen, Dissolved	0.4	mg/L
CCGC_0157	11/Mar/2014	pH	7.26	none
CCGC_0157	11/Mar/2014	SpecificConductivity	1807	uS/cm
CCGC_0157	11/Mar/2014	Temperature	14.3	Deg C
CCGC_0158	11/Mar/2014	Oxidation-Reduction Potential	115.2	mV
CCGC_0158	11/Mar/2014	Oxygen, Dissolved	1.03	mg/L
CCGC_0158	11/Mar/2014	pH	7.07	none
CCGC_0158	11/Mar/2014	SpecificConductivity	1412	uS/cm
CCGC_0158	11/Mar/2014	Temperature	13	Deg C
CCGC_0159	12/Mar/2014	Oxidation-Reduction Potential	72.4	mV
CCGC_0159	12/Mar/2014	Oxygen, Dissolved	2.71	mg/L
CCGC_0159	12/Mar/2014	pH	7.39	none
CCGC_0159	12/Mar/2014	SpecificConductivity	532	uS/cm
CCGC_0159	12/Mar/2014	Temperature	15.5	Deg C
CCGC_0160	12/Mar/2014	Oxidation-Reduction Potential	177.1	mV
CCGC_0160	12/Mar/2014	Oxygen, Dissolved	11.95	mg/L
CCGC_0160	12/Mar/2014	pH	7.16	none
CCGC_0160	12/Mar/2014	SpecificConductivity	992	uS/cm
CCGC_0160	12/Mar/2014	Temperature	13.2	Deg C
CCGC_0161	12/Mar/2014	Oxidation-Reduction Potential	176.8	mV
CCGC_0161	12/Mar/2014	Oxygen, Dissolved	11.78	mg/L
CCGC_0161	12/Mar/2014	pH	7.44	none
CCGC_0161	12/Mar/2014	SpecificConductivity	835	uS/cm
CCGC_0161	12/Mar/2014	Temperature	15.1	Deg C
CCGC_0162	11/Mar/2014	Oxidation-Reduction Potential	107	mV
CCGC_0162	11/Mar/2014	Oxygen, Dissolved	1.78	mg/L
CCGC_0162	11/Mar/2014	pH	7.28	none
CCGC_0162	11/Mar/2014	SpecificConductivity	792	uS/cm
CCGC_0162	11/Mar/2014	Temperature	17.7	Deg C
CCGC_0163	11/Mar/2014	Oxidation-Reduction Potential	141.8	mV
CCGC_0163	11/Mar/2014	Oxygen, Dissolved	5.41	mg/L
CCGC_0163	11/Mar/2014	pH	6.95	none
CCGC_0163	11/Mar/2014	SpecificConductivity	4455	uS/cm
CCGC_0163	11/Mar/2014	Temperature	15.9	Deg C
CCGC_0164	11/Mar/2014	Oxidation-Reduction Potential	110.3	mV
CCGC_0164	11/Mar/2014	Oxygen, Dissolved	8.61	mg/L
CCGC_0164	11/Mar/2014	pH	7.08	none
CCGC_0164	11/Mar/2014	SpecificConductivity	1841	uS/cm
CCGC_0164	11/Mar/2014	Temperature	15.4	Deg C
CCGC_0165	12/Mar/2014	Oxidation-Reduction Potential	147.3	mV
CCGC_0165	12/Mar/2014	Oxygen, Dissolved	10.16	mg/L
CCGC_0165	12/Mar/2014	pH	7.03	none
CCGC_0165	12/Mar/2014	SpecificConductivity	1666	uS/cm
CCGC_0165	12/Mar/2014	Temperature	15.3	Deg C
CCGC_0166	13/Mar/2014	Oxidation-Reduction Potential	129.7	mV
CCGC_0166	13/Mar/2014	Oxygen, Dissolved	0.71	mg/L
CCGC_0166	13/Mar/2014	pH	7.3	none
CCGC_0166	13/Mar/2014	SpecificConductivity	548	uS/cm
CCGC_0166	13/Mar/2014	Temperature	15.3	Deg C
CCGC_0167	13/Mar/2014	Oxidation-Reduction Potential	143.4	mV
CCGC_0167	13/Mar/2014	Oxygen, Dissolved	2.48	mg/L
CCGC_0167	13/Mar/2014	pH	7.2	none
CCGC_0167	13/Mar/2014	SpecificConductivity	1367	uS/cm
CCGC_0167	13/Mar/2014	Temperature	17.1	Deg C
CCGC_0168	13/Mar/2014	Oxidation-Reduction Potential	160	mV
CCGC_0168	13/Mar/2014	Oxygen, Dissolved	3.01	mg/L
CCGC_0168	13/Mar/2014	pH	7.33	none
CCGC_0168	13/Mar/2014	SpecificConductivity	1041	uS/cm
CCGC_0168	13/Mar/2014	Temperature	17.2	Deg C
CCGC_0169	13/Mar/2014	Oxidation-Reduction Potential	118.7	mV
CCGC_0169	13/Mar/2014	Oxygen, Dissolved	0.74	mg/L
CCGC_0169	13/Mar/2014	pH	7.34	none
CCGC_0169	13/Mar/2014	SpecificConductivity	502	uS/cm
CCGC_0169	13/Mar/2014	Temperature	16	Deg C
CCGC_0170	13/Mar/2014	Oxidation-Reduction Potential	87	mV
CCGC_0170	13/Mar/2014	Oxygen, Dissolved	3.78	mg/L
CCGC_0170	13/Mar/2014	pH	6.99	none
CCGC_0170	13/Mar/2014	SpecificConductivity	3647	uS/cm
CCGC_0170	13/Mar/2014	Temperature	16.3	Deg C
CCGC_0171	13/Mar/2014	Oxidation-Reduction Potential	102.6	mV
CCGC_0171	13/Mar/2014	Oxygen, Dissolved	4.39	mg/L
CCGC_0171	13/Mar/2014	pH	7.14	none
CCGC_0171	13/Mar/2014	SpecificConductivity	4073	uS/cm
CCGC_0171	13/Mar/2014	Temperature	20.1	Deg C
CCGC_0172	13/Mar/2014	Oxidation-Reduction Potential	133.9	mV
CCGC_0172	13/Mar/2014	Oxygen, Dissolved	0.75	mg/L
CCGC_0172	13/Mar/2014	pH	7.11	none
CCGC_0172	13/Mar/2014	SpecificConductivity	2440	uS/cm

FieldPointName	SampleDate	AnalyteName	Result	UnitName
CCGC_0172	13/Mar/2014	Temperature	18.4	Deg C
CCGC_0173	14/Mar/2014	Oxidation-Reduction Potential	70.9	mV
CCGC_0173	14/Mar/2014	Oxygen, Dissolved	7.21	mg/L
CCGC_0173	14/Mar/2014	pH	7.54	none
CCGC_0173	14/Mar/2014	SpecificConductivity	2426	uS/cm
CCGC_0173	14/Mar/2014	Temperature	15.4	Deg C
CCGC_0174	14/Mar/2014	Oxidation-Reduction Potential	159.7	mV
CCGC_0174	14/Mar/2014	Oxygen, Dissolved	6.58	mg/L
CCGC_0174	14/Mar/2014	pH	7.27	none
CCGC_0174	14/Mar/2014	SpecificConductivity	1415	uS/cm
CCGC_0174	14/Mar/2014	Temperature	19.9	Deg C
CCGC_0175	14/Mar/2014	Oxidation-Reduction Potential	179.1	mV
CCGC_0175	14/Mar/2014	Oxygen, Dissolved	7.69	mg/L
CCGC_0175	14/Mar/2014	pH	7.21	none
CCGC_0175	14/Mar/2014	SpecificConductivity	1950	uS/cm
CCGC_0175	14/Mar/2014	Temperature	15.3	Deg C
CCGC_0176	14/Mar/2014	Oxidation-Reduction Potential	110.5	mV
CCGC_0176	14/Mar/2014	Oxygen, Dissolved	8.77	mg/L
CCGC_0176	14/Mar/2014	pH	7.91	none
CCGC_0176	14/Mar/2014	SpecificConductivity	1910	uS/cm
CCGC_0176	14/Mar/2014	Temperature	17.9	Deg C
CCGC_0177	14/Mar/2014	Oxidation-Reduction Potential	157.2	mV
CCGC_0177	14/Mar/2014	Oxygen, Dissolved	1.76	mg/L
CCGC_0177	14/Mar/2014	pH	7.28	none
CCGC_0177	14/Mar/2014	SpecificConductivity	1504	uS/cm
CCGC_0177	14/Mar/2014	Temperature	15.4	Deg C
CCGC_0178	12/Mar/2014	Oxidation-Reduction Potential	2640	mV
CCGC_0178	27/Aug/2014	Oxidation-Reduction Potential	145	mV
CCGC_0178	12/Mar/2014	Oxygen, Dissolved	7.02	mg/L
CCGC_0178	27/Aug/2014	Oxygen, Dissolved	10.89	mg/L
CCGC_0178	12/Mar/2014	pH	7	none
CCGC_0178	27/Aug/2014	pH	6.77	none
CCGC_0178	12/Mar/2014	SpecificConductivity	774	uS/cm
CCGC_0178	27/Aug/2014	SpecificConductivity	702	uS/cm
CCGC_0178	12/Mar/2014	Temperature	15.5	Deg C
CCGC_0178	27/Aug/2014	Temperature	17.6	Deg C
CCGC_0179	12/Mar/2014	Oxidation-Reduction Potential	132.8	mV
CCGC_0179	12/Mar/2014	Oxygen, Dissolved	6.71	mg/L
CCGC_0179	12/Mar/2014	pH	7.64	none
CCGC_0179	12/Mar/2014	SpecificConductivity	1607	uS/cm
CCGC_0179	12/Mar/2014	Temperature	16.2	Deg C
CCGC_0180	12/Mar/2014	Oxidation-Reduction Potential	113.9	mV
CCGC_0180	12/Mar/2014	Oxygen, Dissolved	2.29	mg/L
CCGC_0180	12/Mar/2014	pH	7.36	none
CCGC_0180	12/Mar/2014	SpecificConductivity	622	uS/cm
CCGC_0180	12/Mar/2014	Temperature	17.6	Deg C
CCGC_0181	12/Mar/2014	Oxidation-Reduction Potential	147.4	mV
CCGC_0181	12/Mar/2014	Oxygen, Dissolved	0.1	mg/L
CCGC_0181	12/Mar/2014	pH	7.35	none
CCGC_0181	12/Mar/2014	SpecificConductivity	690	uS/cm
CCGC_0181	12/Mar/2014	Temperature	18.2	Deg C
CCGC_0182	13/Mar/2014	Oxidation-Reduction Potential	193	mV
CCGC_0182	13/Mar/2014	Oxygen, Dissolved	5.88	mg/L
CCGC_0182	13/Mar/2014	pH	7.87	none
CCGC_0182	13/Mar/2014	SpecificConductivity	461.3	uS/cm
CCGC_0182	13/Mar/2014	Temperature	16.1	Deg C
CCGC_0183	13/Mar/2014	Oxidation-Reduction Potential	165	mV

FieldPointName	SampleDate	AnalyteName	Result	UnitName
CCGC_0183	13/Mar/2014	Oxygen, Dissolved	1.23	mg/L
CCGC_0183	13/Mar/2014	pH	7.45	none
CCGC_0183	13/Mar/2014	SpecificConductivity	1306	uS/cm
CCGC_0183	13/Mar/2014	Temperature	20.3	Deg C
CCGC_0184	13/Mar/2014	Oxidation-Reduction Potential	181.6	mV
CCGC_0184	13/Mar/2014	Oxygen, Dissolved	2.76	mg/L
CCGC_0184	13/Mar/2014	pH	7.6	none
CCGC_0184	13/Mar/2014	SpecificConductivity	713	uS/cm
CCGC_0184	13/Mar/2014	Temperature	18.9	Deg C
CCGC_0185	13/Mar/2014	Oxidation-Reduction Potential	184.5	mV
CCGC_0185	13/Mar/2014	Oxygen, Dissolved	2	mg/L
CCGC_0185	13/Mar/2014	pH	7.46	none
CCGC_0185	13/Mar/2014	SpecificConductivity	906	uS/cm
CCGC_0185	13/Mar/2014	Temperature	18.5	Deg C
CCGC_0186	14/Mar/2014	Oxidation-Reduction Potential	130.6	mV
CCGC_0186	14/Mar/2014	Oxygen, Dissolved	5.98	mg/L
CCGC_0186	14/Mar/2014	pH	7.28	none
CCGC_0186	14/Mar/2014	SpecificConductivity	1135	uS/cm
CCGC_0186	14/Mar/2014	Temperature	15.2	Deg C
CCGC_0187	14/Mar/2014	Oxidation-Reduction Potential	178.5	mV
CCGC_0187	14/Mar/2014	Oxygen, Dissolved	7.65	mg/L
CCGC_0187	14/Mar/2014	pH	7.14	none
CCGC_0187	14/Mar/2014	SpecificConductivity	2185	uS/cm
CCGC_0187	14/Mar/2014	Temperature	15.2	Deg C
CCGC_0188	19/Mar/2014	Oxidation-Reduction Potential	139.2	mV
CCGC_0188	19/Mar/2014	Oxygen, Dissolved	0.91	mg/L
CCGC_0188	19/Mar/2014	pH	7.1	none
CCGC_0188	19/Mar/2014	SpecificConductivity	961	uS/cm
CCGC_0188	19/Mar/2014	Temperature	15.5	Deg C
CCGC_0189	19/Mar/2014	Oxidation-Reduction Potential	124.3	mV
CCGC_0189	19/Mar/2014	Oxygen, Dissolved	4.05	mg/L
CCGC_0189	19/Mar/2014	pH	7.16	none
CCGC_0189	19/Mar/2014	SpecificConductivity	445	uS/cm
CCGC_0189	19/Mar/2014	Temperature	15.6	Deg C
CCGC_0190	19/Mar/2014	Oxidation-Reduction Potential	67.9	mV
CCGC_0190	19/Mar/2014	Oxygen, Dissolved	6.71	mg/L
CCGC_0190	19/Mar/2014	pH	7.44	none
CCGC_0190	19/Mar/2014	SpecificConductivity	442.1	uS/cm
CCGC_0190	19/Mar/2014	Temperature	17.6	Deg C
CCGC_0191	19/Mar/2014	Oxidation-Reduction Potential	154	mV
CCGC_0191	19/Mar/2014	Oxygen, Dissolved	3.71	mg/L
CCGC_0191	19/Mar/2014	pH	7.21	none
CCGC_0191	19/Mar/2014	SpecificConductivity	1141	uS/cm
CCGC_0191	19/Mar/2014	Temperature	16.1	Deg C
CCGC_0193	19/Mar/2014	Oxidation-Reduction Potential	185.3	mV
CCGC_0193	19/Mar/2014	Oxygen, Dissolved	5.23	mg/L
CCGC_0193	19/Mar/2014	pH	7.43	none
CCGC_0193	19/Mar/2014	SpecificConductivity	2290	uS/cm
CCGC_0193	19/Mar/2014	Temperature	17.5	Deg C
CCGC_0194	19/Mar/2014	Oxidation-Reduction Potential	257.7	mV
CCGC_0194	19/Mar/2014	Oxygen, Dissolved	12.27	mg/L
CCGC_0194	19/Mar/2014	pH	6.66	none
CCGC_0194	19/Mar/2014	SpecificConductivity	1967	uS/cm
CCGC_0194	19/Mar/2014	Temperature	16.6	Deg C
CCGC_0195	19/Mar/2014	Oxidation-Reduction Potential	157.3	mV
CCGC_0195	19/Mar/2014	Oxygen, Dissolved	1.5	mg/L
CCGC_0195	19/Mar/2014	pH	6.86	none

FieldPointName	SampleDate	AnalyteName	Result	UnitName
CCGC_0195	19/Mar/2014	SpecificConductivity	1938	uS/cm
CCGC_0195	19/Mar/2014	Temperature	18	Deg C
CCGC_0196	19/Mar/2014	Oxidation-Reduction Potential	156.3	mV
CCGC_0196	19/Mar/2014	Oxygen, Dissolved	2.13	mg/L
CCGC_0196	19/Mar/2014	pH	7.18	none
CCGC_0196	19/Mar/2014	SpecificConductivity	594	uS/cm
CCGC_0196	19/Mar/2014	Temperature	17.1	Deg C
CCGC_0197	19/Mar/2014	Oxidation-Reduction Potential	110.2	mV
CCGC_0197	19/Mar/2014	Oxygen, Dissolved	6.73	mg/L
CCGC_0197	19/Mar/2014	pH	7.26	none
CCGC_0197	19/Mar/2014	SpecificConductivity	648	uS/cm
CCGC_0197	19/Mar/2014	Temperature	14.8	Deg C
CCGC_0198	19/Mar/2014	Oxidation-Reduction Potential	126.6	mV
CCGC_0198	19/Mar/2014	Oxygen, Dissolved	8.01	mg/L
CCGC_0198	19/Mar/2014	pH	7.49	none
CCGC_0198	19/Mar/2014	SpecificConductivity	853	uS/cm
CCGC_0198	19/Mar/2014	Temperature	15.9	Deg C
CCGC_0200	20/Mar/2014	Oxidation-Reduction Potential	-52.3	mV
CCGC_0200	20/Mar/2014	Oxygen, Dissolved	0.29	mg/L
CCGC_0200	20/Mar/2014	pH	7.17	none
CCGC_0200	20/Mar/2014	SpecificConductivity	2543	uS/cm
CCGC_0200	20/Mar/2014	Temperature	18.2	Deg C
CCGC_0201	20/Mar/2014	Oxidation-Reduction Potential	127.1	mV
CCGC_0201	20/Mar/2014	Oxygen, Dissolved	5.66	mg/L
CCGC_0201	20/Mar/2014	pH	7.1	none
CCGC_0201	20/Mar/2014	SpecificConductivity	3668	uS/cm
CCGC_0201	20/Mar/2014	Temperature	18	Deg C
CCGC_0203	20/Mar/2014	Oxidation-Reduction Potential	149.8	mV
CCGC_0203	20/Mar/2014	Oxygen, Dissolved	9.82	mg/L
CCGC_0203	20/Mar/2014	pH	7.6	none
CCGC_0203	20/Mar/2014	SpecificConductivity	3768	uS/cm
CCGC_0203	20/Mar/2014	Temperature	15.4	Deg C
CCGC_0204	20/Mar/2014	Oxidation-Reduction Potential	120.7	mV
CCGC_0204	20/Mar/2014	Oxygen, Dissolved	3.99	mg/L
CCGC_0204	20/Mar/2014	pH	7.11	none
CCGC_0204	20/Mar/2014	SpecificConductivity	1891	uS/cm
CCGC_0204	20/Mar/2014	Temperature	17.5	Deg C
CCGC_0206	19/Mar/2014	Oxidation-Reduction Potential	100.8	mV
CCGC_0206	19/Mar/2014	Oxygen, Dissolved	7.25	mg/L
CCGC_0206	19/Mar/2014	pH	7.07	none
CCGC_0206	19/Mar/2014	SpecificConductivity	1176	uS/cm
CCGC_0206	19/Mar/2014	Temperature	16.6	Deg C
CCGC_0207	19/Mar/2014	Oxidation-Reduction Potential	122	mV
CCGC_0207	19/Mar/2014	Oxygen, Dissolved	8.46	mg/L
CCGC_0207	19/Mar/2014	pH	7.2	none
CCGC_0207	19/Mar/2014	SpecificConductivity	830	uS/cm
CCGC_0207	19/Mar/2014	Temperature	18.9	Deg C
CCGC_0365	29/Apr/2014	Oxidation-Reduction Potential	143.9	mV
CCGC_0365	29/Apr/2014	Oxygen, Dissolved	10.26	mg/L
CCGC_0365	29/Apr/2014	pH	7.08	none
CCGC_0365	29/Apr/2014	SpecificConductivity	697	uS/cm
CCGC_0365	29/Apr/2014	Temperature	18.2	Deg C
CCGC_0378	01/May/2014	Oxidation-Reduction Potential	105.3	mV
CCGC_0378	01/May/2014	Oxygen, Dissolved	7.14	mg/L
CCGC_0378	01/May/2014	pH	7.02	none
CCGC_0378	01/May/2014	SpecificConductivity	426.9	uS/cm
CCGC_0378	01/May/2014	Temperature	18.5	Deg C

FieldPointName	SampleDate	AnalyteName	Result	UnitName
CCGC_0386	06/Aug/2014	Oxidation-Reduction Potential	66.6	mV
CCGC_0386	06/Aug/2014	Oxygen, Dissolved	4.48	mg/L
CCGC_0386	06/Aug/2014	pH	7.03	none
CCGC_0386	06/Aug/2014	SpecificConductivity	1907	uS/cm
CCGC_0386	06/Aug/2014	Temperature	20.3	Deg C
CCGC_0387	06/Aug/2014	Oxidation-Reduction Potential	130.7	mV
CCGC_0387	06/Aug/2014	Oxygen, Dissolved	6.43	mg/L
CCGC_0387	06/Aug/2014	pH	6.43	none
CCGC_0387	06/Aug/2014	SpecificConductivity	801	uS/cm
CCGC_0387	06/Aug/2014	Temperature	22.7	Deg C
CCGC_0390	06/Aug/2014	Oxidation-Reduction Potential	127	mV
CCGC_0390	06/Aug/2014	Oxygen, Dissolved	0.3	mg/L
CCGC_0390	06/Aug/2014	pH	6.94	none
CCGC_0390	06/Aug/2014	SpecificConductivity	870	uS/cm
CCGC_0390	06/Aug/2014	Temperature	17.6	Deg C
CCGC_0391	06/Aug/2014	Oxidation-Reduction Potential	98.7	mV
CCGC_0391	06/Aug/2014	Oxygen, Dissolved	0.11	mg/L
CCGC_0391	06/Aug/2014	pH	6.98	none
CCGC_0391	06/Aug/2014	SpecificConductivity	3243	uS/cm
CCGC_0391	06/Aug/2014	Temperature	18.9	Deg C
CCGC_0392	06/Aug/2014	Oxidation-Reduction Potential	119.8	mV
CCGC_0392	06/Aug/2014	Oxygen, Dissolved	6.02	mg/L
CCGC_0392	06/Aug/2014	pH	7.09	none
CCGC_0392	06/Aug/2014	SpecificConductivity	2088	uS/cm
CCGC_0392	06/Aug/2014	Temperature	17.8	Deg C
CCGC_0393	06/Aug/2014	Oxidation-Reduction Potential	106.6	mV
CCGC_0393	06/Aug/2014	Oxygen, Dissolved	0.21	mg/L
CCGC_0393	06/Aug/2014	pH	7.17	none
CCGC_0393	06/Aug/2014	SpecificConductivity	1372	uS/cm
CCGC_0393	06/Aug/2014	Temperature	17.5	Deg C
CCGC_0394	06/Aug/2014	Oxidation-Reduction Potential	116.9	mV
CCGC_0394	06/Aug/2014	Oxygen, Dissolved	4.12	mg/L
CCGC_0394	06/Aug/2014	pH	7.03	none
CCGC_0394	06/Aug/2014	SpecificConductivity	3720	uS/cm
CCGC_0394	06/Aug/2014	Temperature	21.8	Deg C
CCGC_0395	06/Aug/2014	Oxidation-Reduction Potential	114.7	mV
CCGC_0395	06/Aug/2014	Oxygen, Dissolved	6.73	mg/L
CCGC_0395	06/Aug/2014	pH	7	none
CCGC_0395	06/Aug/2014	SpecificConductivity	4283	uS/cm
CCGC_0395	06/Aug/2014	Temperature	21.4	Deg C
CCGC_0396	06/Aug/2014	Oxidation-Reduction Potential	124.4	mV
CCGC_0396	06/Aug/2014	Oxygen, Dissolved	0.79	mg/L
CCGC_0396	06/Aug/2014	pH	7.05	none
CCGC_0396	06/Aug/2014	SpecificConductivity	3105	uS/cm
CCGC_0396	06/Aug/2014	Temperature	17.6	Deg C
CCGC_0397	07/Aug/2014	Oxidation-Reduction Potential	171.2	mV
CCGC_0397	07/Aug/2014	Oxygen, Dissolved	8.27	mg/L
CCGC_0397	07/Aug/2014	pH	6.77	none
CCGC_0397	07/Aug/2014	SpecificConductivity	1133	uS/cm
CCGC_0397	07/Aug/2014	Temperature	19.5	Deg C
CCGC_0398	07/Aug/2014	Oxidation-Reduction Potential	149.5	mV
CCGC_0398	07/Aug/2014	Oxygen, Dissolved	7.97	mg/L
CCGC_0398	07/Aug/2014	pH	6.5	none
CCGC_0398	07/Aug/2014	SpecificConductivity	1036	uS/cm
CCGC_0398	07/Aug/2014	Temperature	16.7	Deg C
CCGC_0399	07/Aug/2014	Oxidation-Reduction Potential	132.9	mV
CCGC_0399	07/Aug/2014	Oxygen, Dissolved	0.19	mg/L

FieldPointName	SampleDate	AnalyteName	Result	UnitName
CCGC_0399	07/Aug/2014	pH	7.32	none
CCGC_0399	07/Aug/2014	SpecificConductivity	697	uS/cm
CCGC_0399	07/Aug/2014	Temperature	16.8	Deg C
CCGC_0400	07/Aug/2014	Oxidation-Reduction Potential	122.2	mV
CCGC_0400	07/Aug/2014	Oxygen, Dissolved	3.74	mg/L
CCGC_0400	07/Aug/2014	pH	7.84	none
CCGC_0400	07/Aug/2014	SpecificConductivity	986	uS/cm
CCGC_0400	07/Aug/2014	Temperature	19	Deg C
CCGC_0401	07/Aug/2014	Oxidation-Reduction Potential	135.9	mV
CCGC_0401	07/Aug/2014	Oxygen, Dissolved	4.34	mg/L
CCGC_0401	07/Aug/2014	pH	7.6	none
CCGC_0401	07/Aug/2014	SpecificConductivity	728	uS/cm
CCGC_0401	07/Aug/2014	Temperature	23.5	Deg C
CCGC_0402	07/Aug/2014	Oxidation-Reduction Potential	167.1	mV
CCGC_0402	07/Aug/2014	Oxygen, Dissolved	7.74	mg/L
CCGC_0402	07/Aug/2014	pH	6.64	none
CCGC_0402	07/Aug/2014	SpecificConductivity	1008	uS/cm
CCGC_0402	07/Aug/2014	Temperature	22.3	Deg C
CCGC_0403	07/Aug/2014	Oxidation-Reduction Potential	149.6	mV
CCGC_0403	07/Aug/2014	Oxygen, Dissolved	8.94	mg/L
CCGC_0403	07/Aug/2014	pH	7.01	none
CCGC_0403	07/Aug/2014	SpecificConductivity	801	uS/cm
CCGC_0403	07/Aug/2014	Temperature	19.1	Deg C
CCGC_0404	07/Aug/2014	Oxidation-Reduction Potential	157.3	mV
CCGC_0404	07/Aug/2014	Oxygen, Dissolved	2.81	mg/L
CCGC_0404	07/Aug/2014	pH	6.87	none
CCGC_0404	07/Aug/2014	SpecificConductivity	1404	uS/cm
CCGC_0404	07/Aug/2014	Temperature	21.4	Deg C
CCGC_0405	07/Aug/2014	Oxidation-Reduction Potential	135.7	mV
CCGC_0405	07/Aug/2014	Oxygen, Dissolved	3.15	mg/L
CCGC_0405	07/Aug/2014	pH	6.98	none
CCGC_0405	07/Aug/2014	SpecificConductivity	761	uS/cm
CCGC_0405	07/Aug/2014	Temperature	19.6	Deg C
CCGC_0406	07/Aug/2014	Oxidation-Reduction Potential	136.6	mV
CCGC_0406	07/Aug/2014	Oxygen, Dissolved	3.54	mg/L
CCGC_0406	07/Aug/2014	pH	7.35	none
CCGC_0406	07/Aug/2014	SpecificConductivity	728	uS/cm
CCGC_0406	07/Aug/2014	Temperature	18.3	Deg C
CCGC_0430	08/Aug/2014	Oxidation-Reduction Potential	233.9	mV
CCGC_0430	08/Aug/2014	Oxygen, Dissolved	8.51	mg/L
CCGC_0430	08/Aug/2014	pH	7.26	none
CCGC_0430	08/Aug/2014	SpecificConductivity	434.1	uS/cm
CCGC_0430	08/Aug/2014	Temperature	14.5	Deg C
CCGC_0431	08/Aug/2014	Oxidation-Reduction Potential	187.5	mV
CCGC_0431	08/Aug/2014	Oxygen, Dissolved	9.89	mg/L
CCGC_0431	08/Aug/2014	pH	7.41	none
CCGC_0431	08/Aug/2014	SpecificConductivity	1085	uS/cm
CCGC_0431	08/Aug/2014	Temperature	17.9	Deg C
CCGC_0432	08/Aug/2014	Oxidation-Reduction Potential	196	mV
CCGC_0432	08/Aug/2014	Oxygen, Dissolved	7.25	mg/L
CCGC_0432	08/Aug/2014	pH	6.5	none
CCGC_0432	08/Aug/2014	SpecificConductivity	2255	uS/cm
CCGC_0432	08/Aug/2014	Temperature	19.3	Deg C
CCGC_0433	08/Aug/2014	Oxidation-Reduction Potential	172.5	mV
CCGC_0433	08/Aug/2014	Oxygen, Dissolved	8	mg/L
CCGC_0433	08/Aug/2014	pH	7.15	none
CCGC_0433	08/Aug/2014	SpecificConductivity	2318	uS/cm

FieldPointName	SampleDate	AnalyteName	Result	UnitName
CCGC_0433	08/Aug/2014	Temperature	23.7	Deg C
CCGC_0441	14/Aug/2014	Oxidation-Reduction Potential	121.4	mV
CCGC_0441	14/Aug/2014	Oxygen, Dissolved	8.01	mg/L
CCGC_0441	14/Aug/2014	pH	7.03	none
CCGC_0441	14/Aug/2014	SpecificConductivity	802	uS/cm
CCGC_0441	14/Aug/2014	Temperature	19.6	Deg C
CCGC_0442	14/Aug/2014	Oxidation-Reduction Potential	65.8	mV
CCGC_0442	14/Aug/2014	Oxygen, Dissolved	3.5	mg/L
CCGC_0442	14/Aug/2014	pH	7.31	none
CCGC_0442	14/Aug/2014	SpecificConductivity	480	uS/cm
CCGC_0442	14/Aug/2014	Temperature	21.4	Deg C
CCGC_0443	14/Aug/2014	Oxidation-Reduction Potential	2.5	mV
CCGC_0443	14/Aug/2014	Oxygen, Dissolved	5.2	mg/L
CCGC_0443	14/Aug/2014	pH	7.62	none
CCGC_0443	14/Aug/2014	SpecificConductivity	711	uS/cm
CCGC_0443	14/Aug/2014	Temperature	24.8	Deg C
CCGC_0444	14/Aug/2014	Oxidation-Reduction Potential	103.8	mV
CCGC_0444	14/Aug/2014	Oxygen, Dissolved	4.41	mg/L
CCGC_0444	14/Aug/2014	pH	7.35	none
CCGC_0444	14/Aug/2014	SpecificConductivity	409	uS/cm
CCGC_0444	14/Aug/2014	Temperature	21	Deg C
CCGC_0471	27/Aug/2014	Oxidation-Reduction Potential	156.9	mV
CCGC_0471	27/Aug/2014	Oxygen, Dissolved	7.9	mg/L
CCGC_0471	27/Aug/2014	pH	6.56	none
CCGC_0471	27/Aug/2014	SpecificConductivity	1199	uS/cm
CCGC_0471	27/Aug/2014	Temperature	19.5	Deg C
CCGC_0473	27/Aug/2014	Oxidation-Reduction Potential	151.5	mV
CCGC_0473	27/Aug/2014	Oxygen, Dissolved	8.2	mg/L
CCGC_0473	27/Aug/2014	pH	6.76	none
CCGC_0473	27/Aug/2014	SpecificConductivity	896	uS/cm
CCGC_0473	27/Aug/2014	Temperature	24.7	Deg C
CCGC_0474	27/Aug/2014	Oxidation-Reduction Potential	149.3	mV
CCGC_0474	27/Aug/2014	Oxygen, Dissolved	3	mg/L
CCGC_0474	27/Aug/2014	pH	6.82	none
CCGC_0474	27/Aug/2014	SpecificConductivity	1002	uS/cm
CCGC_0474	27/Aug/2014	Temperature	21.1	Deg C
CCGC_0475	28/Aug/2014	Oxidation-Reduction Potential	130.8	mV
CCGC_0475	28/Aug/2014	Oxygen, Dissolved	3.28	mg/L
CCGC_0475	28/Aug/2014	pH	7.17	none
CCGC_0475	28/Aug/2014	SpecificConductivity	949	uS/cm
CCGC_0475	28/Aug/2014	Temperature	18.5	Deg C
CCGC_0476	28/Aug/2014	Oxidation-Reduction Potential	164.9	mV
CCGC_0476	28/Aug/2014	Oxygen, Dissolved	6.55	mg/L
CCGC_0476	28/Aug/2014	pH	6.46	none
CCGC_0476	28/Aug/2014	SpecificConductivity	1726	uS/cm
CCGC_0476	28/Aug/2014	Temperature	17.5	Deg C
CCGC_0477	28/Aug/2014	Oxidation-Reduction Potential	127.7	mV
CCGC_0477	28/Aug/2014	Oxygen, Dissolved	7.64	mg/L
CCGC_0477	28/Aug/2014	pH	7	none
CCGC_0477	28/Aug/2014	SpecificConductivity	1277	uS/cm
CCGC_0477	28/Aug/2014	Temperature	19.2	Deg C
CCGC_0483	27/Aug/2014	Oxidation-Reduction Potential	115.2	mV
CCGC_0483	27/Aug/2014	Oxygen, Dissolved	0.21	mg/L
CCGC_0483	27/Aug/2014	pH	7.39	none
CCGC_0483	27/Aug/2014	SpecificConductivity	678	uS/cm
CCGC_0483	27/Aug/2014	Temperature	18.5	Deg C
CCGC_0484	27/Aug/2014	Oxidation-Reduction Potential	87.1	mV

FieldPointName	SampleDate	AnalyteName	Result	UnitName
CCGC_0484	27/Aug/2014	Oxygen, Dissolved	5.9	mg/L
CCGC_0484	27/Aug/2014	pH	7.76	none
CCGC_0484	27/Aug/2014	SpecificConductivity	2576	uS/cm
CCGC_0484	27/Aug/2014	Temperature	19.6	Deg C
CCGC_0487	26/Aug/2014	Oxidation-Reduction Potential	87.3	mV
CCGC_0487	26/Aug/2014	Oxygen, Dissolved	6.79	mg/L
CCGC_0487	26/Aug/2014	pH	7.04	none
CCGC_0487	26/Aug/2014	SpecificConductivity	765	uS/cm
CCGC_0487	26/Aug/2014	Temperature	22.8	Deg C
CCGC_0488	27/Aug/2014	Oxidation-Reduction Potential	98.5	mV
CCGC_0488	27/Aug/2014	Oxygen, Dissolved	0.71	mg/L
CCGC_0488	27/Aug/2014	pH	7.17	none
CCGC_0488	27/Aug/2014	SpecificConductivity	1051	uS/cm
CCGC_0488	27/Aug/2014	Temperature	18	Deg C
CCGC_0489	27/Aug/2014	Oxidation-Reduction Potential	96.3	mV
CCGC_0489	27/Aug/2014	Oxygen, Dissolved	9.62	mg/L
CCGC_0489	27/Aug/2014	pH	7.3	none
CCGC_0489	27/Aug/2014	SpecificConductivity	2374	uS/cm
CCGC_0489	27/Aug/2014	Temperature	18.7	Deg C
CCGC_0490	27/Aug/2014	Oxidation-Reduction Potential	81	mV
CCGC_0490	27/Aug/2014	Oxygen, Dissolved	9.85	mg/L
CCGC_0490	27/Aug/2014	pH	7.51	none
CCGC_0490	27/Aug/2014	SpecificConductivity	867	uS/cm
CCGC_0490	27/Aug/2014	Temperature	20.7	Deg C
CCGC_0491	27/Aug/2014	Oxidation-Reduction Potential	97.5	mV
CCGC_0491	27/Aug/2014	Oxygen, Dissolved	7.24	mg/L
CCGC_0491	27/Aug/2014	pH	7.22	none
CCGC_0491	27/Aug/2014	SpecificConductivity	2570	uS/cm
CCGC_0491	27/Aug/2014	Temperature	19	Deg C
CCGC_0492	27/Aug/2014	Oxidation-Reduction Potential	65.1	mV
CCGC_0492	27/Aug/2014	Oxygen, Dissolved	4.28	mg/L
CCGC_0492	27/Aug/2014	pH	7.21	none
CCGC_0492	27/Aug/2014	SpecificConductivity	1520	uS/cm
CCGC_0492	27/Aug/2014	Temperature	19.7	Deg C
CCGC_0493	27/Aug/2014	Oxidation-Reduction Potential	103.6	mV
CCGC_0493	27/Aug/2014	Oxygen, Dissolved	8.06	mg/L
CCGC_0493	27/Aug/2014	pH	7.1	none
CCGC_0493	27/Aug/2014	SpecificConductivity	2962	uS/cm
CCGC_0493	27/Aug/2014	Temperature	17.7	Deg C
CCGC_0496	28/Aug/2014	Oxidation-Reduction Potential	141.2	mV
CCGC_0496	28/Aug/2014	Oxygen, Dissolved	5.94	mg/L
CCGC_0496	28/Aug/2014	pH	6.74	none
CCGC_0496	28/Aug/2014	SpecificConductivity	654	uS/cm
CCGC_0496	28/Aug/2014	Temperature	25.4	Deg C
CCGC_0498	28/Aug/2014	Oxidation-Reduction Potential	113.7	mV
CCGC_0498	28/Aug/2014	Oxygen, Dissolved	4.26	mg/L
CCGC_0498	28/Aug/2014	pH	7.01	none
CCGC_0498	28/Aug/2014	SpecificConductivity	2043	uS/cm
CCGC_0498	28/Aug/2014	Temperature	20.3	Deg C
CCGC_0500	28/Aug/2014	Oxidation-Reduction Potential	100.1	mV
CCGC_0500	28/Aug/2014	Oxygen, Dissolved	9.94	mg/L
CCGC_0500	28/Aug/2014	pH	7.31	none
CCGC_0500	28/Aug/2014	SpecificConductivity	2000	uS/cm
CCGC_0500	28/Aug/2014	Temperature	18.4	Deg C
CCGC_0502	28/Aug/2014	Oxidation-Reduction Potential	101.3	mV
CCGC_0502	28/Aug/2014	Oxygen, Dissolved	4.5	mg/L
CCGC_0502	28/Aug/2014	pH	7.24	none

FieldPointName	SampleDate	AnalyteName	Result	UnitName
CCGC_0502	28/Aug/2014	SpecificConductivity	3688	uS/cm
CCGC_0502	28/Aug/2014	Temperature	18.7	Deg C
CCGC_0503	28/Aug/2014	Oxidation-Reduction Potential	77.4	mV
CCGC_0503	28/Aug/2014	Oxygen, Dissolved	13.48	mg/L
CCGC_0503	28/Aug/2014	pH	7.25	none
CCGC_0503	28/Aug/2014	SpecificConductivity	1650	uS/cm
CCGC_0503	28/Aug/2014	Temperature	19.5	Deg C
CCGC_0505	28/Aug/2014	Oxidation-Reduction Potential	96.2	mV
CCGC_0505	28/Aug/2014	Oxygen, Dissolved	4.31	mg/L
CCGC_0505	28/Aug/2014	pH	7.39	none
CCGC_0505	28/Aug/2014	SpecificConductivity	1394	uS/cm
CCGC_0505	28/Aug/2014	Temperature	22.6	Deg C
CCGC_0507	28/Aug/2014	Oxidation-Reduction Potential	113.4	mV
CCGC_0507	28/Aug/2014	Oxygen, Dissolved	1.75	mg/L
CCGC_0507	28/Aug/2014	pH	7.12	none
CCGC_0507	28/Aug/2014	SpecificConductivity	2812	uS/cm
CCGC_0507	28/Aug/2014	Temperature	17.2	Deg C
CCGC_0508	28/Aug/2014	Oxidation-Reduction Potential	76.1	mV
CCGC_0508	28/Aug/2014	Oxygen, Dissolved	1.99	mg/L
CCGC_0508	28/Aug/2014	pH	7.49	none
CCGC_0508	28/Aug/2014	SpecificConductivity	534.3	uS/cm
CCGC_0508	28/Aug/2014	Temperature	17.8	Deg C
CCGC_0509	28/Aug/2014	Oxidation-Reduction Potential	118.3	mV
CCGC_0509	28/Aug/2014	Oxygen, Dissolved	1.21	mg/L
CCGC_0509	28/Aug/2014	pH	7.16	none
CCGC_0509	28/Aug/2014	SpecificConductivity	1489	uS/cm
CCGC_0509	28/Aug/2014	Temperature	17.6	Deg C
CCGC_0510	28/Aug/2014	Oxidation-Reduction Potential	98	mV
CCGC_0510	28/Aug/2014	Oxygen, Dissolved	0.25	mg/L
CCGC_0510	28/Aug/2014	pH	7.54	none
CCGC_0510	28/Aug/2014	SpecificConductivity	416.3	uS/cm
CCGC_0510	28/Aug/2014	Temperature	20.5	Deg C
CCGC_0511	27/Aug/2014	Oxidation-Reduction Potential	118.9	mV
CCGC_0511	27/Aug/2014	Oxygen, Dissolved	4.3	mg/L
CCGC_0511	27/Aug/2014	pH	7.17	none
CCGC_0511	27/Aug/2014	SpecificConductivity	2869	uS/cm
CCGC_0511	27/Aug/2014	Temperature	22.8	Deg C
CCGC_0512	26/Aug/2014	Oxidation-Reduction Potential	92.5	mV
CCGC_0512	26/Aug/2014	Oxygen, Dissolved	2.74	mg/L
CCGC_0512	26/Aug/2014	pH	7.35	none
CCGC_0512	26/Aug/2014	SpecificConductivity	876	uS/cm
CCGC_0512	26/Aug/2014	Temperature	19.9	Deg C
CCGC_0513	27/Aug/2014	Oxidation-Reduction Potential	84.4	mV
CCGC_0513	27/Aug/2014	Oxygen, Dissolved	0.37	mg/L
CCGC_0513	27/Aug/2014	pH	7.35	none
CCGC_0513	27/Aug/2014	SpecificConductivity	1351	uS/cm
CCGC_0513	27/Aug/2014	Temperature	18.5	Deg C
CCGC_0514	28/Aug/2014	Oxidation-Reduction Potential	111	mV
CCGC_0514	28/Aug/2014	Oxygen, Dissolved	7.52	mg/L
CCGC_0514	28/Aug/2014	pH	7.06	none
CCGC_0514	28/Aug/2014	SpecificConductivity	2038	uS/cm
CCGC_0514	28/Aug/2014	Temperature	23.3	Deg C

APPENDIX E

EXCEEDANCE NOTIFICATION FOLLOW-UP REPORT

The exceedance notification information is provided in the complete Northern Counties Groundwater Characterization Report.

APPENDIX F

RESPONSE TO SUBMITTAL OF ANCILLARY SAMPLING DATA

PO Box 828, Salinas, CA 93902
www.centralcoastgc.org

Phone: 831-585-1435

Fax: 831-422-0868

May 29, 2015

MEMORANDUM

TO: Angela Schroeter

FROM: Parry Klassen

SUBJECT: Response to Submittal of Ancillary Sampling Data

DATE: May 29, 2015

Pursuant your request for additional information regarding ancillary data (e.g., stable isotopes, pharmaceuticals, noble gases) outlined in the CCGC Work Plan, the CCGC hereby submits this response:

1. The CCGC is not submitting the ancillary sampling data outlined in the CCGC Work Plan for several substantive reasons relating to scientific defensibility. The CCGC has consulted with its hydrogeologist (Luhdorff and Scalmanini Consulting Engineers (LSCE)) with respect to what would be the most technically and scientifically sound approach for gathering and interpreting ancillary data. According to LSCE, to adequately interpret ancillary data, other additional data and information needs to be obtained. Specifically, additional data and analyses need to include:

- Well depths and well screen intervals;
- Mapping of potential nitrate sources;
- Water quality sampling (including ancillary constituents) in the unsaturated and saturated zones directly beneath various types of nitrate sources in each groundwater basin;
- Evaluation of groundwater flow paths including vertical flow and horizontal flow components; and,
- Development of a comprehensive hydrogeologic conceptual model (including, for example, evaluation of potential mixing of recharge waters from various sources such as streamflow percolation, precipitation recharge, irrigation recharge that may be derived from older water, underflow from adjacent groundwater basins or subbasins, etc.).

None of this additional work was undertaken, except as explained below. For a majority of wells sampled, members often attempted to estimate well depths, but in many cases reliable well depth data was not available. Further, the CCGC made an initial effort to obtain well logs, and use the well logs of member wells to determine well depth and well screen intervals. For well logs that were obtained, the effort to connect the well logs to a member well was both time-consuming and often unsuccessful.

2. The CCGC program emphasis was on collecting nitrate data from all domestic wells for its members as required in the approved Work Plan. As directed by Central Coast Regional Water Quality Control Board (CCRWQCB) staff in various communications, including a supplemental sheet prepared by CCRWQCB staff giving direction to the CCGC on its Monitoring and Reporting Program (Supplemental Sheet for Regular Meeting of May 22-23, 2014, page 3, final paragraph), the CCGC focused its efforts on the required elements of the Work Plan and did not spend further resources on obtaining additional data and analyses necessary for proper interpretation of other data not specifically required in that Work Plan.

In completing required elements of the approved Work Plan, the CCGC expended all its available resources obtaining the nitrate monitoring data, notifying its members of nitrate exceedances, conducting follow-up on member responses, and preparing the required technical reports.

3. Finally, inclusion of the raw ancillary data without the additional scientific information or analysis in this report or as a later addendum to the characterization report could result in misinterpretation and/or derivation of unsupported conclusions. Such a result is contrary to one of the CCGC's most important principles, which is that all data and information collected and/or prepared by the CCGC must be scientifically defensible.

The CCGC remains committed to providing the CCRWQCB with scientifically defensible information, and according to our expert consultants, the raw ancillary data without the additional data and analyses would not reach this threshold. Accordingly, the CCGC has determined that it is not appropriate, scientifically or technically, to report raw ancillary data with the Technical Memorandum.

APPENDIX C

PAJARO VALLEY

TECHNICAL MEMORANDUM

Distribution of Groundwater Nitrate Concentrations
Pajaro Valley, California

Prepared for:
Central Coast Groundwater Coalition

Prepared By:
Luhdorff & Scalmanini Consulting Engineers

Peter Leffler, P.G., C.Hg.
Principal Hydrogeologist

June 1, 2015

Table of Contents

1 EXECUTIVE SUMMARY 1

2 INTRODUCTION AND BACKGROUND 3

2.1 Hydrogeologic Context 5

2.1.1 Groundwater Inflows and Outflows 6

2.2 Previous Groundwater Quality Studies and Data 7

3 METHODS AND DATA SOURCING 10

3.1 Sampling of CCGC Member Wells 10

3.2 Analytical Methods 13

3.2.1 Nitrate 13

3.2.2 Major Ions and Total Dissolved Solids 13

3.3 Ancillary Sampling 13

3.3.1 Sampling Methods 14

3.3.2 Analytical Methods 14

3.4 Other Sources of Nitrate Data 14

3.5 Mapping of Nitrate Concentrations in Groundwater 15

3.6 Mapping Assumptions 16

3.7 Well Construction Information 18

4 RESULTS AND DISCUSSION 18

4.1 Well Construction 18

4.2 Distribution of Groundwater Nitrate Concentrations 21

4.3 Factors Affecting the Distribution of Nitrate Concentrations 24

4.3.1 Major Ions and Piper Diagrams 24

4.3.2 Nitrate Concentrations and Oxidation-Reduction Potential and Dissolved Oxygen Concentrations 25

4.3.3 Relation of Nitrate Concentrations to Soil Texture and Recharge 26

5 SUMMARY AND CONCLUSIONS 26

5.1 Study Objectives 26

5.2 General Findings 26

5.3 Data Gaps 28

Tables

Table 1	Recent and Older Groundwater Classifications from Hanson
Table 2	Wells Sampled Under the CCGC by Well Use
Table 3	Wells and Sample Counts Sampled by the CCGC
Table 4	Supplemental Constituents
Table 5	List of Wells Deeper than 400 Feet included in in the Nitrate Mapping Analysis
Table 6	Summary Statistics for Domestic Depth and Screen Bottom Reported on Well Completion Reports for the Pajaro Valley
Table 7	Summary Statistics for Public Supply Wells - Well Depth and Screen Bottom Reported on DWR Well Completion Reports
Table 8	Summary of Nitrate Concentrations by Well Type
Table 9	Summary Statistics for Average Groundwater Nitrate Concentrations
Table 10	Summary Statistics for Average Groundwater Nitrate Concentrations for Samples Collected on CCGC Parcels

Figures

Figure 1	Pajaro Valley and Locations of Well Used for Mapping of Nitrate Concentrations
Figure 2	Generalized Cross-Section of the Pajaro Valley Aquifer System
Figure 3	Locations of CCGC Member Parcels and Wells Used for Analysis
Figure 4	Average and Range of Domestic Well Depths by Township
Figure 5	Distributions of Known Well Depths
Figure 6	Average Public Supply Well Depth by Section
Figure 7	Known Domestic Wells Sampled by CCGC, Individual L&Gs, USGS, State Board (GAMA) and Sections containing at least One DWR Domestic Well Completion Report
Figure 8	Boxplot Showing Mean and Range of Maximum Nitrate Concentrations for the Pajaro Valley
Figure 9	Boxplots Showing Medians and Ranges for Average Nitrate Concentrations for the Pajaro Valley by Depth
Figure 10	Boxplots of Maximum Nitrate Concentrations for Pajaro Valley Wells Sampled by the CCGC Inside and Outside of the Drain Area

Figure 11 Kriged Nitrate Concentrations and Delineation of Areas with Varying Concentration Ranges

Figure 12 Kriged Nitrate Concentration and Member Parcels

Figure 13 Distribution of Estimated Probability of Exceeding Nitrate (as NO3) Concentrations of 45 mg/L in Groundwater

Figure 14 Chemical Characteristics and Areas of Ionic Dominance Represented by the Piper Diagram

Figure 15 Piper Plot for Pajaro Valley Wells Sampled by the CCGC

Figure 16 Relation of Groundwater Nitrate Concentrations to Oxidation-Reduction Potential for CCGC Samples

Figure 17 Estimated Nitrate Concentrations and Distribution of Percent Sand in Soils

Figure 18 Estimated Nitrate Concentrations and Distribution of Estimated Groundwater Recharge

Appendices

Appendix A Kriging and Development of Variogram Models

Appendix B Wells Excluded from Nitrate Mapping

Appendix C Quality Assurance and Quality Control

Appendix D CCGC Sampled Well Information and Results

Appendix E Exceedance Notification Follow-Up Report

Appendix F Response to Submittal of Ancillary Sampling Data

1 EXECUTIVE SUMMARY

The Central Coast Regional Water Quality Control Board (Regional Water Board) adopted Order No. R3-2012-0011 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Conditional Waiver) and associated Monitoring and Reporting Program Orders (MRPs) on March 15, 2012. The Conditional Waiver and the MRPs specify that landowners and growers may meet groundwater monitoring requirements by either monitoring groundwater individually on their agricultural operations, or by joining a groundwater cooperative monitoring program. The approved workplan submitted by the Central Coast Groundwater Coalition (CCGC) set forth plans for satisfying the objectives in the MRP. The CCGC aims to provide information that fills the gaps in the current understanding of groundwater quality for domestic consumption throughout the region. Nitrate is the primary constituent of concern and the focus of this report. The program also commits to provide information about the effects of land- and water-management practices that will result in improved groundwater quality over time.

The primary objectives of the tasks described in the CCGC workplan are to develop: 1) a process-level understanding of the spatial distribution of nitrate concentrations in domestic supply wells with single connections or a small number of connections, and 2) identify regions for evaluation of agricultural land and water management practices to reduce discharges to groundwater. In addition, the MRP requires that, at a minimum, the cooperative groundwater monitoring effort must include sufficient monitoring to adequately characterize the groundwater aquifer(s) in the local area of the participating Dischargers, characterize the groundwater quality of the uppermost aquifer, and identify and evaluate groundwater used for domestic drinking water purposes. This Technical Memorandum (TM) is one of three TMs for the northern counties region that attempts to satisfy the objectives of the CCGC workplan and requirements of the MRP in the Pajaro Valley.

Groundwater recharge in the Pajaro Valley occurs primarily from infiltration of rainfall and irrigation water, and seepage from the Pajaro River. Seepage from smaller tributaries such as Corralitos Creek, seawater intrusion, and inter-basin underflow also contribute to groundwater recharge. Groundwater generally flows from higher altitudes in the north and south towards the Pajaro River and to the Pacific Ocean.

Results of laboratory analysis of groundwater samples collected from wells on CCGC member landowners and growers (L&Gs) properties in the Pajaro Valley are evaluated and presented herein. Other sources of nitrate data for mapping included GeoTracker, USGS National Water Information System, L&Gs enrolled in the Irrigated Lands Regulatory Program, data collected by the USGS as part of the Regional Water Quality Control Board Central Coast Ambient Monitoring Program - Groundwater Assessment and Protection (CCAMP-GAP) Domestic Well Project for the Salinas and Pajaro Valleys, and data provided by the Pajaro Valley Water Management Agency. It was assumed that water quality data collected from 2000 to 2014 are most representative for the area at this time. The overall approach was to process and evaluate available analytical data for inclusion in nitrate mapping, and create water quality maps for the Pajaro Valley.

Water samples were collected and field parameters measured from 73 domestic wells on CCGC properties. Field parameters (pH, water temperature, specific conductance, oxidation-reduction potential (ORP) and dissolved oxygen (DO)) were measured at each well. Concentrations of nitrate and major ions (calcium, magnesium, potassium, sodium, chloride, sulfate and bicarbonate) were determined in all samples.

Geostatistics (kriging) was used to create a map of estimated groundwater nitrate concentrations in the Pajaro Valley. Kriging is an interpolation technique based on surrounding measured values used to derive estimated values for unsampled locations. Using well completion reports gathered from DWR from throughout the Pajaro Valley and hydrogeologic information, an attempt was made to restrict the data for mapping to wells completed within 400 feet of the land surface to best characterize groundwater quality in the shallow aquifer and for domestic supply. Results from 439 wells were used to characterize the distribution of estimated groundwater nitrate (as NO_3) concentrations. For wells with multiple sample dates from 2000 to 2014, the maximum nitrate concentrations were used for each well.

The mean (of the maximum values for each well) nitrate concentration in groundwater used for domestic supply for the entire Pajaro Valley was 33.3 mg/L as NO_3 and the median was 5.1 mg/L as NO_3. Values ranged from less than the detection limit of 0.03 mg/L to 346.5 mg/L. A total of 94 wells (21%) had maximum nitrate concentrations over the MCL of 45 mg/L. Where well depths were available, nitrate concentrations were generally higher in wells completed within 400 feet of the land surface.

Mapped groundwater nitrate concentrations are generally less than one-half of the MCL due to widespread distribution of a large number of low nitrate concentrations; 9.7% of the area within the Pajaro Valley is mapped as having nitrate concentrations in groundwater greater than the MCL. The spatial distribution of high nitrate values results in clustered areas where concentrations were over the MCL west, north, and east of Watsonville, and between Moss Landing and Aromas.

Uncertainty was addressed using indicator kriging to show the estimated probability of exceeding the nitrate MCL. In areas northwest of Aromas, northeast of Watsonville, west of Watsonville near the coast, and north of Moss Landing, the probability of exceeding the MCL is greater than 60%. In most of the remainder of the Valley, the probability is generally less than 40%.

Groundwater nitrate concentrations in the Pajaro Valley are affected by different hydrogeologic and geochemical processes. Low groundwater nitrate concentrations associated with the locations of drainage systems along the Pajaro River are likely the result of removal of high nitrate groundwater. Outside the drainage area, relatively high nitrate concentrations are generally associated with sandy soils and moderate to high groundwater recharge rates. However, areas of higher recharge are also associated with areas of low nitrate concentrations (e.g., along the Pajaro River), and areas of soils with high percent sand are sometimes associated with low nitrate concentrations.

Lower nitrate concentrations in CCGC samples were generally associated with chemically reducing conditions with oxidation-reduction potential values less than 75 mV. An ORP value of 75 mV indicates the theoretical redox potential below which nitrate is denitrified. The majority of the samples with oxidation-reduction potential values below 75 mV were associated with relatively finer-grained soils in the northeastern part of the basin southeast of Corralitos and near the Pajaro River and Elkhorn Slough. Reducing conditions in riparian sediments likely result in denitrification.

Major ion data (calcium, magnesium, sodium, potassium, sulfate, chloride, bicarbonate) were summarized on Piper diagrams showing general groundwater geochemistry. Points representing groundwater samples collected in Pajaro Valley indicate a range from calcium-magnesium/chloride-sulfate waters to sodium/potassium bicarbonate waters.

Tile drains exist in lowland agricultural areas along the river where high recharge areas are mapped along with relatively low nitrate concentrations. It is likely that high nitrate water is removed by the tile drains before it enters the groundwater system.

Based on review of nitrate data and various factors as described above, there are likely several factors that influence nitrate concentrations in any given area.

There are two key areas of uncertainty which place limitations on the conclusions: 1) well depth information, and 2) GeoTracker data obfuscation and clustering. Due to lack of specific well construction information for wells used in the analysis, the results of processing DWR well completion logs were used to make statements about well depths. While the results of the analysis indicate that the large majority of domestic wells are screened within 400 feet of land surface, there is a relatively small amount of uncertainty about the water-quality influence of data from deeper wells that may be included in the mapping. Since nitrate concentrations are generally lower at depths below 400 feet, there could be inclusion of lower nitrate concentration data not necessarily associated with the shallow drinking water supply. However, for GeoTracker data the maximum values were used for wells with multiple values and for multiple wells mapped at the same location. While this also introduces uncertainty, maximum values tend to result in conservative estimates of where nitrate concentrations are high.

High spatial variability in nitrate concentrations and obfuscation and clustering in GeoTracker create uncertainty in mapping nitrate distribution. Uncertainty due to spatial variability associated with the estimated nitrate concentration maps is addressed with a map that shows the probability of exceeding the nitrate MCL throughout the basin. The effects of obfuscation and clustering are impossible to fully quantify. The primary effect is diminished spatial resolution about where drinking water wells are at risk for high nitrate concentrations.

2 INTRODUCTION AND BACKGROUND

The Central Coast Regional Water Quality Control Board (Regional Water Board) adopted Order No. R3-2012-0011 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Conditional Waiver) and associated Monitoring and Reporting Program Orders (MRPs) on March 15, 2012. The Conditional Waiver and the MRPs specify that landowners and growers (L&Gs) may meet groundwater monitoring requirements by either monitoring groundwater individually on their agricultural operations, or by joining a groundwater cooperative monitoring program. A workplan approved by the Regional Water Board on June 20, 2013, set forth the plan for a Northern Central Coast Cooperative Groundwater Program that satisfies the requirements in the Conditional Waiver and MRPs for participating L&Gs in Monterey, Santa Cruz, Santa Clara, and San Benito Counties. The steps outlined in the workplan provide a foundation for a Groundwater Cooperative Program (GCP) that satisfies the requirements as set forth in the MRPs. A key GCP purpose undertaken by the Central Coast Groundwater Coalition (CCGC) is to provide the Regional Water Board with information that fills the gaps in the current understanding of groundwater quality for domestic consumption throughout the region. Nitrate is the primary constituent of concern and the focus of this report. The program will also provide information about the effects of land and water management practices that will result in improved groundwater quality over time.

The primary objectives of the tasks described in the workplan are to develop: 1) a process-level understanding of the spatial distribution of nitrate concentrations in domestic supply wells with single connections, or a small number of connections, and 2) identify regions for evaluation of agricultural land and water management practices to reduce discharges to groundwater. The workplan also described the approach for sampling and reporting. In addition, the MRP requires that, at a minimum, the cooperative groundwater monitoring effort must include sufficient monitoring to adequately characterize the groundwater aquifer(s) in the local area of the participating Dischargers, characterize the groundwater quality of the uppermost aquifer, and identify and evaluate groundwater used for domestic drinking water purposes.

This Technical Memorandum (TM) is one of three TMs that provide information about the spatial distribution of nitrate concentrations in groundwater used for domestic drinking water in the CCGC service area. This TM also attempts to address the probability of domestic drinking water having nitrate concentrations over the Maximum Contaminant Level (MCL) at a given location in the basin.

To assess the spatial variability in groundwater nitrate concentrations, results of laboratory analysis of groundwater samples collected from wells on CCGC member L&G's properties in the Pajaro Valley are evaluated and presented herein. Also, the analytical results from other sampling conducted by the California Department of Public Health, U.S. Geological Survey (USGS), Pajaro Valley Water Management Agency (PVWMA), and L&Gs who conducted individual sampling were integrated in this study. The approach focused on the uppermost aquifer. The available analytical data for the shallow groundwater used for drinking was processed and evaluated to create water quality maps for the Pajaro Valley. Available depth information was used to provide some understanding of the depth-distribution of nitrates in shallow groundwater.

Figure 1 shows the Pajaro Valley and where data were available for mapping[1].

This report also provides some data related to factors and processes affecting groundwater nitrate concentrations throughout the Pajaro Valley. Included in this report are the data for field parameters and major ions (calcium, magnesium, potassium, sodium, sulfate, chloride and bicarbonate). Field parameter data (oxidation-reduction potential, electrical conductivity, pH, dissolved oxygen and temperature) and major ion data were analyzed in all samples collected from wells on CCGC properties and are required as part of the MRP. Groundwater recharge volumes and sources, soil texture, and hydrogeology have been used to interpret the spatial distribution of groundwater chemical data.

2.1 Hydrogeologic Context

Much of the discussion in this section is from Department of Water Resources (DWR) Bulletin 118[2] and Hanson's and others 2014[3]. The Pajaro Valley Groundwater Basin **(Figure 1)** is bordered on the east by the San Andreas Fault and consists of four water bearing formations. The Holocene and late Pleistocene alluvial deposits (which include eolian deposits) overlie the Aromas Sand (also referred to as the Aromas) of Pleistocene age that in turn overlie the Pliocene Purisima Formation.

Figure 2 is a generalized cross section modified from Johnson et al (1988)[4], showing the three primary aquifer zones within the Pajaro Valley. The location of the cross section line is shown on **Figure 1**. Generalized topography relative to sea level can be seen on **Figure 2**. The upper alluvial units, which are approximately 50 to 300 feet thick, consist of terrace deposits overlain by Quaternary alluvium and eolian deposits. These deposits are comprised of gravel, silt, and sand. The Aromas Sands formation consists of fluvial and eolian deposits of silty clay, sand, and gravel.

The upper aquifer is composed of discontinuous water producing zones within the younger eolian deposits of the Aromas Sands through the Quaternary dune sands, generally present from 300 feet above sea level to sea level (see **Figure 2**).[5] Basal gravel lying at the Pleistocene terrace deposits-Aromas Sands contact is a main source of water for shallow wells completed at 100 to 200 feet below sea level and is denoted as the middle aquifer[6]. The middle aquifer extends down approximately 200 feet below sea level (see **Figure 2**). The main water producing aquifer (middle aquifer) bottom is approximately 300

[1] The locations of CCGC member wells were obfuscated to protect member privacy. The locations of CCGC member wells shown on Figure 1 were randomly adjusted up to 0.5 miles in both the east-west and north-south directions. The wells are plotted within a 1 mi^2 block centered over the actual well location. This block is consistent with the area of obfuscation required by a Public Records Act Request (PRAR).

[2] California Department of Water Resources (DWR). 2003. California's Groundwater, Bulletin 118 – Update 2003.

[3] Hanson R.T., Wolfgang Schmid, Claudia C. Faunt, Jonathan Lear, and Brian Lockwood'. 2014. Integrated Hydrologic Model of Pajaro Valley, Santa Cruz and Monterey Counties, California, USGS Scientific Investigations Report 2014-5111

[4] Johnson MJ, Londquist CJ, Laudon J, Mitten HT. (1988). Geohydrology and Mathematical Simulation of the Pajaro Valley Aquifer System, Santa Cruz and Monterey Counties, California. U.S. Geological Survey Water-Resources Investigations Report 87-4281.

[5] See **footnote 3**

[6] Ibid

to 500 feet below land surface. A confining clay layer reportedly separates the middle aquifer from the lower aquifer.

Multiple clay layers result in confined[7] conditions, except near the coast where the aquifer is semi-confined due to less prevalent clays. In many areas, these interbedded clay layers impede percolation and cause groundwater mounding and therefore shallow groundwater levels. The lower, confined aquifer consists of the Aromas Sands fluvial deposits, which range in elevation from approximately 300 to 600 feet below sea level (see **Figure 2**).[8]

The deepest formation, the Purisima Formation, is present at about 500 feet to greater than 1,000 feet below sea level (see Figure 2). This formation is not an important groundwater source in the Pajaro Valley and has only been developed for groundwater extraction in the Soquel-Aptos area in the north-western area of the valley[9].

2.1.1 Groundwater Inflows and Outflows

Recharge in the Pajaro Valley Groundwater Basin occurs primarily from infiltration of rainfall and irrigation, and seepage from the Pajaro River. Streamflow originates upslope of the Pajaro Valley and enters the Basin through the Pajaro River, and runoff from within the valley moves toward small tributaries and to the river. Seepage from smaller tributaries such as Corralitos Creek, seawater intrusion, and interbasin underflow from the Purisima Formation also contribute to groundwater recharge. Additional underflow of groundwater as inflows and outflows occurs along the coastal, northern, and southern boundaries of the valley. Groundwater generally flows from higher altitudes in the north and south towards the Pajaro River drainage basin and to the Pacific Ocean. Hanson and others[10] stated that about 60% of the recharge to the Middle Aquifer comes from leakage: 17% from the lower aquifer and 40% from the upper-aquifer system. Due to the clay layers in the Aromas Sands formation, only a small amount of recharge infiltrates to deeper depths in the lower Aromas Sands aquifers.[11] Seawater has intruded into both alluvial units and the upper Aromas Sands formation[12], especially in areas near the coast. Seawater intrusion accounts for about 10% of the recharge to the Pajaro Valley.

---

[7] The terms confined and semi-confined refer to the depth distribution of water levels in wells screened in different aquifers. In a confined aquifer, groundwater is under sufficient pressure such that the water level in a well screened solely in the confined aquifer rises above the elevation of the top of aquifer. Semi-confined aquifers are intermediate between confined and unconfined aquifers. The extent of confinement is due to the heterogeneous nature of the subsurface fine-grained layers which causes spatially varying degrees of confinement.
[8] ibid
[9] See **footnote 3**
[10] Hanson R.T., Wolfgang Schmid, Claudia C. Faunt, Jonathan Lear, and Brian Lockwood. 2014. Integrated Hydrologic Model of Pajaro Valley, Santa Cruz and Monterey Counties, California. U.S. Geological Survey Scientific Investigations Report 2014–5111.
[11] See **footnote 3**
[12] Hanson, R.T. 2003. Geohydrologic Framework of Recharge and Seawater Intrusion in the Pajaro Valley, Santa Cruz and Monterey Counties, California. U.S. Geological Survey Water-Resources Investigations Report 03-4096.

Basin outflow also occurs as evapotranspiration; groundwater pumping for agricultural, urban, domestic and industrial uses; and from subsurface agricultural drain flows. The drain flows represent the potential interception of deep percolation of excess irrigation water, precipitation, or of shallow groundwater.

Under predevelopment conditions, groundwater flowed from the foothills of the Santa Cruz Mountains to the Pacific Ocean. Under developed conditions, groundwater withdrawals altered groundwater movement; there is onshore flow of seawater and development of pumping depressions in the center of the valley. Influenced by higher agricultural and municipal pumping during summer, the depth and extent of these depressions vary seasonally[13]. Groundwater development resulted in the construction of more than 3,000 wells for agricultural, domestic, and municipal use. Total pumping grew from about 6,000 acre-feet during water year 1964 to more than 12,000 acre-feet during water years 1987–1988, and then leveled off to about 11,000 acre-feet during 2006–2009.[14]

2.2 Previous Groundwater Quality Studies and Data

Previous studies of groundwater quality in the Pajaro Valley demonstrate that concentrations of nitrate (as NO_3) in groundwater vary spatially. Primary sources of data include irrigation, public supply, and monitoring wells[15]. Concentrations of nitrate above the MCL and up to several hundred mg/L have been measured.

There are seven primary programs that have evaluated groundwater nitrate concentrations in the Pajaro Valley:

- Sampling of irrigation and monitoring wells by the Monterey County Water Resources Agency (MCWRA);
- Sampling of monitoring wells by the PVWMA;
- Public water systems are required to systematically test their well water and the results are reported to the California Department of Public Health;
- Drinking-water supply wells are sampled by Monterey County Public Health and Santa Cruz County Environmental Health Departments.
- Groundwater Ambient Monitoring and Assessment (GAMA) study conducted by the California State Water Resources Control Board and USGS sampled public supply wells throughout the basin;
- Central Coast Ambient Monitoring Program – Groundwater Assessment and Protection (CCAMP-GAP) Domestic Well Project for the Salinas and Pajaro Valleys sampled domestic wells in cooperation with the USGS.
- USGS analysis of data from wells located at the western edge of the basin.

---

[13] Hanson and others, 2014 (see footnote 10)
[14] ibid
[15] Boyle, D., King, A., Kourakos, G., Lockhart, K., Mayzelle, M., Fogg, G.E. & Harter, T. 2012. Groundwater Nitrate Occurrence. Technical Report 4 in: Addressing Nitrate in California's Drinking Water with a Focus on Tulare Lake Basin and Salinas Valley Groundwater. Report for the State Water Resources Control Board Report to the Legislature. Center for Watershed Sciences, University of California, Davis.
Justin T. Kulongoski and Kenneth Belitz. 2005. Program Status and Understanding of Groundwater Quality in the Monterey Bay and Salinas Valley Basins, 2005: California GAMA Priority Basin Project, US Geological Investigations Report 2011 – 5058.

The MCWRA has used a network of wells to monitor groundwater conditions in the Pajaro and Salinas Valley Groundwater Basins since the 1940s. The network of wells provides the information needed to manage and protect groundwater resources and sustain beneficial uses. The MCWRA monitors over 300 wells for water quality in the Salinas and Pajaro valleys. Most of the wells are used for irrigation. The MCWRA[16] reported nitrate concentrations in several hundred wells sampled in 1993 and 2007. They reported that 25% (1993) to 37% (2007) had nitrate concentrations exceeding the MCL. Reported concentrations ranged from 1 to over 500 mg/L nitrate.

The Monterey County Health Department mandates that any water supply system with two connections or more must be tested annually. At the state level, systems with 15 or more connections (or serving more than 25 people for more than 60 days out of the year) are required to be tested annually. Similarly, Santa Cruz County Environmental Health Department personnel collect water quality data (including nitrate) for individual systems with one to four hookups and small water systems with five to 199 hookups. These data are transmitted to CDPH and stored in GeoTracker. GeoTracker is an online information system that provides access to groundwater quality information. The maximum nitrate concentration for all wells was used when there were multiple analytical results or coincident points. For mapping the data, the maximum of the maximum was used.

Under the auspices of the GAMA Priority Basin Program, Kulongoski and Belitz[17] analyzed groundwater nitrate data for domestic and public supply wells throughout the Pajaro and Salinas Valleys. They identified over a dozen public supply wells where nitrate concentrations exceeded the MCL. They used a non-parametric statistical analysis to examine the relationship between nitrate and potential explanatory factors including land use, well construction, groundwater age, and geochemical condition. They reported that nitrate concentrations over the MCL were generally associated with shallow wells (less than 350 feet) and groundwater that was either of mixed pre-modern and modern or modern age.[18] Additionally, the State Water Board sampled 38 domestic wells within the Salinas and Pajaro Valleys as part of the GAMA Program Domestic Well Project[19]. Nine wells had detections greater than the MCL, one of which occurred in Pajaro Valley.

The PVWMA collects samples from 13 monitoring wells quarterly or monthly depending on the well cluster. The data provided by PVWMA was collected between 2011 and 2013. Some of these monitoring wells were also sampled by the USGS[20].

---

[16] Monterey County Water Resources Agency. 2010. Technical Memorandum – NITRATE Tasks 2.01, 2.02, 2.04-2b EPA Grant XP-96995301 – Groundwater Sampling, Reporting and Storage, Groundwater Sampling Data, QA/QC, Data Reduction and Representation

[17] Justin T. Kulongoski and Kenneth Belitz. 2005. Program Status and Understanding of Groundwater Quality in the Monterey Bay and Salinas Valley Basins, 2005: California GAMA Priority Basin Project, US Geological Investigations Report 2011 – 5058.

[18] Modern water recharged during or after the 1950's.

[19] California Water Boards. 2011. State Water Board GAMA Program Domestic Well Project Monterey County Focus Area.

[20] Hanson, R.T. 2003. Geohydrologic Framework of Recharge and Seawater Intrusion in the Pajaro Valley, Santa Cruz and Monterey Counties, California. U.S. Geological Survey Water-Resources Investigations Report 03-4096.

Hanson[21] delineated the Pajaro Valley recent and older groundwater based on groundwater major-ion chemistry and water isotope data. Using data from six well clusters located in the western portion of the valley and surface water and drain water samples, Hanson delineated geochemical groups. These groups included shallow aquifers with recent recharge, older freshwater, recent seawater intrusion, deeper aquifers with older seawater intrusion and older freshwater, Pajaro River recharge, and runoff from other streams.

Tritium (the radioactive isotope of hydrogen) data was used to help delineate older and recent groundwater. As a result of atmospheric testing of nuclear weapons between 1952 -1962, about 800 kg of tritium was released[22]. Since the end of the testing, tritium activities in precipitation has decreased to pre-1952 levels. Tritium can be used to trace the movement of water and its relative age on scales ranging from 0 to 50 years before present. Less than detectable tritium is generally associated with groundwater older than 50 years[23].

Hanson evaluated tritium in Pajaro Valley groundwater[20]. Water from wells with screened-interval depths of ranging from 70 to 530 feet were categorized as recent groundwater. All but one of these wells had detectible tritium. All were classified as calcium/magnesium-sulfate/chloride waters. Older groundwater from wells with screened-interval depths of ranging from 110 to 750 feet were classified as calcium/magnesium-bicarbonate water had less than detectable tritium. Nitrate concentrations for the wells classified as recent ranged from less than 2 to 182 mg/L (Table 1). Older (greater than 50 years) well samples had nitrate concentrations ranging from 0.025 to 45.4 mg/L[20].

[21] ibid
[22] Michel, R.L. 1976. Tritium inventories of the world's oceans and their implications: Nature, v. 263, p. 103–106
[23] Izbicki, J.A., Michel, R.L., and Martin, Peter. 1993. 3H and 14C as tracers of ground water recharge, in: Engman, Ted, Saving a threatened resource—In search of solutions: American Society of Civil Engineers, IR Division/ASCE, p. 122–127.

Table 1. Recent and Older Groundwater Classifications from Hanson[24]

Category	Well Name	Tritium (picoCuries/liter)	Depth of well screen (ft) below land surface	Nitrate (mg/L)
Recent Groundwater (Group 1)	PV-1 (S)	18.1	70-90	122
	PV-3 (S)	<0.3	140-170	0.10
	PV-4A (S)	8.2	80-110	173
	PV-8 (S)	14.2	130-200	182
	PV- 8 (M)	0.3	420-530	<2
	PV-11	10.4	56-116	171
Older Groundwater (Group 2)	PV-6 (S)	<0.3	110-180	45.4
	PV-6 (SM)	<0.3	260-280	0.025
	PV-6 (MD)	<0.3	510-640	0.025
	PV-6 (D)	<0.3	730-750	0.05
	PV-8 (D)	<0.3	570-590	20.54

Hanson[25] also reported results for water samples collected from two agricultural drainage systems located adjacent to the Pajaro River near the western edge of the basin. Nitrate concentrations in samples collected from drainage systems AG-1 and AG-2 were 349 and 38 mg/L nitrate.

3 METHODS AND DATA SOURCING

3.1 Sampling of CCGC Member Wells

Between October 2013 and August 2014, groundwater nitrate data were obtained from 459 domestic and domestic/irrigation wells and 26 irrigation wells on L&G properties in Monterey, Santa Cruz, San Benito, and Santa Clara Counties on L&G properties sampled by HydroFocus, Inc. and Michael L. Johnson, LLC personnel. For MRP compliance any domestic source well falling on a CCGC parcel was sampled; however, this TM focuses only on the Pajaro Valley Groundwater Basin. **Table 2** summarizes the wells sampled under the CCGC.

[24] Hanson (2003) see footnote 19
[25] ibid

A total of 84 samples were collected under the CCGC characterization monitoring program in Pajaro Valley. Twenty-one samples were collected under the individual monitoring program, including eleven samples during the Fall 2013 monitoring campaign and ten samples during the Spring 2014 monitoring campaign. Four samples were collected because their original nitrate concentration was within 80% of the MCL. **Table 3** summarizes the sample counts for Pajaro Valley Groundwater Basin.

Table 2. Wells Sampled Under the CCGC by Well Use

Groundwater Basin	Domestic and Domestic/Irrigation Wells	Irrigation Wells
Pajaro Valley	73	11

Table 3. Wells and Sample Counts Sampled by the CCGC

Groundwater Basin	Total Wells Sampled	Samples Collected				
		Characterization	Individual Monitoring Fall 2013	Individual Monitoring Spring 2014	Within 80% of the MCL Re-Sample	Additional Re-Sample
Pajaro Valley	84	74	11	10	4	4

Within the Pajaro Valley, the most recently collected groundwater nitrate data were obtained from 73 domestic wells on L&G properties sampled by HydroFocus, Inc. and Michael L. Johnson, LLC personnel from February through August 2014. The results of this sampling are included in this report. There are three remaining domestic wells located on L&G parcels in which the leasee does not have access to the well and, therefore, could not be sampled by the CCGC. These wells are owned by the land owners who are not members of the CCGC and did not allow the CCGC to sample their wells. The parcels on which these wells reside are in areas with at least two other sample points within 1 mi^2.

Upon arrival at the well and using electronic sounders accurate to the nearest 0.01 feet, field personnel measured the depth to groundwater in the well (if there was access), relative to the top (the highest point) of the well casing. The measuring point location and depth to groundwater were recorded on the field sheet.

Field parameters (pH, water temperature, specific conductance, oxidation-reduction potential (ORP) and dissolved oxygen (DO)) were measured at each well using a Yellow Springs Instruments Multimeter. Meters were calibrated for all parameters at least two times per day, once in the morning prior to beginning sampling and once in the afternoon. At each well, field parameters were measured upon arrival. If the preliminarily measured field parameter values were more than 20% outside of the range of calibration values, the meter was recalibrated. Meters were calibrated with standards close to or that bracketed the values for the well sample and standards were maintained at temperatures (in water baths) close to the temperature of the well water. The meter was checked with zero DO solution at the first site of the day, and more frequently if needed. The pH probe was calibrated using buffers bracketing the preliminary sample result. The ORP was calibrated using Zobell solution[26]. Personnel recorded calibration data on field sheets. After calibration, tubing was connected to the well outlet and directed the well discharge to a flow-through chamber. As water was pumped from the well, field parameters were recorded approximately every 3 minutes.

To the extent possible, purging of the well occurred prior to sample collection in order to remove stagnant water from within the well casing and ensure that a representative sample was obtained. Stabilization of the field parameters was used as an indication that the sample water was representative of groundwater. Stability was defined as ± 0.1 for pH, ± 3% for conductivity, ± 10 mV for ORP and ± 10% for DO for at least two consecutive readings Sampling began as soon as possible after parameter stabilization.

Field personnel collected all samples using the dedicated pumps installed in the domestic wells. The sample was collected as close to the well head as possible. In most cases, the sample was collected through plastic tubing connected to a spigot at or near the well head. In rare cases, the sample was collected from an indoor or outdoor faucet. Well water flowed into a flow-through chamber and into a collection bucket for measuring volume of flow per unit time. Samples analyzed for dissolved constituents (including nitrate) were filtered in the field using 0.45µm capsule filters certified to meet EPA standards for trace metal analysis. Sample bottles and sampling equipment were rinsed thoroughly three times with the water to be sampled prior to sample collection. Bottles pretreated with preservatives were not rinsed prior to sample collection. Samples collected for metals were preserved with nitric acid in the field. Test strips were used to verify that the pH was less than 2 in preserved samples.

Field personnel collected ten percent of the total samples for quality assurance and quality control (QA/QC) purposes (duplicate and field blank samples). Field duplicate samples were collected and processed in the field and analyzed to evaluate the heterogeneity of the matrices. The duplicate samples were submitted to the laboratory as semi-blind samples. Field blank samples were processed in the field identically as the other samples using deionized water as sample water. The blank samples were submitted to the laboratory as semi-blind samples.

All samples collected for the MRP constituents were placed immediately on ice and transported to Monterey Bay Analytical Services on the day of collection. Before leaving the field to deliver samples, sampling personnel checked the ice level to ensure the temperature of the ice chest would remain around 6° C, and added ice if necessary. Chain of Custody form(s) were completed for each sampling day.

[26] Nordstrom, D.K. 1977. Thermochemical redox equilibria of ZoBell's solution, Geochimica e Cosmochimica Acta, 41:1835-1841

3.2 Analytical Methods

3.2.1 <u>Nitrate</u>

Nitrate samples were analyzed by Monterey Bay Analytical Services using EPA Method 300.0.

3.2.2 <u>Major Ions and Total Dissolved Solids</u>

All major ions and total dissolved solids were analyzed by Monterey Bay Analytical Services. Calcium, magnesium, potassium, and sodium were analyzed by EPA Method 200.7. Chloride and sulfate were analyzed by EPA Method 300.0. Total dissolved solids were analyzed by EPA approved Standard Methods 2540C.

3.3 Ancillary Sampling

At selected wells, samples were collected for supplemental data not required by the California Regional Water Quality Control Board Central Coast Region Order No. R3-2012-001 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (WDR). The CCGC submitted an Addendum to the Northern Counties Quality Assurance Project Plan (QAPP) which included the methods by which this data would be collected and analyzed (submitted November 15, 2013). As stated within the Addendum submittal, the QAPP did not need Regional Board approval since these data are not required. Within the Northern Counties, supplemental data were collected voluntarily by the CCGC according to methods outlined in the Addendum. The list of constituents analyzed for at selected wells is included in **Table 4**.

Table 4. Supplemental Constituents

Constituents	Function
N^{15} and O^{18} isotopes	Potential for denitrification
N^{15} and O^{18} isotopes; pharmaceuticals	Nitrogen source analysis
Tritium/He-4, chlorofluorocarbons	Age of water
Br, O^{18}, N^{15}, deuterium	Source of water

Note: Modified from Table 2 of CCGC Work Plan for Monterey, Santa Clara, Santa Cruz, and San Benito Counties, November 1, 2013.

The CCGC is not including these data with this report (**Appendix F**), but a summary of the methods used to collect and analyze the samples is included as requested by Regional Board staff. The following is a summary of the sampling methods employed to collect the supplemental data at selected wells after well purging and collection of the required constituents in the MRPs of the WDR.

3.3.1 **Sampling Methods**

Prior to collecting the tritium sample, sampling personnel removed any wristwatches. The unfiltered samples were collected by inserting the plastic tubing connected to the well connection into the tritium bottle. The tubing was inserted about 1/3 of the way into the bottle and was slowly removed as the bottle was filled.

Noble gases samples were collected in copper tubes. Prior to sample collection, copper tubes were placed on backing plates with two clamps, one on each end. Plastic tubing leading from the well hook up was attached to one tube end, and blank plastic tubing was attached to the other tube end. As water flowed through the tube, the line was inspected for any air bubbles. The copper tube was continuously tapped to ensure bubbles were not trapped inside. When there was certainty that no bubbles were present, the upper clamp was sealed followed by the lower clamp. Copper tubes were stored at room temperature and shipped to Lawrence Livermore National Laboratory under standard Chain of Custody procedures.

Chlorofluorocarbons (CFCs) were collected in laboratory provided glass bottles with aluminum foil lined caps. At each site, three samples were collected. Using Viton tubing leading into a bucket, three bottles and three caps were completely submerged in sample water. Each bottle was individually filled from the Viton tubing until it overflowed under water. Once submerged and filled, a cap was chosen, completely submerged, and tapped underwater to ensure no air bubbles were trapped. The Viton tubing was removed from the sample bottle and the cap was tightly screwed on under water. The bottle was removed and checked for any visible bubbles. If bubbles were present, the sampled process was repeated with a new cap. If no bubbles were present, electrical tape was used to secure the cap in a clockwise direction.

3.3.2 **Analytical Methods**

Water samples are chilled, heated, and chilled in cycles in which the headspace gases are pumped away. After five cycles, almost all the ^{3}He is removed. The sample then sits for 10 days, allowing the ^{3}He from tritium decay to accumulate. The gas is then analyzed using a mass spectrometer.

In the laboratory, samples are released from the copper tubes, tubes are heated, and then the water is frozen effectively trapping the dissolved gases in the headspace. Dissolved gases are measured by either mass spectrometer or a high-sensitivity capacitive manometer. The measured amounts of Ne, Ar, Kr, and Xe are used to determine the He present in the sample.

Selected groundwater samples were analyzed for CFC's using a purge-and-trap gas chromatography procedure with an electron capture detector (see http://water.usgs.gov/lab/chlorofluorocarbons/lab/analytical_procedures/) by the Tritium Laboratory at the University of Miami Rosenthiel of Marine and Atmospheric Science.

3.4 Other Sources of Nitrate Data

Using GeoTracker GAMA[27], all data were downloaded for the Pajaro Valley. The GeoTracker GAMA database includes data from the California Department of Public Health, GAMA – SWRCB data collection

[27] http://geotracker.waterboards.ca.gov/gama/, accessed 2/6/2014

efforts and Regulated Sites. Data were also downloaded from the USGS National Water Information System[28] for wells in the Pajaro Valley which contain samples analyzed for nitrate.

The Central Coast Regional Board provided two sets of nitrate data, including data uploaded as part of the individual well sampling (eNOI) process by L&Gs enrolled in the Irrigated Lands Regulatory Program and data collected by the USGS as part of the Regional Water Quality Control Board Central Coast Ambient Monitoring Program - Groundwater Assessment and Protection (CCAMP-GAP) Domestic Well Project for the Salinas and Pajaro Valleys. The PVWMA provided data from 13 wells sampled for nitrate from 2011 through 2013.

3.5 Mapping of Nitrate Concentrations in Groundwater

Nitrate mapping for this project was based on the theory of regionalized variables, or geostatistics, to create maps of estimated groundwater nitrate concentrations in the Pajaro Valley. The theory of regionalized variables relies on the assumption that data collected in geographic areas is randomly distributed[29]. Kriging, the process of interpolation from measured values of some variable z measured at N locations relies on the determination of the spatial covariance or semivariogram of the variable at points x_i (**Appendix A**). The semivariance (γ) is defined as:

$$\gamma(h) = \frac{variance[z(x_i)-z(x_j)]}{2} \qquad (3)$$

where:

h is the lag or average distance between data points and

z(x) is the groundwater nitrate concentration

The semivariogram was calculated to estimate the spatial covariance in the area of nitrate concentrations. Interpolation was done with kriging, which uses a linear combination of weighting factors and measured values of $z(x_j)$ that minimize the estimation variance.

The objective of kriging for this study was to characterize the spatial distribution of the estimated nitrate concentrations in the Pajaro Valley and provide a conservative estimate of where groundwater nitrate concentrations are likely to be above the MCL. Because of the high spatial variability and non-Gaussian nature of the distribution, the concentrations were transformed to logarithms of the concentrations and SURFER was used to calculate the semivariogram. Kriging was carried out using exact well locations (where available) and a grid of estimated values was generated. A 20-meter cell size was specified for development of maps showing the distribution of estimated groundwater nitrate concentrations.

---

[28] http://waterdata.usgs.gov/nwis, accessed 4/4/2013

[29] David, M. 1977. Geostatistical ore reserve. New York (NY): Elsevier Scientific
Journel, A.G. and Ch. J. Huijbregts. 1978. Mining Geostatistics. San Diego (CA): Academic Press Harcourt Brace & Company, Publishers.
Matheron, G. 1963. Principles of Geostatistics. Economic Geology 58: 1246-1266.

Indicator kriging[30] was performed with Surfer to address uncertainty in estimated nitrate concentrations by developing a map that displays the probability that concentrations at a given location will exceed the MCL. For indicator kriging, the data are transformed into either zeroes or ones depending on whether they are above or below a specified threshold. The transformed data values are used as input to ordinary kriging and the indicator kriging prediction at a location is interpreted as the probability that the threshold is exceeded[31]. Indicator kriging does not provide any information on how far above or below the threshold the values might be, only the probability that they are above or below the threshold.

3.6 Mapping Assumptions

It was assumed that water quality data collected from 2000 to 2014 are representative of current conditions for the area. When drinking water supply wells are determined to contain nitrate concentrations above the MCL, use and sampling can be discontinued. Thus, a 14-year time period was used for data gathering in an attempt to capture wells where sampling may have been discontinued. Where there was more than one value for samples collected at different times from a well within this time frame, the maximum of all values was used.

Data from supply wells downloaded from GeoTracker have obfuscated coordinates[32], which create a dataset where multiple wells may plot at the same location. There are several limitations of the obfuscated and clustered data from GeoTracker. The obfuscated well locations are sometimes not accurate. Moreover, clustered data limited the ability to fully map areas where there is likely impairment of groundwater quality due to high nitrate. To provide a conservative map of where groundwater is likely over the MCL, the maximum of all concentrations was used at each of these "coincident" points for map creation. There were 122 coincident points in Pajaro Valley.

Analytical data downloaded from GeoTracker are reported as either nitrate or nitrate as nitrogen. It was generally assumed that this designation is correct. It was possible to match data from samples collected by the L&G as part of the individual sampling or eNOI process and the CCGC for one well. The (CCGC) values agreed with values (for the same well) reported in the eNOI, giving credibility to the assumption that the eNOI process used the correct nitrate classification.

Analytical data with non-detect values were re-assigned concentrations of half the detection limit for averaging and mapping. Where the detection limit was known, half that value was assigned. Where the

---

[30] Indicator Kriging is an analysis that 1) transforms data into 0s and 1s based on a value being below or above a threshold, and 2) interpolates values using kriging at unknown locations with resulting values being between 0 and 1. The results can be interpreted as probabilities of concentrations at unsampled locations being above the chosen threshold. For example, when transforming the measured data, if the threshold chosen is 45 mg/L, a measured concentration of 10 mg/L at a particular location would be classified as 0, and a concentration of 70 mg/L at another location would be classified as 1. After indicator kriging is performed, if the calculated value is, for example, 0.73 at an unsampled location, there is a 73% probability that if this location was sampled the concentration would be at least 45 mg/L. Additional information can be found at the following link: http://help.arcgis.com/en/arcgisdesktop/10.0/help/index.html#00310000004n000000

[31] Konstantin Krivoruchko. 2011. Spatial Statistical Data Analysis for GIS Users, ESRI Press, 928 pp.

[32] These locations are accurate to within 1 square mile of the actual location.

detection limit was unknown, a detection limit of 1 mg/L was assumed. Some of the analytical data downloaded from GeoTracker had a "<" qualifier, but a large nitrate concentration, e.g., < 32 mg/L. These data were excluded from averaging due to the large uncertainty in the actual concentration relative to the MCL. Excluded data are provided in **Appendix B**.

The CCAMP-GAP project samples were obtained from household faucets. Where applicable, the GAP sites were matched to USGS – NWIS sites. Where there were comparison samples, all nitrate concentrations for tap samples generally agreed well with concentrations obtained at the well head.

Consistent with the discussion in the Hydrogeologic Context section and the objectives of characterizing the domestic water supply and shallow groundwater and reasonably delineating areas where concentrations are likely to be over the MCL, it was assumed that the shallow aquifer used for domestic drinking water supply generally extends to a maximum depth of 400 feet throughout the Pajaro Valley. Therefore, any wells with known depths greater than 400 feet were removed from the dataset for mapping, with a few exceptions. The exceptions include the wells listed in **Table 5**.

Table 5. List of Wells Deeper than 400 feet included in the Nitrate Mapping Analysis

Well Name	Basin	Use	Well Depth (feet)	Source
AW3128_SUNUSDI	Pajaro	Dom/Irrig	420	Field Visit
AW1510_CAVCODI	Pajaro	Dom/Irrig	429	Field Visit; eNOI
AW3515_RUFLPOD	Pajaro	Domestic	420	Field Visit
USGS_365429121411301	Pajaro	Unknown	420	USGS-NWIS; GAMA
USGS_365318121394601	Pajaro	Unknown	440	USGS-NWIS

For mapping purposes, irrigation wells and domestic/irrigation wells[33] with unknown depths were included in the analysis. It is recognized that that there may be some irrigation and irrigation/domestic wells that have a portion of their screen intervals below 400 feet. However, review of available well depth data for domestic and public supply wells (**Tables 6 and 7**) combined with assessment of nitrate concentrations by well type (**Table 8**) indicates most domestic/irrigation and irrigation wells are likely screened primarily within the upper 400 feet. It was also assumed that wells with unknown depths having uses of Observation or Unknown were less than 400 feet deep.

For creation of maps where CCGC domestic well locations are shown, locations were obfuscated as follows. For each pair of well location coordinates, the location coordinate was altered using a random-number generation algorithm in Microsoft Excel. The coordinates were randomly altered in both the east-west and north-south directions to place the well location somewhere within 0.5 miles of the actual location. This resulted in plotting of the well location within a 1-square mile block centered over the actual well location. In some cases the obfuscated well location plotted outside of the L&G parcel.

[33] These are wells that were originally installed as irrigation wells and then converted to use for domestic supply.

3.7 Well Construction Information

In an attempt to learn about domestic well construction, available well completion reports from DWR were obtained for the Pajaro Valley Groundwater Basin. From these reports, over 1,706 reports that designated wells as domestic use were identified and well construction information was extracted. Of these, all reports provided well depth information and 1,661 reports provided bottom of screen information for the Pajaro Valley. There were 51 well completion reports designated as public supply wells for the Pajaro Valley. The data for well depth are described in more detail in the following section.

4 RESULTS AND DISCUSSION

Figure 1 shows the locations of wells and sources of data used in the analysis of the distribution of groundwater nitrate concentrations in the Pajaro Valley. Data sources included GeoTracker GAMA, PVWMA, USGS, the Central Coast Regional Water Quality Control Board and samples collected under the auspices of the CCGC groundwater program. The total number of wells used for mapping the distribution of estimated nitrate concentrations was 439. In the Pajaro Valley, the total area of the member parcels equals 15,422 acres. Member parcels are present throughout most of the valley. However, the density of member parcels is lower in the northwestern and southeastern areas (**Figure 3**)[34].

4.1 Well Construction

The distribution of the DWR well completion reports shows that the large majority of the domestic wells have depths within 400 feet of land surface. Therefore, most domestic wells are completed in the upper and middle aquifers **(Figure 2)**. The average depth to the bottom of the well screens for all well completion reports where this information was available for domestic wells is 294 feet. Three-hundred and eight (308) well completion reports (19%) stated that the bottom of the well screen was greater than 400 feet. Therefore, any domestic well, there is 81% likelihood that the well screens intercept water from within 400 feet. The average well depth was 304 feet. Three-hundred and sixty-seven (367) well completion reports (22%) stated that the bottom of the well was greater than 400 feet. Domestic well total depth and depth to screen bottom statistics are summarized in **Table 6**.

[34] The locations of CCGC member wells were obfuscated to protect member privacy. The locations of CCGC member wells shown on Figure 5 were randomly adjusted up to 0.5 miles in both the east-west and north-south directions. The wells are plotted within a 1 mi^2 block centered over the actual well location. Therefore, the wells may not be shown on the member parcels on which they are actually located.

Table 6. Summary Statistics for Domestic Depth and Screen Bottom Reported on Well Completion Reports for the Pajaro Valley

	Well Depth (feet)	Screen Bottom (feet)
Average	304	294
Median	300	284
Minimum	30	30
Maximum	1,260	1,200
Number of wells	1,706	1,661
Percentage of wells depths within 400 feet of land surface	78.5%	81.5%

Figure 4 shows the distribution of average domestic well depths by township for the Pajaro Valley and vicinity. The average domestic well depth ranges from 109 to 386 feet and averages 297 feet. The average well depth generally is shallowest near the valley center around Watsonville. For a subset of the 83 wells sampled on Coalition L&Gs' properties in the Pajaro Valley, wells were matched to well completion reports or well construction information was received from L&Gs. Well depth and screened interval data were received for same non-CCGC wells. In total, well depth information was obtained for 198 wells. Figure 5 shows the distribution of well depths for wells with nitrate data[35]. Well depths vary substantially from 10 to 800 feet. Most wells (89%) were shallower than 400 feet. Where well depth and screened interval information was available, wells deeper than 400 feet (consistent with the discussion in the Hydrogeologic Context section) were excluded for purposes of developing maps of estimated nitrate concentrations. Information about the excluded wells is listed in **Appendix B**.

Figure 6 shows the distribution of average public supply well depths by section for the Pajaro Valley. These well depths were extracted from available DWR well completion reports with the designation of either Public Supply or Municipal well. Most public supply wells in the hilly region between Moss Landing and Aromas, and Aptos and Corralitos are deeper than 400 feet; however, there are many sections, especially in the valley bottom northeast of Watsonville, that have well depths less than 400 feet.

Well depth statistics in **Table 7** show that the average depth from these public supply wells is slightly deeper than 400 feet, but the average well screen bottom is less than 400 feet. Forty-four percent of the wells were completed within 400 feet, and a higher percentage have screen bottoms shallower than

[35] The locations of CCGC member wells were obfuscated to protect member privacy. The locations of CCGC member wells shown on **Figure 5** were randomly adjusted up to 0.5 miles in both the east-west and north-south directions. The wells are plotted within a 1 mi^2 block centered over the actual well location.

400 feet. There were 52 well logs in the DWR well completion reports classified as Public Supply, and 199 wells downloaded from GeoTracker GAMA designated as CDPH supply wells.   Of the 199 CDPH wells from GeoTracker, 151 have nitrate data collected since the year 2000. Some wells in the CDPH database are likely classified as other sources, most likely domestic, on the DWR well completion reports.   As discussed above, most domestic well depths are shallower than 400 feet. The CDPH well dataset includes any Public Water system that supplies water to either 15 service connections or 25 people at least 60 days of the year. These wells could be anything from a well serving a campground, a rural school or an agricultural facility to sources that serve a large community[36].   Therefore, incorporating the CDPH supply well data into the dataset may introduce some deeper water sources. However, based on available well depth data for public supply and domestic wells, it is likely that most of the CDPH wells are completed within 400 feet.

Table 7. Summary Statistics for Public Supply Wells - Well Depth and Screen Bottom Reported on DWR Well Completion Reports

	Well Depth (feet)	Screen Bottom (feet)
Average	431	392
Median	435	410
Minimum	152	147
Maximum	1,500	1,080
Number of wells	52	49

Table 8 provides a summary of nitrate concentrations by well type in Pajaro Valley. The range and average nitrate concentrations are very similar among the various well types. In particular, the range/average for domestic/irrigation, irrigation, and public supply wells are similar to the range/average for domestic wells. The nitrate concentration data by well type indicate that well depths among these various well types are similar and warrant inclusion in the database for nitrate mapping used in this study.

[36] Personal communication with Jan Sweigert, District Engineer of SWRCB Division of Drinking Water, 12/5/2014.

Table 8. Summary of Nitrate Concentrations by Well Type

Well Type	Count	Min (mg/L)	Max (mg/L)	Average (mg/L)	Median (mg/L)
Domestic/Irrigation	39	0.5	221	38	5.0
Domestic	71	0.1	299	47	18.8
Irrigation	104	0.0	317	33	3.8
Observation	160	0.2	347	26	2.1
Public Supply	34	0.3	309	34	21.5
Unknown	31	0.1	190	34	14.8
Grand Total	439	0.0	347	33	5.0

4.2 Distribution of Groundwater Nitrate Concentrations

Results from 439 wells were used to map the distribution of estimated groundwater nitrate (as NO_3) concentrations in shallow groundwater. For wells with multiple sample dates from 2000 to 2014, the maximum nitrate concentrations for each well were used in the analysis. Summary statistics for nitrate concentrations are shown in **Table 9**. The mean concentration was 33.3 mg/L as NO_3. The median was 5.1 mg/L as NO_3. Values ranged from less than the detection limit of 0.03 mg/L to 346.5 mg/L. A total of 94 wells (21%) had maximum concentrations over the MCL of 45 mg/L.

Table 9. Summary Statistics for Average Groundwater Nitrate Concentrations

	Pajaro Valley
Mean (mg/L)	33.3
Median (mg/L)	5.1
Minimum (mg/L)	0.03
Maximum (mg/L)	346.5
Number of wells	439
Number of wells (percentage) with concentrations over the MCL	94 (21%)
Total Area (acres)	88,062
Percent of area mapped as over MCL	9.7%

Table 10 shows the summary statistics for wells sampled on CCGC parcels. The mean nitrate concentration from domestic wells was 52.3 mg/L and the median was 9 mg/L. Values ranged from less than the detection limit to 299 mg/L. A high value of 835 mg/L was removed from the kriging dataset as this well has a potential for direct fertilizer contamination as indicated by very low pH and high sulfate. This well was re-sampled directly at the well head in August and the nitrate concentration was 1 mg/L. The sample concentration from the well head was used in the analysis. The source of the high nitrates is currently being investigated. See **Appendix B** for all well exclusions. The QA/QC results for groundwater sampling conducted by CCGC are provided in **Appendix C**, well information and results are presented in **Appendix D**, and the Exceedance Notification follow-up report is in **Appendix E**.

Table 10. Summary Statistics for Average Groundwater Nitrate Concentrations for Samples Collected on CCGC Parcels

	Domestic and Domestic/Irrigation	Irrigation
Mean (mg/L)	52.3	42.3
Median (mg/L)	9	9.5
Minimum (mg/L)	0.5	0.5
Maximum (mg/L)	299	165
Number of Wells	74[a]	10
Number of wells (percentage) with concentrations over the MCL	25 (34%)	3 (30%)

a. One well was incorrectly sampled as it was not on a CCGC member parcel and although it was used in the nitrate contour map creation, the results were not used for the statistical analysis or reporting for samples collected on CCGC parcels.

Seventy-three (73) domestic supply wells were sampled by the CCGC in the Pajaro Valley. From the 1,706 DWR well completion reports with well depth information in Pajaro Valley, 1,339 have well depths less than 400 feet. (Hanson and others[37] reported 1,695 domestic wells throughout the Pajaro Valley.) These data indicate that the CCGC sampled about 4.5% of domestic wells for which DWR well completion reports exist in the Pajaro Valley. A total of 82 known domestic wells were used in the analysis which indicates a representation of 5% of domestic wells for which DWR well completion reports exist in the Pajaro Valley. It is uncertain how many of the wells described in the DWR well completion reports remain in operation. Even though wells were removed based on well decommissioning reports filed with DWR when processing and analyzing the 1,706 DWR well completion reports with well depth information, there are likely wells that are no longer used or have been abandoned for which DWR does not have documentation. **Figure 7** shows the known domestic well locations based on the wells sampled by the CCGC and data obtained from other sources and sections with DWR domestic well completion reports. **Figure 7** indicates that the domestic well data used for this report adequately represents the areas where, based on DWR well completion reports and land use data, domestic wells have been installed in agricultural areas. **Figure 8** is a boxplot showing the range and median of maximum groundwater nitrate concentrations for the Pajaro Valley. Groundwater nitrate concentrations are generally below the MCL but there are some wells with concentrations that exceed the MCL ranging up to several hundred mg/L. The low median value relative to the mean and the large number of outliers indicate a non-parametric distribution. **Figure 9** shows boxplots of average nitrate concentrations by depth for the Pajaro Valley for wells where depths were known. Most wells with groundwater nitrate concentrations greater than 100 mg/l have well depths of less than 250 feet. The highest median nitrate concentration occurred in the 201-250 foot depth interval, and the lowest median concentrations occurred in wells greater than 400 feet deep.

Figure 10 shows a boxplot of nitrate concentrations for wells sampled by CCGC inside and outside of the drain area. The agricultural tile drains are generally located in shallow groundwater areas along the Pajaro River. This plot shows significantly lower nitrate concentrations within the drain area, possibly due to removal of high nitrate groundwater by the drain system.

Figure 11 shows the areal distribution of estimated groundwater nitrate concentrations based on kriging results in the Pajaro Valley[38], which provides an estimate of nitrate levels at unsampled locations. It should be noted that the nitrate concentration contours are only an estimate and are based on nearby measured values. Estimated groundwater nitrate concentrations in the Pajaro Valley are generally less than 50% of the MCL due to widespread distribution of a large number of low nitrate concentrations.

---

[37] R.T. Hanson, Wolfgang Schmid, Claudia C. Faunt, Jonathan Lear, and Brian Lockwood. 2014. Integrated Hydrologic Model of Pajaro Valley, Santa Cruz and Monterey Counties, California, US Geological Survey Scientific Investigations Report 2014-5111
Figure 6A in the Hanson and others report shows the locations of domestic supply wells. The area where the domestic well locations are shown are generally consistent with the areas shown in **Figure 7** in this report.

[38] The locations of CCGC member wells were obfuscated to protect member privacy. The locations of CCGC member wells shown on **Figure 11** were randomly adjusted up to 0.5 miles in both the east-west and north-south directions. The wells are plotted within a 1 mi^2 block centered over the actual well location. The actual locations were used when kriging the nitrate concentration surface.

Exceptions include areas near the coast. There is also a relatively large area where estimated nitrate concentrations are over the MCL south of Watsonville between Moss Landing and Aromas and east of Watsonville. Within the Pajaro Valley, 9.7% of the total area is mapped as having estimated nitrate groundwater concentrations greater than the MCL. Mapping of estimated nitrate concentrations was limited to areas within 1.5 miles of the data points. The well density in the mapped area is one well per 167 acres (3.8 wells per square mile). **Appendix A** presents kriging methods and parameter values used for the analysis and the related kriging statistics.

Figure 12 shows the locations of CCGC member parcels overlain on the mapped areas of varying concentration ranges shown **in Figure 11**. Member parcels are generally concentrated in central Pajaro Valley and relatively sparse in the northwestern and southeastern areas of the valley. The areas where groundwater nitrate concentrations exceed the MCL and range up to over 4 times the MCL are located west and northwest of Aromas, north of Moss Landing and west and north of Watsonville.

Figure 13 shows the probability of exceeding a 45 mg/L nitrate concentration based on the indicator kriging results. For indicator kriging, the data were transformed into either zeroes or ones depending on whether they are above or below a specified threshold. The transformed data values are used as input to ordinary kriging and the indicator kriging prediction at a location is interpreted as the probability that the threshold is exceeded. The probability map provides an analysis to address the uncertainty of nitrate concentrations at unsampled locations by providing a probability of exceeding the MCL. In areas where nearby wells have measured concentrations above the nitrate MCL, higher probabilities of exceeding the MCL are calculated at unsampled locations. Conversely, in areas where nearby wells have measured concentrations below the MCL, lower probabilities of exceeding the MCL are calculated at unsampled locations.

Figure 13 shows that there are a few areas with a greater than 60% probability of exceeding the MCL. These areas are along the coast directly west of Watsonville, northwest of Aromas, and north of Moss Landing. However, most areas in Pajaro Valley are shown as having less than 40% probability of exceeding the MCL.

Appendix A presents kriging methods and parameter values used for the analysis and the related kriging statistics.

4.3 Factors Affecting the Distribution of Nitrate Concentrations

Data related to major ions, nitrate, field parameters, percent sand in soil, and hydrogeology were used to understand factors and processes affecting groundwater nitrate concentrations.

4.3.1 Major Ions and Piper Diagrams

Piper diagrams provide a graphic way of viewing the relative concentrations of major ions in groundwater (calcium, magnesium, sodium, potassium, chloride, sulfate, bicarbonate and carbonate). **Figure 14** shows the groundwater chemical characteristics displayed on a Piper diagram.

There is evidence for similar geochemical evolution of groundwater in the Salinas Valley and Pajaro Valley basins. Boyle and others[39] hypothesized that variation in major-ion chemistry in Salinas Valley groundwater results from geochemical processes occurring along groundwater flow paths. Specifically, relatively high concentrations of calcium and magnesium are associated with more recently recharged water. Calcium and magnesium can move from groundwater to clays and displace sodium which tends to increase in concentration as groundwater moves along its flow path. Additionally, groundwater tends to continuously dissolve carbonate minerals found naturally in geological materials as it travels through the subsurface which results in higher concentrations of bicarbonate in more geochemically evolved groundwater.

Hanson[40] displayed major ion results for groundwater samples collected in the Pajaro Valley in Piper diagrams which show a similar pattern to that described by Boyle; i.e., groundwater of more recent age plots within the calcium/magnesium-sulfate/chloride area of the Piper diagrams whereas older groundwater plots within the calcium/magnesium bicarbonate/carbonate area.

Figure 15 shows a Piper diagram for the samples collected by the CCGC in the Pajaro Valley. The points representing groundwater samples for Pajaro Valley show a range from calcium-magnesium/chloride-sulfate waters to calcium-magnesium/bicarbonate waters. Available well depths posted on the Piper diagram generally show increasing well depths associated with water in the calcium/magnesium-bicarbonate/carbonate sector of the central diamond, which indicates a more geochemically evolved water.

4.3.2 Nitrate Concentrations and Oxidation-Reduction Potential and Dissolved Oxygen Concentrations

Figure 16 indicates an oxidation-reduction potential (ORP) influence on nitrate concentrations and speciation. High and low nitrate concentrations were associated with less reducing conditions over about 75 mV. The line delineating an ORP value of 75 mV indicates the theoretical redox potential below which nitrate is denitrified[41]. Where ORP values below 75 mV were measured, nitrate concentrations were generally lower than where ORP values were above 75 mV. There was no discernable relationship between ORP and well depth. Dissolved oxygen concentrations varied from 0.03 to 12.89 mg/L. There was no apparent relation between dissolved oxygen and nitrate concentrations.

[39] Boyle, Dylan, King, Aaron, Kourakos, Giorgos, Lockhart, Katherine, Mayzelle, Megan, Fogg, Graham E. and Harter, Thomas. 2012. Addressing Nitrate in California's Drinking Water With a Focus on Tulare Lake Basin and Salinas Valley Groundwater Report for the State Water Resources Control Board Report to the Legislature, Technical Report 4.
[40] Hanson R.T. 2003. Geohydrologic Framework of Recharge and Seawater Intrusion in the Pajaro Valley, Santa Cruz and Monterey Counties, California. U.S. Geological Survey Water-Resources Investigation Report 03-4096.
[41] Stumm W. and Morgan, J.J. 1981. *Aquatic Chemistry*, John Wiley and Sons, New York.

4.3.3 Relation of Nitrate Concentrations to Soil Texture and Recharge

Figure 17 shows the distribution of nitrate concentrations overlaid on soil texture (percent sand). The highest concentrations tend to be associated with relatively sandy soils that are 50% sand or greater in the areas northwest of Moss Landing, west of Watsonville (near the coast), and northwest of Aromas. However, high nitrate areas where concentrations are over 45 mg/L west of Aromas overlie an area mapped as 25-50% sand. Thus, it is apparent that elevated nitrate concentrations occur in areas with soils having a range of percent sand contents.

Figure 18 shows the distribution of nitrate concentrations overlaid on recharge estimated from the Pajaro Valley groundwater flow model.[42] The highest nitrate concentrations are generally associated with areas of higher recharge. However, areas of higher recharge are also associated with areas of low nitrate concentrations, particularly along the Pajaro River. Along the river where recharge is high and nitrate concentrations are low, recharge from the river may contribute to lower nitrate concentrations in groundwater near the river. Tile drains exist in lowland agricultural areas along the river[43] and likely remove some high nitrate irrigation water before it enters the groundwater system. Hanson[44] reported drain-water nitrate concentrations of 38 and 350 mg/L.

5 SUMMARY AND CONCLUSIONS

This section provides a summary of the primary study objectives, findings, and data gaps. The summary includes the conclusions derived from the collection, analysis, and mapping of groundwater nitrate concentration data for wells that represent the domestic supply aquifers in the Pajaro Valley.

5.1 Study Objectives

- Characterize shallow groundwater quality with focus on domestic drinking water supply.
- Prepare estimated nitrate concentration maps of Pajaro Valley covering areas with sufficient data.
- Identify data gaps and study limitations.

5.2 General Findings

- A total of 1,706 DWR well completion reports were designated as being associated with domestic wells based on review of available well logs. Analysis of well completion reports indicated that the large majority of domestic wells are screened within 400 feet of land surface.
- A total of 52 DWR well completion reports were designated as public supply wells based on review of available well logs. These wells are generally completed at slightly deeper depths than the domestic wells, with average screen bottom depths of approximately 400 feet.
- Based on review of all available data related to well depths, likely composition of the CDPH well database, and nitrate concentrations by well type, all well types with unknown depths were

[42] Hanson RT, Wolfgang Schmid, Claudia C. Faunt, Jonathan Lear, and Brian Lockwood. 2014. Integrated Hydrologic Model of Pajaro Valley, Santa Cruz and Monterey Counties, California. U.S. Geological Survey Scientific Investigations Report 2014–5111.
[43] Ibid.
[44] Hanson (2003) – see footnote 18

included in the database for the nitrate mapping analysis. Wells with known depths greater than 400 feet were generally excluded from the analysis.

- Eighty-four wells on CCGC properties were sampled; 73 of which are domestic supply wells.
- Depths for the CCGC wells sampled ranged from 120 to 710 feet.
- For 439 wells used in analysis of nitrate concentrations in the Pajaro Valley, 21% had concentrations over the MCL.
- Where depths were known, groundwater nitrate concentrations generally decreased with depth. Wells greater than 400 feet deep all have concentrations below the MCL.
- Most domestic supply wells are completed in the upper and middle aquifers, which are generally within 300 to 500 feet of land surface.
- Mapping of estimated nitrate concentrations resulted in an estimated 10% of the area in the Pajaro Valley where groundwater nitrate concentrations are over the MCL.
- For the domestic wells sampled on CCGC properties, 34% had concentrations exceeding the MCL. All available wells on CCGC properties were sampled.
- The map depicting estimated nitrate concentrations generally indicates concentrations below the MCL for most of the valley. The areas above the MCL included locations between Moss Landing and Aromas, and areas west, north, and east of Watsonville.
- Uncertainty was addressed using indicator kriging to develop a map of the probability of exceeding the nitrate MCL throughout Pajaro Valley. The results generally indicate less than 40 percent chance of exceeding the nitrate MCL throughout most of Pajaro Valley; however, some coastal areas and some areas east and south of Watsonville have greater than 60 percent chance of exceeding the nitrate MCL.
- Higher nitrate concentrations are generally associated with areas where relatively sandy soils are mapped, although regions of sandy soils and low nitrate concentrations are also present.
- There is some indication of chemically reducing conditions that result in denitrification in selected areas of the Pajaro Valley. These areas may be influenced by riparian sediments and the Purisima Formation in the eastern part of the Basin.
- There is an oxidation-reduction potential influence on nitrate concentrations and speciation. High and low nitrate concentrations were associated with less reducing conditions over about 75 mV. The line delineating an ORP value of 75 mV indicates the theoretical redox potential below which nitrate is denitrified[45]. Where ORP values below 75 mV were measured, nitrate concentrations were generally lower than where ORP values were above 75 mV.
    - o The majority of the redox values below 75 mV are associated with relatively finer-grained soils in the northeastern part of the basin southeast of Corralitos and near the Pajaro River and Elkhorn Slough. Reducing conditions in riparian sediments likely result in denitrification.
- Major-ion data (calcium, magnesium, sodium, potassium, sulfate, chloride, bicarbonate) and Piper diagrams[46] were used to summarize groundwater geochemistry.
- Calcium/magnesium-sulfate/chloride water types are generally associated with shallower wells. Calcium/magnesium bicarbonate/carbonate water types are generally associated with deeper wells.

---

[45] Stumm W. and Morgan, J.J., 1981. *Aquatic Chemistry*, John Wiley and Sons, New York.

[46] Hem, Hem JD. 1985. Study and Interpretation of the Chemical Characteristics of Natural Water. Third Edition. U.S. Geological Survey Water-Supply Paper 2254.

- The highest nitrate concentrations are generally associated with areas of moderate to high recharge. However, areas of higher recharge are also associated with areas of low nitrate concentrations, particularly along the Pajaro River.
- Tile drains exist in lowland agricultural areas along the river where high recharge areas are mapped along with relatively low nitrate concentrations and likely remove high nitrate water before it enters the groundwater system.

Based on review of nitrate data and various factors as described above, there are likely several factors that influence nitrate concentrations in any given area.

5.3 Data Gaps

- There are several areas where additional data will be beneficial for the characterization of groundwater quality. These include areas where there are large data gaps such as in the northern portion of the basin between Aptos and Corralitos and smaller areas without many data points such as the extreme southeastern and southwestern corners of the basin.
- Future inclusion of additional data collected by the Monterey County and Santa Cruz County Health Departments will improve the characterization of groundwater quality for human consumption.

FIGURES

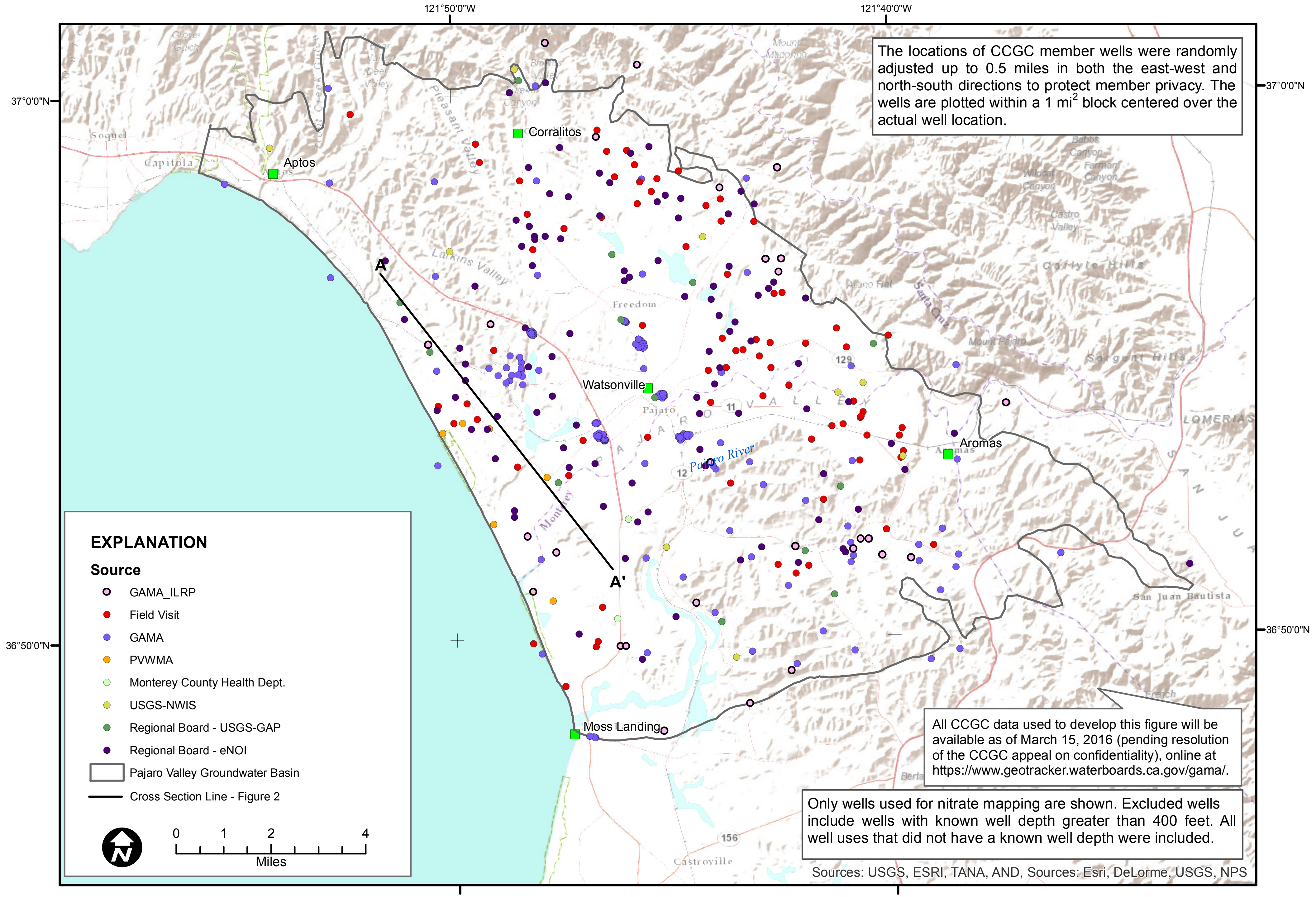


Figure 1. Pajaro Valley and Locations of Wells Used for Mapping of Nitrate Concentrations

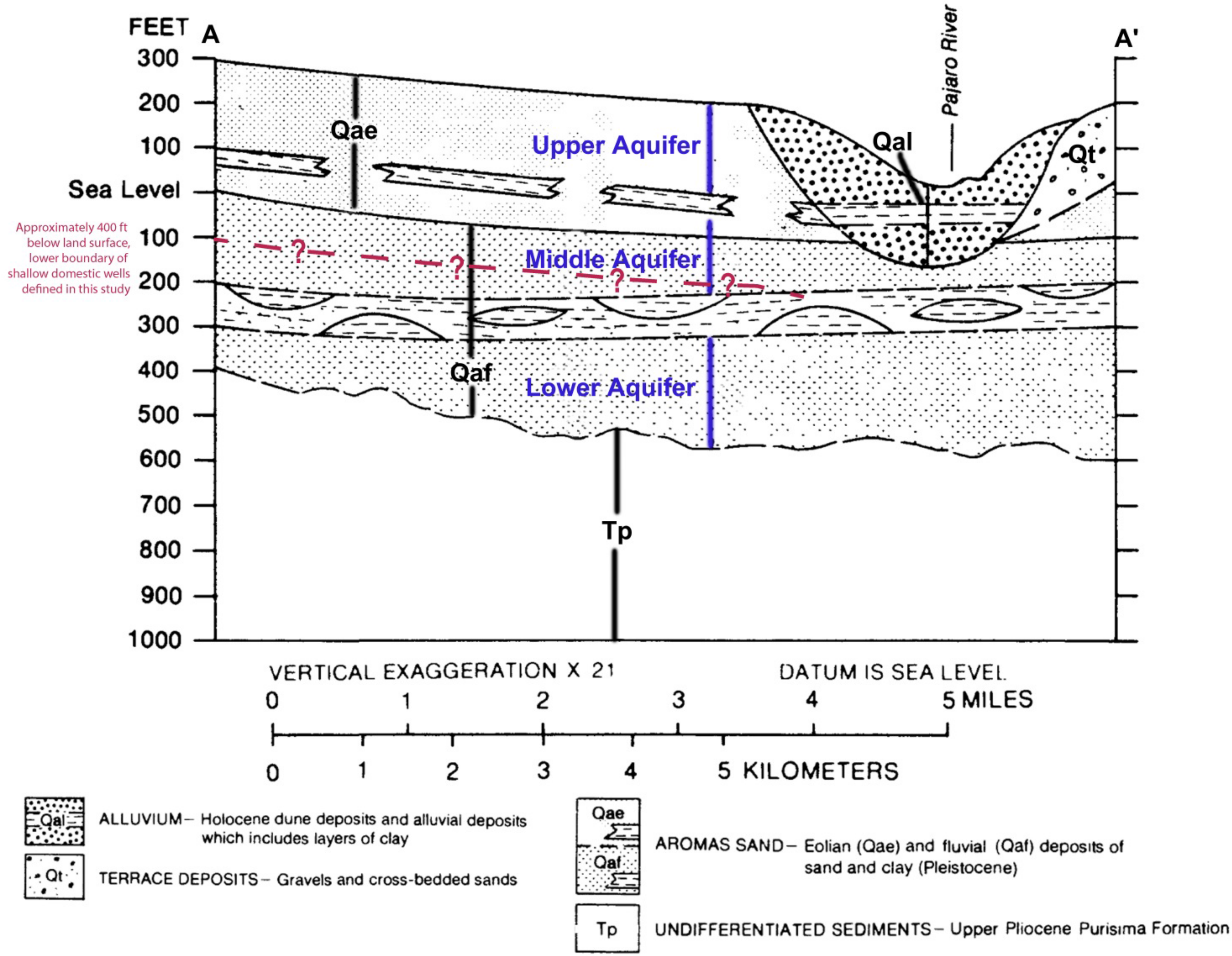


Figure 2. Generalized Cross-Section of the Pajaro Valley Aquifer System

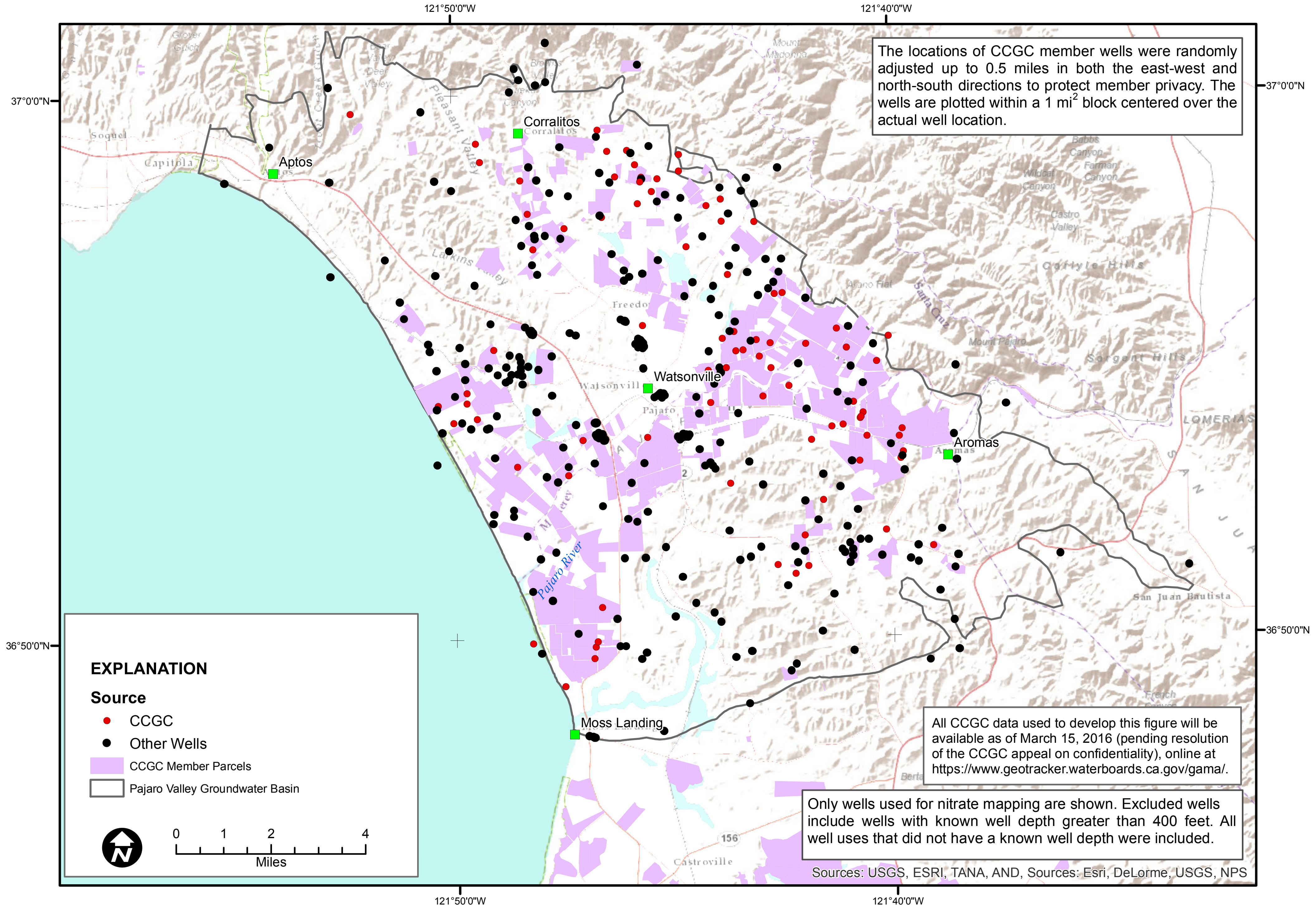


Figure 3: Locations of CCGC Member Parcels

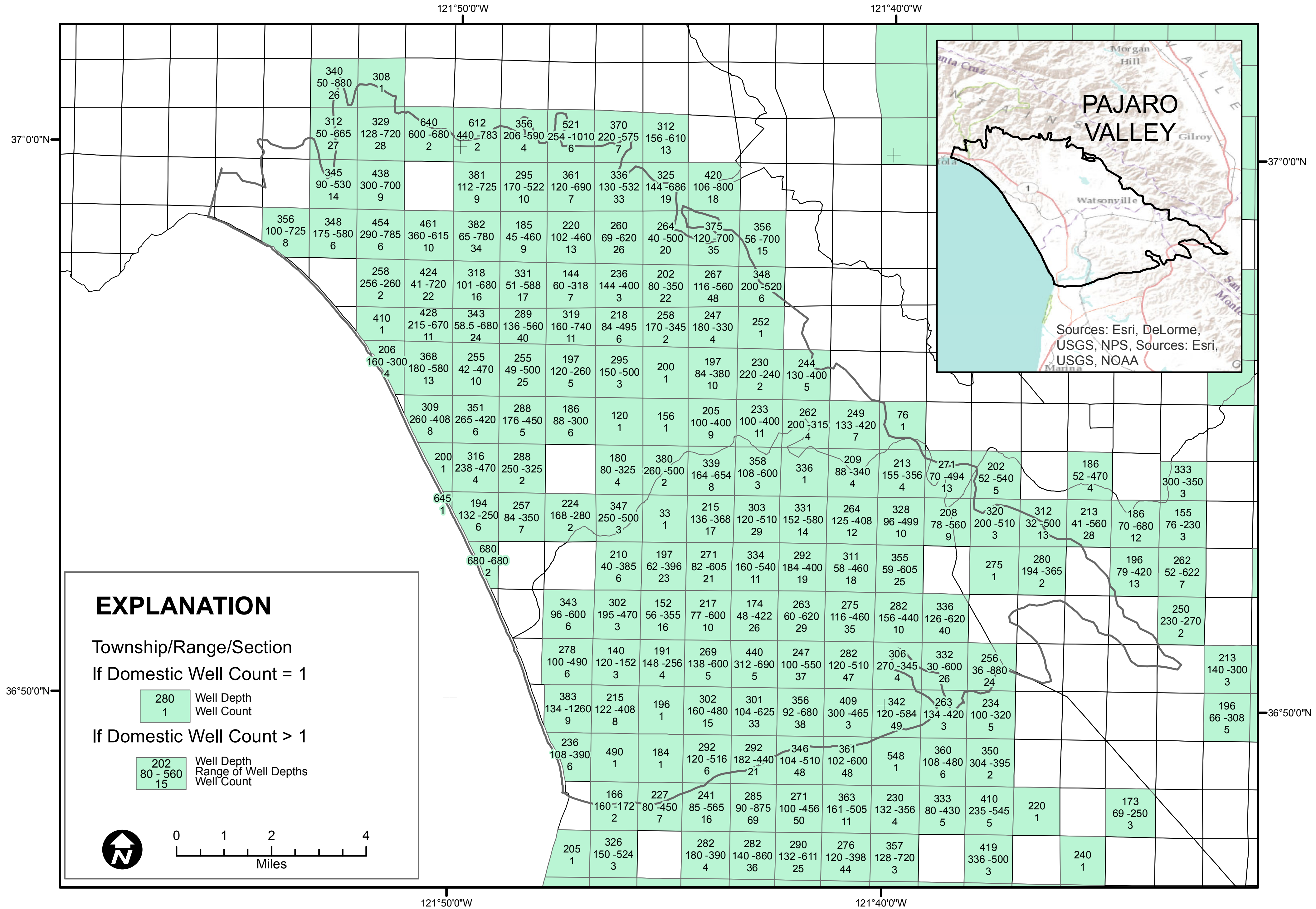


Figure 4. Average and Range of Domestic Well Depths by Township

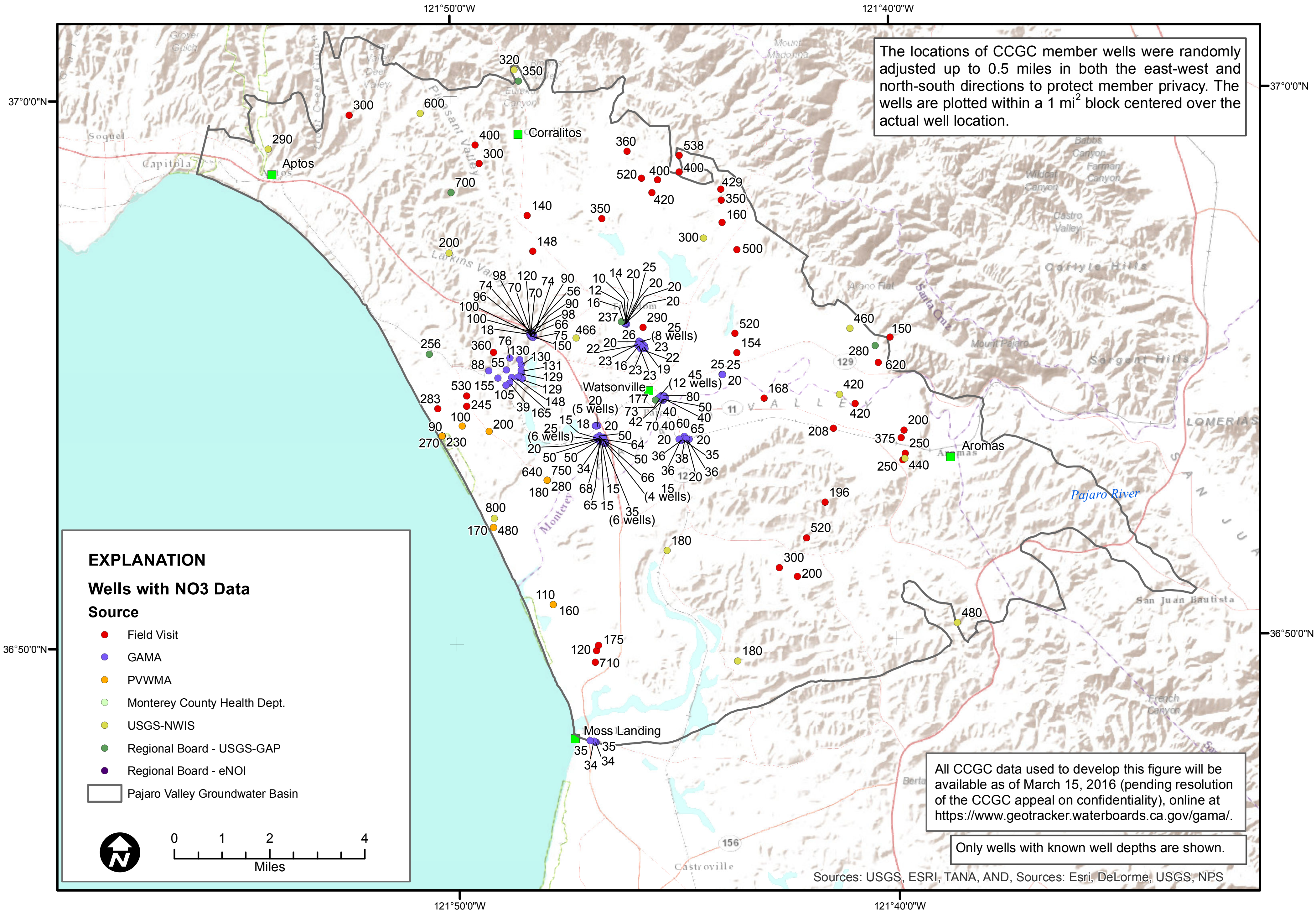


Figure 5. Distribution of Known Well Depths

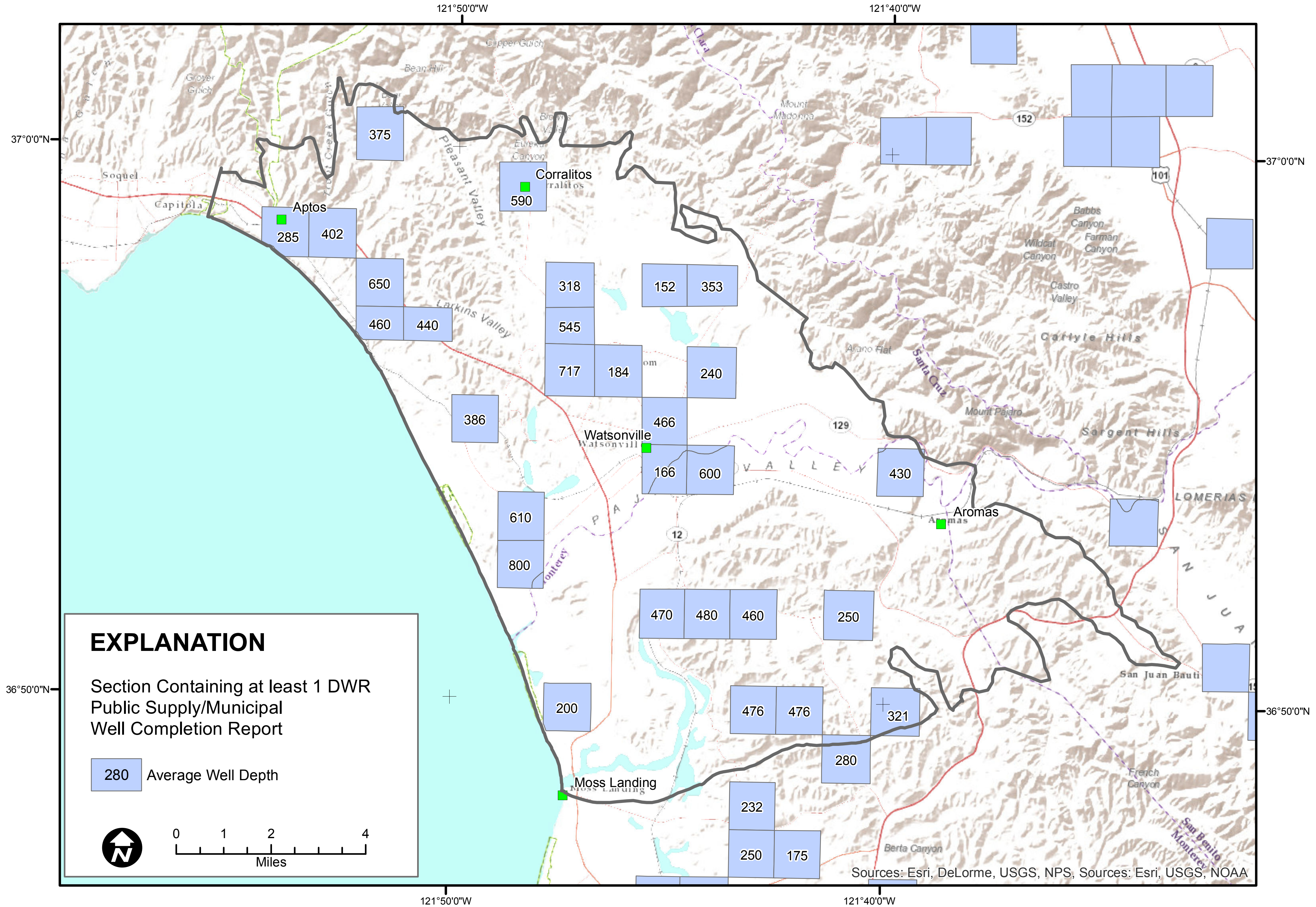


Figure 6. Average Public Supply Well Depth by Section

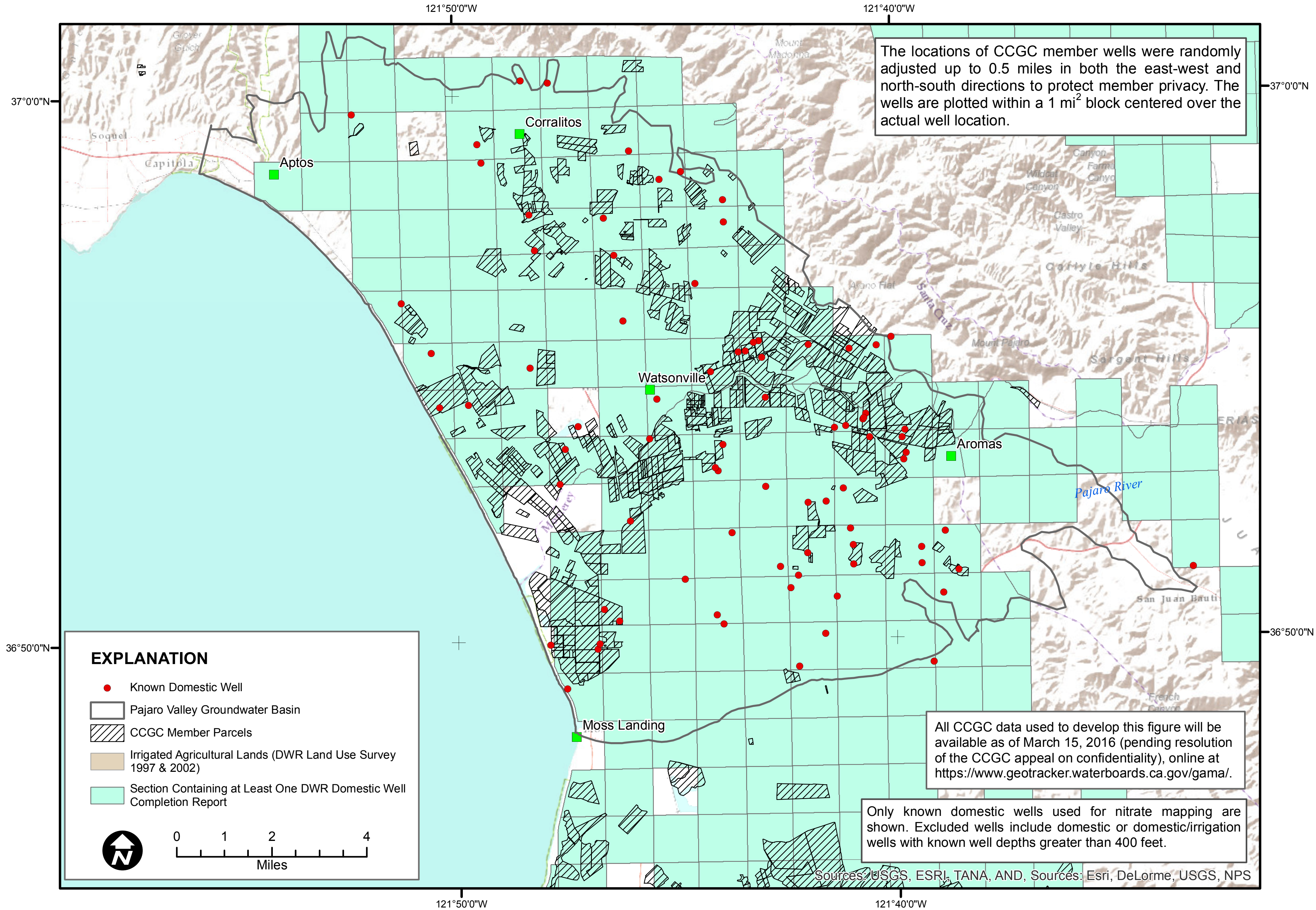


Figure 7. Known Domestic Wells Sampled by CCGC, Individual L&Gs, USGS, State Board (GAMA) and Sections Containing at Least One DWR Domestic Well Completion Report

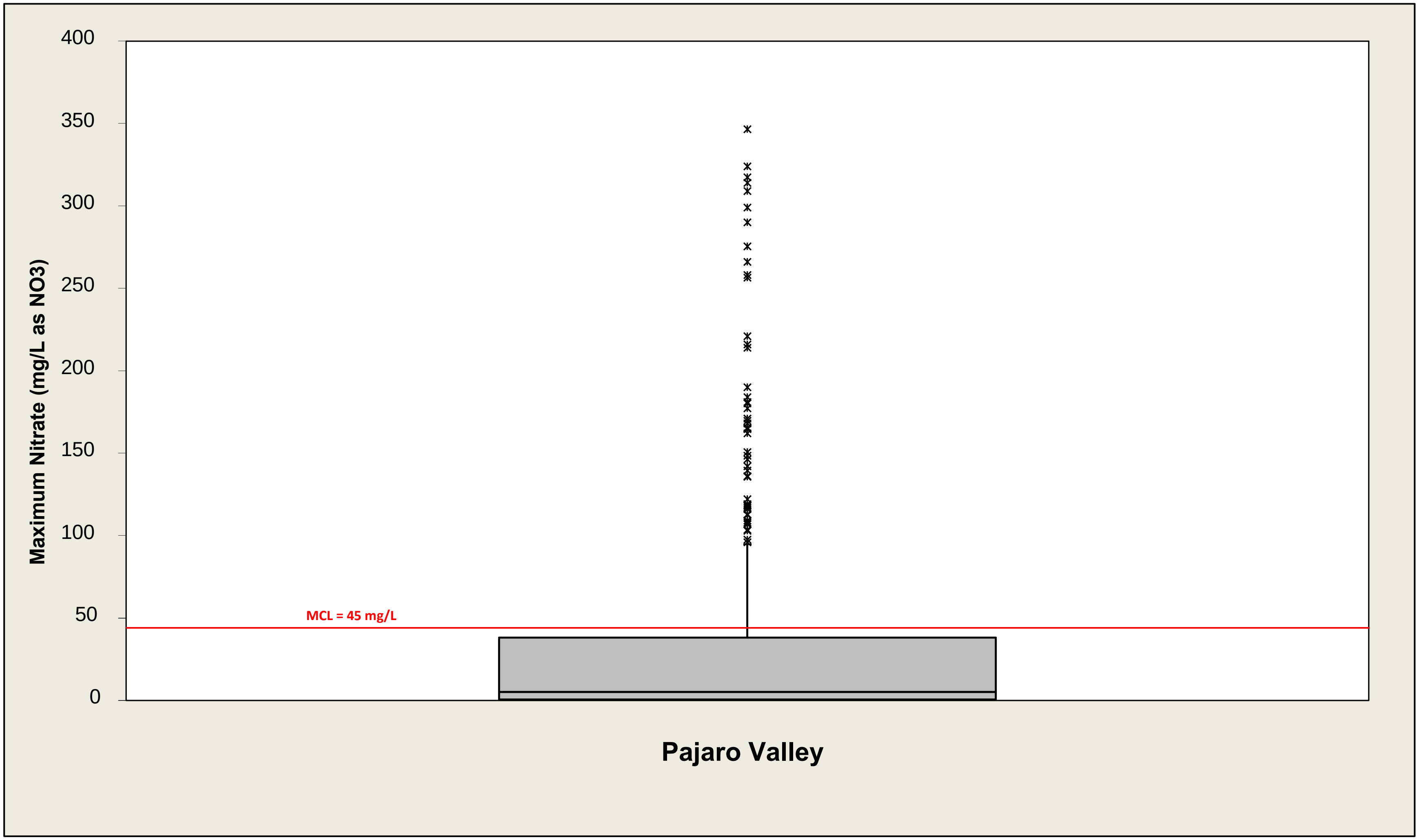


Figure 8. Boxplot Showing Median and Range of Maximum Nitrate Concentrations for the Pajaro Valley

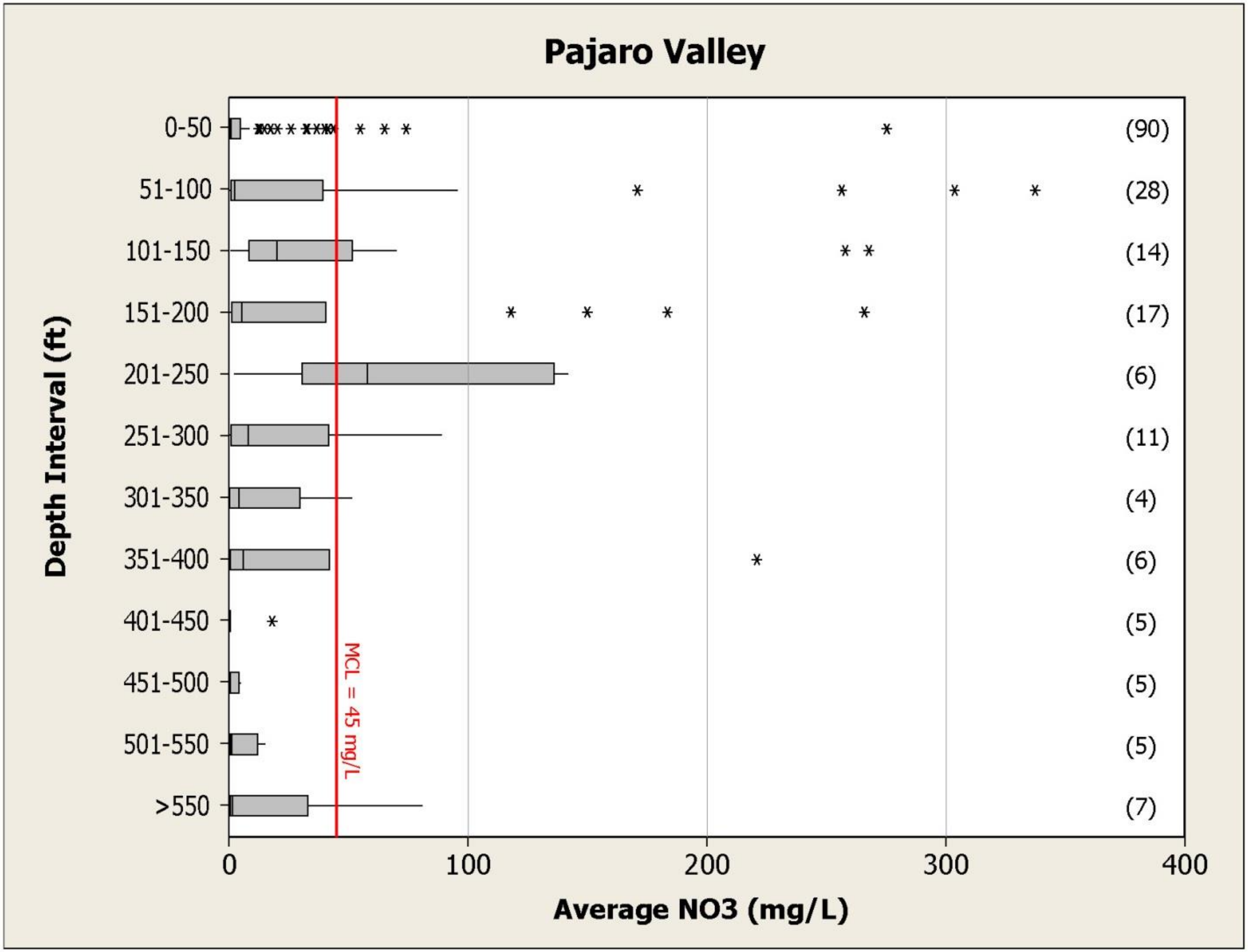


Figure 9. Boxplots Showing Medians and Ranges for Average Nitrate Concentrations for the Pajaro Valley by Depth

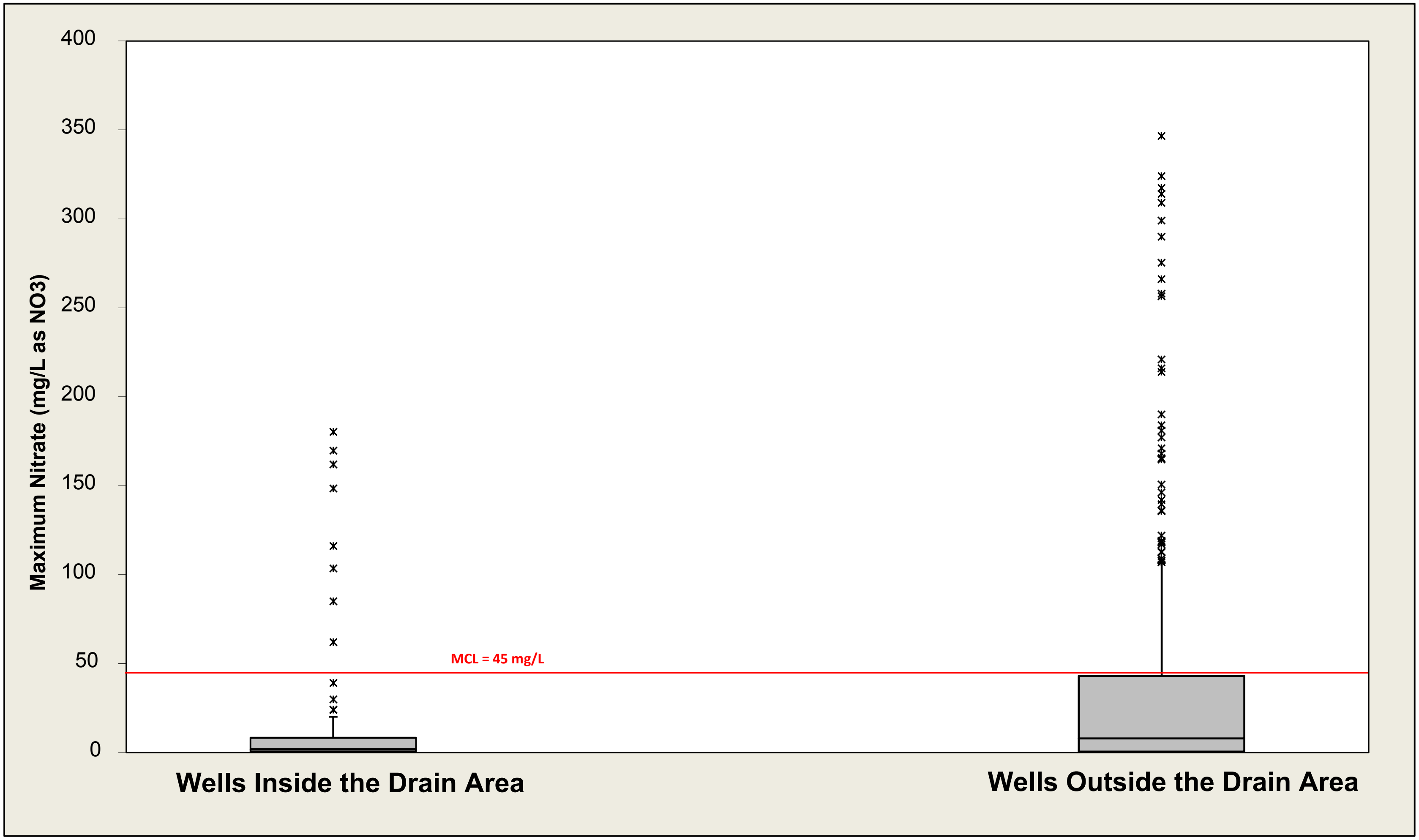


Figure 10. Boxplots of Maximum Nitrate Concentrations for Pajaro Valley Wells Sampled by the CCGC Inside and Outside of the Drain Area

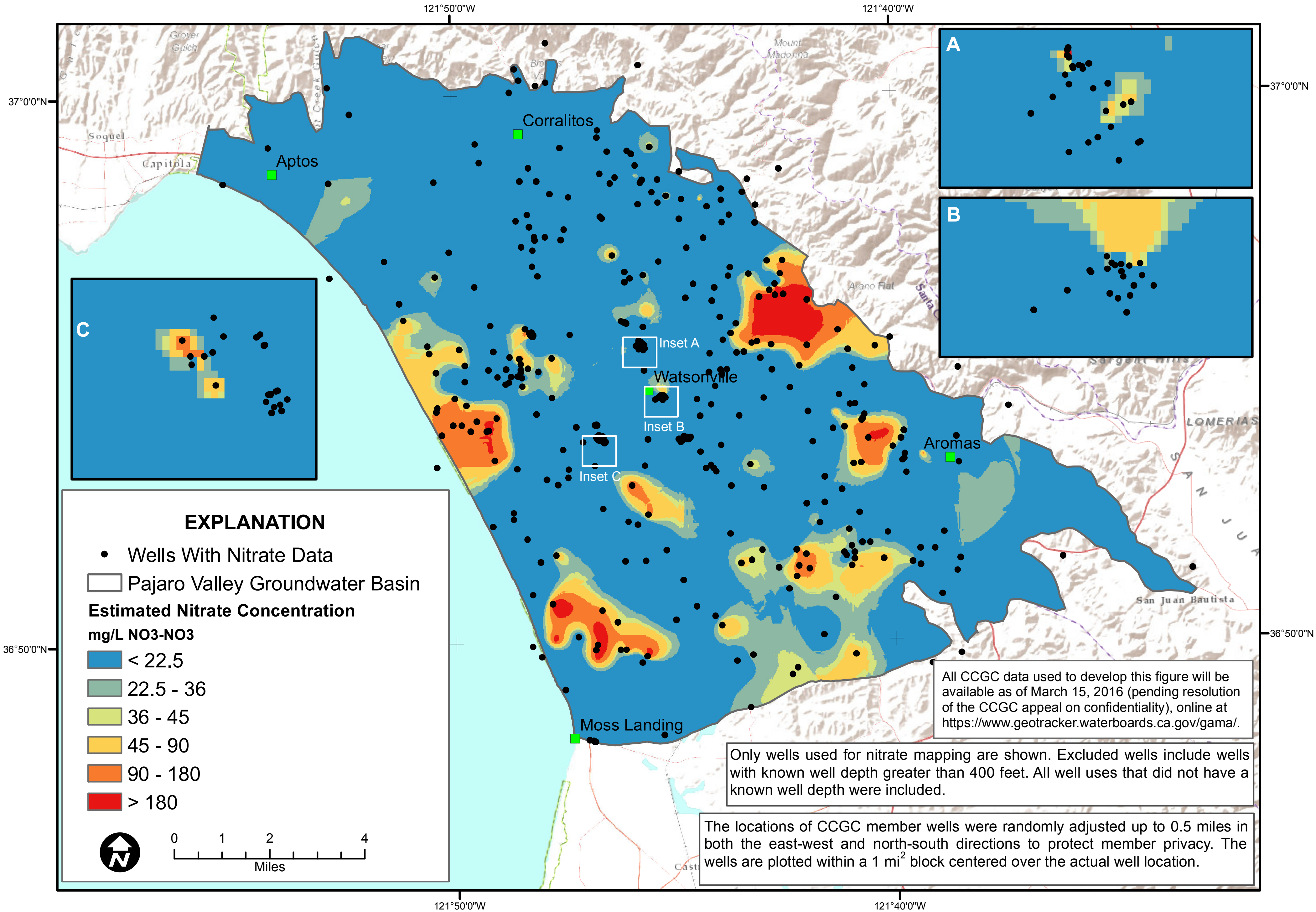


Figure 11a. Kriged Nitrate Concentrations and Delineation of Areas with Varying Concentration Ranges

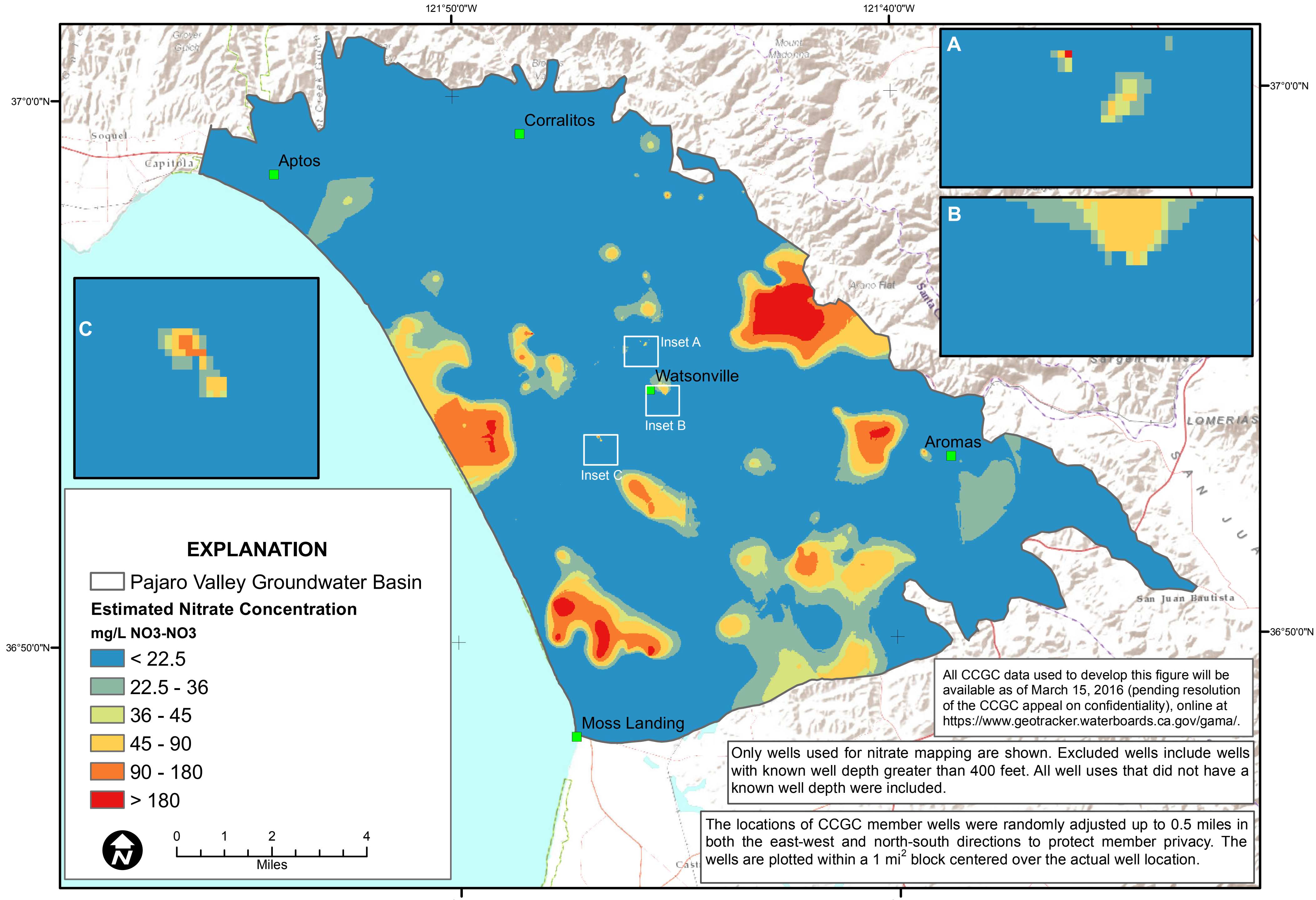


Figure 11b. Kriged Nitrate Concentrations and Delineation of Areas with Varying Concentration Ranges

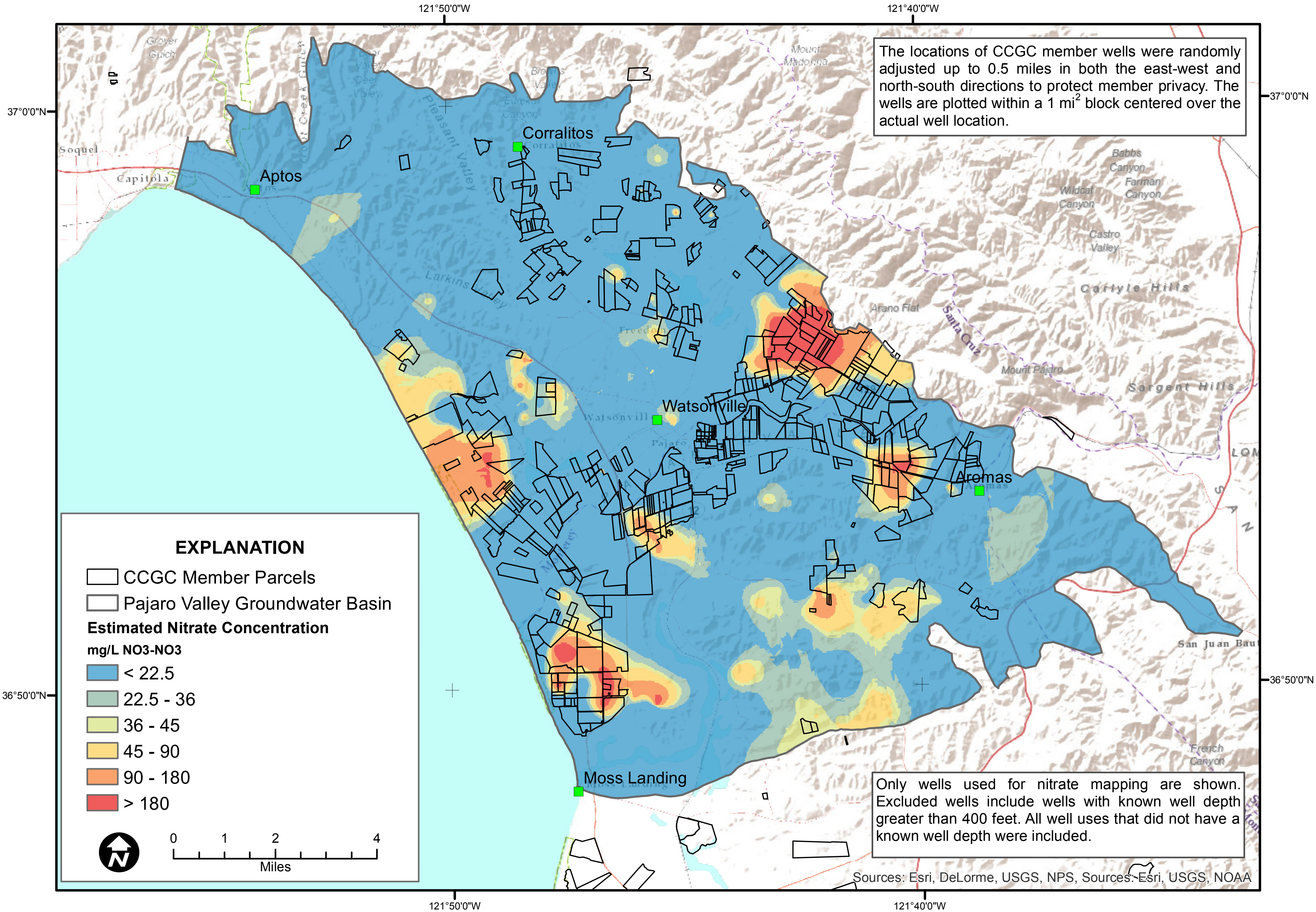


Figure 12. Kriged Nitrate Concentrations and Member Parcels

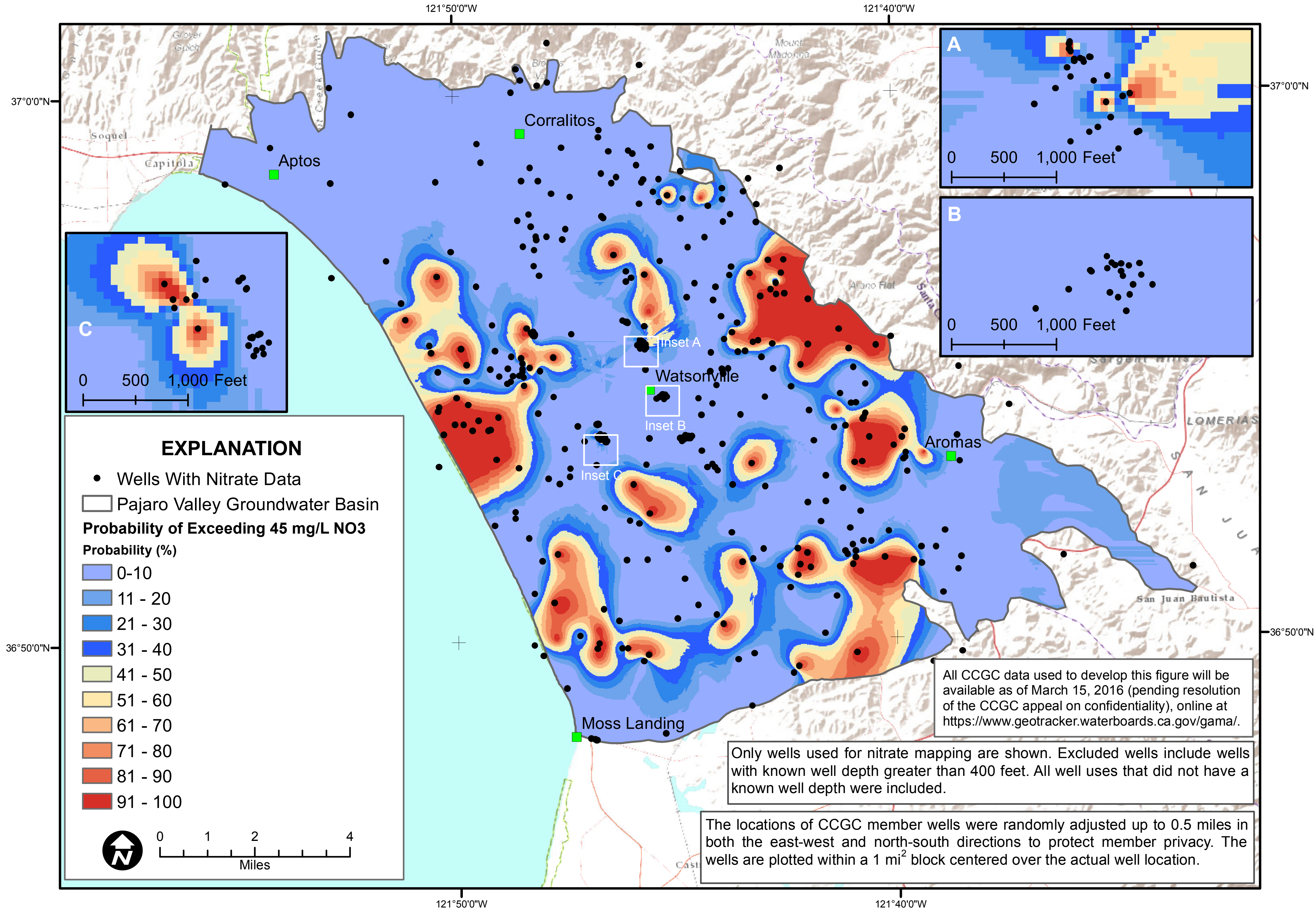


Figure 13a. Distribution of Estimated Probability of Exceeding Nitrate (as NO3) Concentrations of 45 mg/L in Groundwater

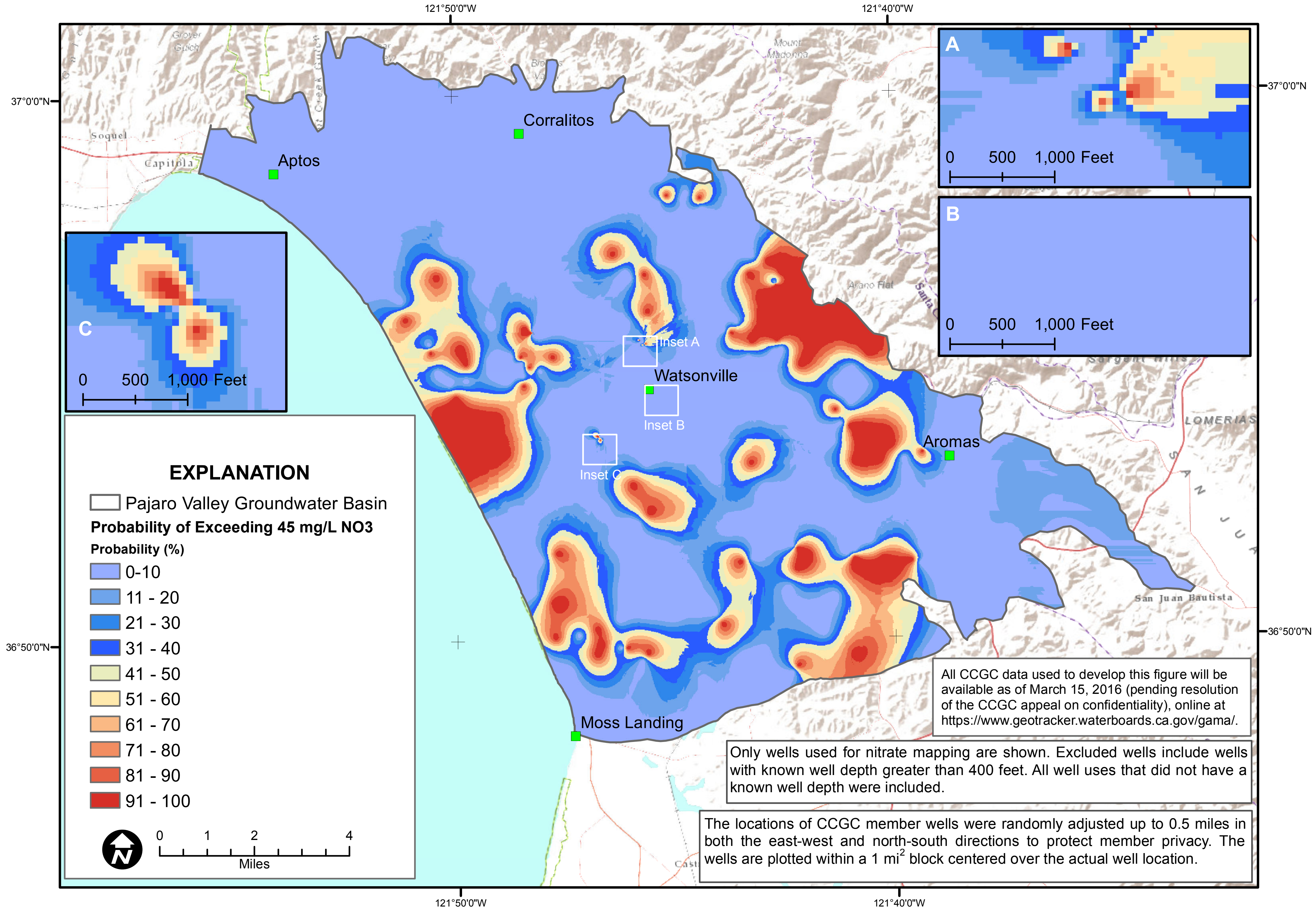


Figure 13b. Distribution of Estimated Probability of Exceeding Nitrate (as NO3) Concentrations of 45 mg/L in Groundwater

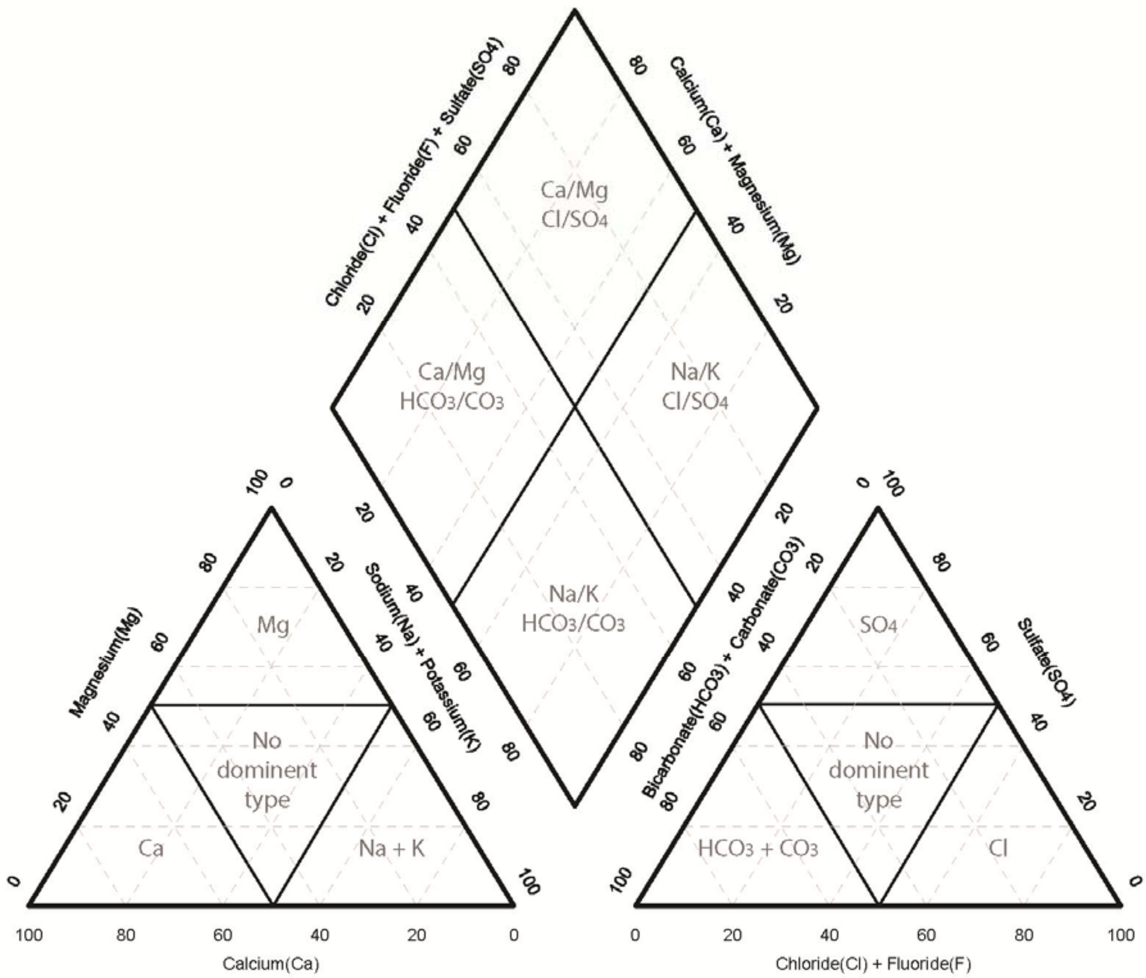


Figure 14. Chemical Characteristics and Areas of Ionic Dominance represented by the Piper Diagram

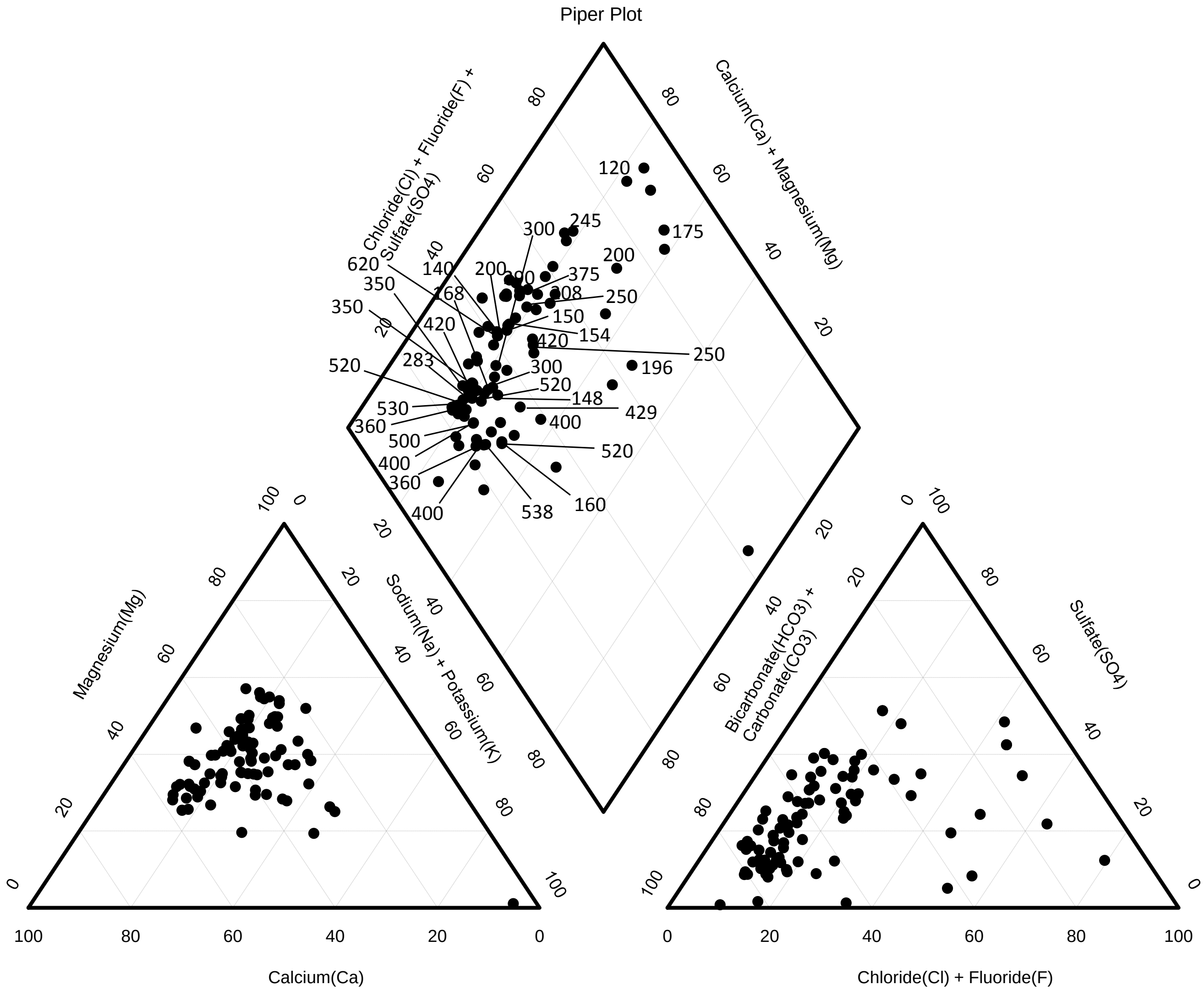


Figure 15. Piper Plot for Pajaro Valley Wells Sampled by the CCGC

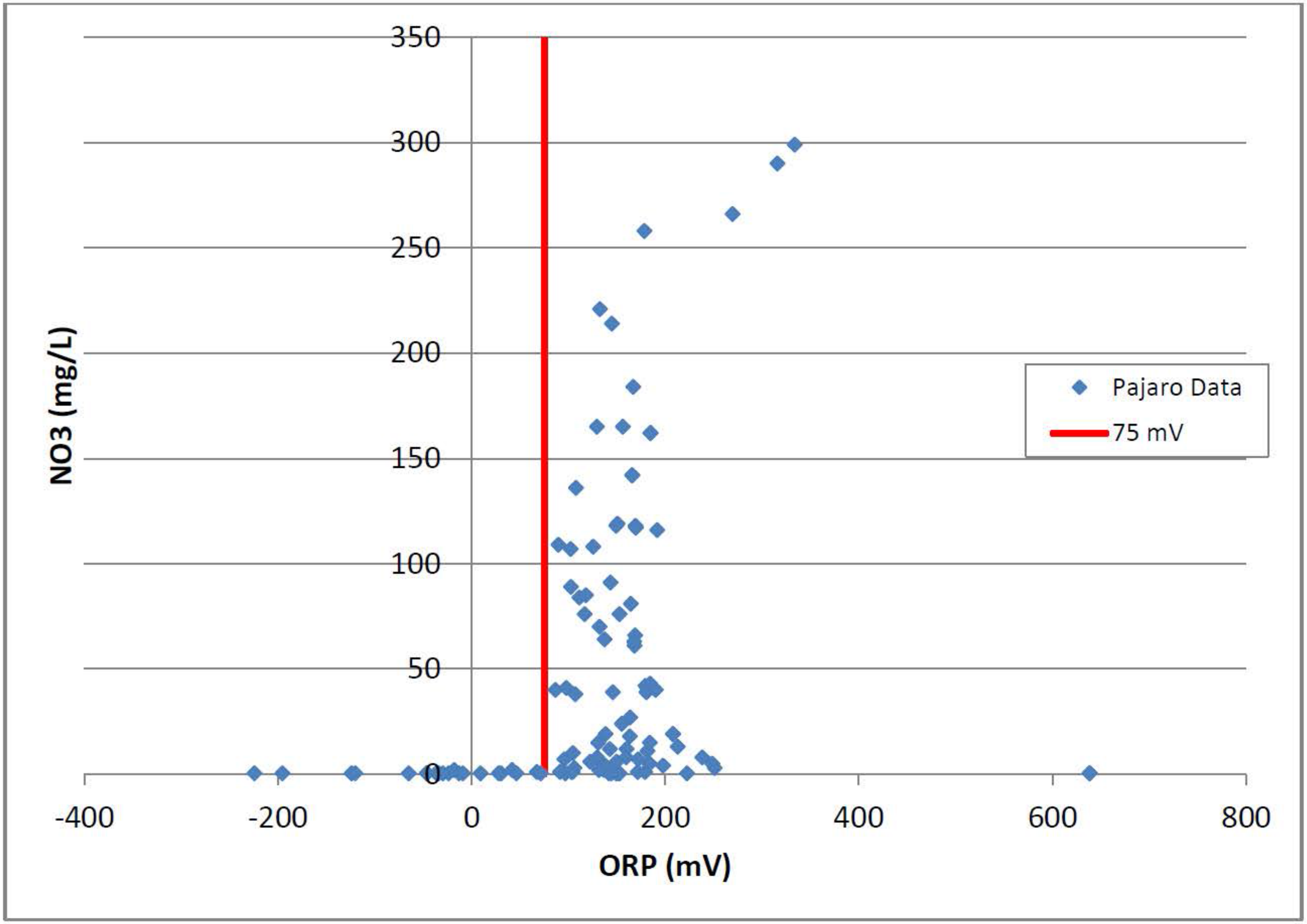


Figure 16. Relation of Groundwater Nitrate Concnetrations to Oxidation-Reduction Potential for CCGC samples

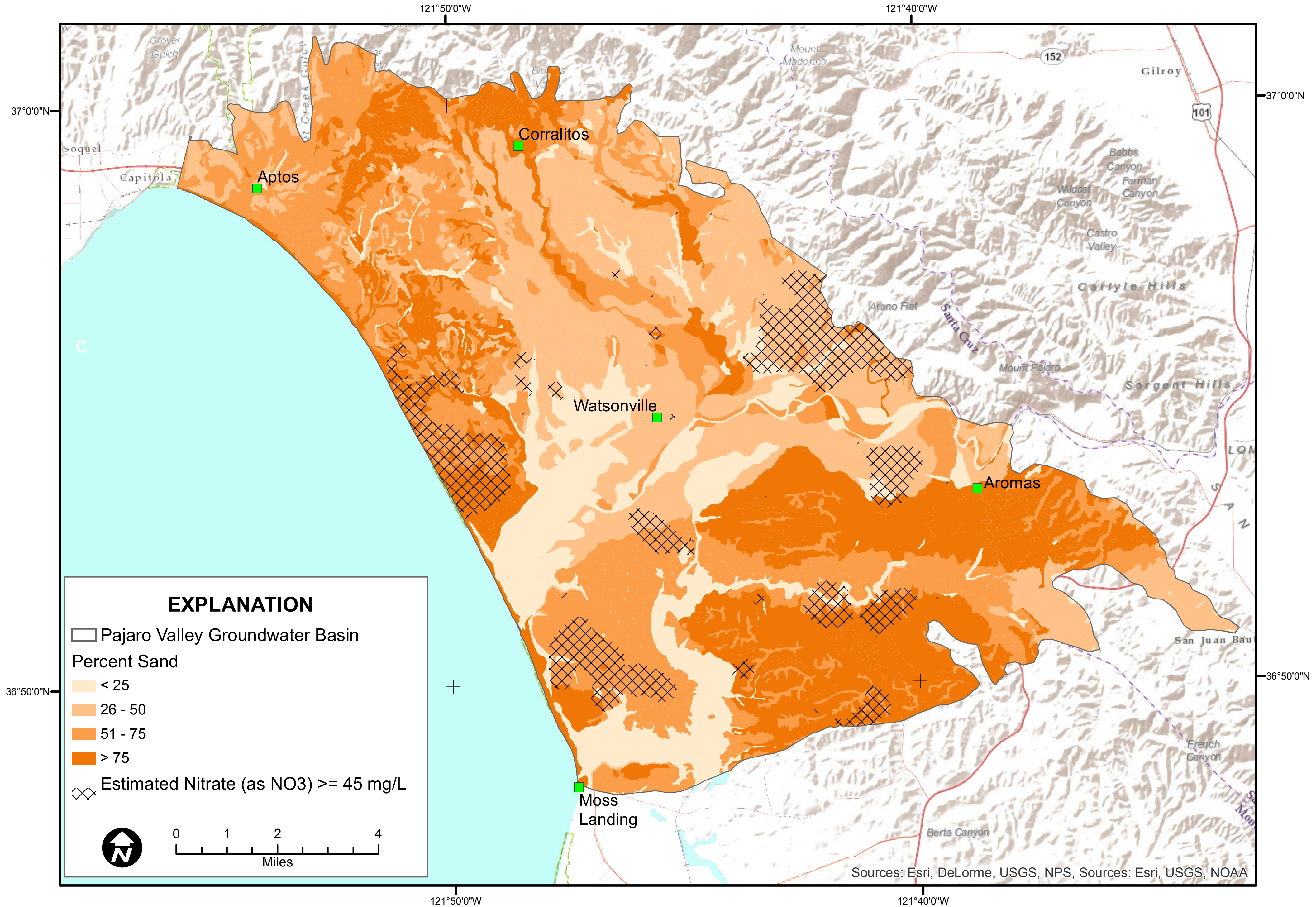


Figure 17. Estimated Nitrate Concentrations and Distribution of Percent Sand in Soils

APPENDICES

APPENDIX A

KRIGING AND DEVELOPMENT OF VARIOGRAM MODELS

Kriging was used to produce contours of estimated nitrate concentrations for Pajaro Valley Groundwater Basin. Kriging is a method that estimates values at unknown locations, and utilizes a variogram model that is modeled off the available data and describes the spatial variance of data as a function of distance from known data points. For more background on kriging, see Journal and Huijbregts (1978). Kriging was performed using Surfer® 12 (Golden Software, LLC).

The histogram of nitrate data for the Pajaro Valley **(Figure A-1)** does not follow a normal distribution. Kriging can be problematic with distributions that are highly skewed, and transformations are often used to transform data into a distribution that is closer to a normal distribution (Journal and Huijbregts, 1978). By taking the natural log of nitrate data, the resulting histogram **(Figure A-2)** is closer to a normal distribution. Statistics of the transformed data are summarized in **Table A-1**.

Table A-1: Statistics of Natural Log of Nitrate Data

Basin	No. of data	Min	Max	Mean	Variance	Range
Pajaro	526	-3.507	5.848	1.1.816	5.06	9.354

A spherical variogram model was used in the Pajaro Valley **(Figure A-3)** to fit to the nitrate data with a sill equal to 5, which is close to the variance of the natural log of nitrate data. The range, which is a correlation length, is set to equal 4,000 meters (m). The domain was discretized to 987 rows with 2,040 columns with approximately 20 by 29 meter grid cells. The variogram characteristics are summarized in **Table A-2**.

Table A-2: **Variogram Model Characteristics**

Basin	Model Type	Scale	Range (m)	Search Radius (m)	Grid size (rows x column)	X Spacing (m)	Y Spacing (m)
Pajaro	Spherical	5	4000	5000	987 x 2040	20	29

The kriging output is analyzed graphically with related statistics. The first evaluation is based on an observed versus estimated plot. The estimated nitrate concentrations at the observation locations are compared to the observed values, and this is illustrated as a scatter plot with data categorized as CCGC data and data from other sources **(Figure A-4)**. The data points are compared to a line with slope of

1:1, which is the line that data points ideally fall on when estimated values equal observed values exactly. Overall, the data fit very well to the 1:1 line. The correlation coefficient, R, is equal to 0.946, which indicates that the trends in the estimated values closely match those of the observations. The R for the CCGC data category is equal to 0.986, and R for the other data category is equal to 0.928. The correlation coefficient is defined to be the covariance between the measured and estimated nitrate normalized by multiplication of standard deviations of both measured and estimated nitrate data using:

$$\boldsymbol{R} = \frac{\sum_{i}^{nw}(\boldsymbol{z_i} - \boldsymbol{m_z})(\boldsymbol{z'_i} - \boldsymbol{m_{z'}})}{\sqrt{\sum_{i}^{nw}(\boldsymbol{z_i} - \boldsymbol{m_z})^2}\sqrt{\sum_{i}^{nw}(\boldsymbol{z'_i} - \boldsymbol{m_{z'}})^2}}$$

Where:

$\boldsymbol{z_i}$ is the observed (measured) value of nitrate [mg/l];

$\boldsymbol{z'_i}$ is the estimated (kriged) value of nitrate [mg/l];

$\boldsymbol{m_z}$ is the mean of observed concentration values [mg/l];

$\boldsymbol{m_{z'}}$ is the mean of estimated concentration values [mg/l];

$\boldsymbol{nw}$ is the number of observations and is equal to the number of wells [mg/l];

A plot of residual verses estimated values is shown on **Figure A-5**. The residual quantity is defined to be the difference between estimated and observed nitrate concentrations at measured locations, which can be positive or negative values. The other data sources exhibit larger residuals compared with CCGC data, with the majority underestimating nitrate concentration.

It is also useful to normalize the residuals by associated observation value, and plot the histogram that provides relative error as a percentage (**Figure A-6**). In general, approximately 62 % of Pajaro Valley data was honored with +/- 5 % relative error. Approximately 78 % of the CCGC wells are honored within 5 % relative error and 58.6 % of the other wells are honored within +/- 5 % relative error.

References

Journel, A.G., and Huijbregts, C. (1978), Mining Geostatistics, Academic Press, 600 pp.

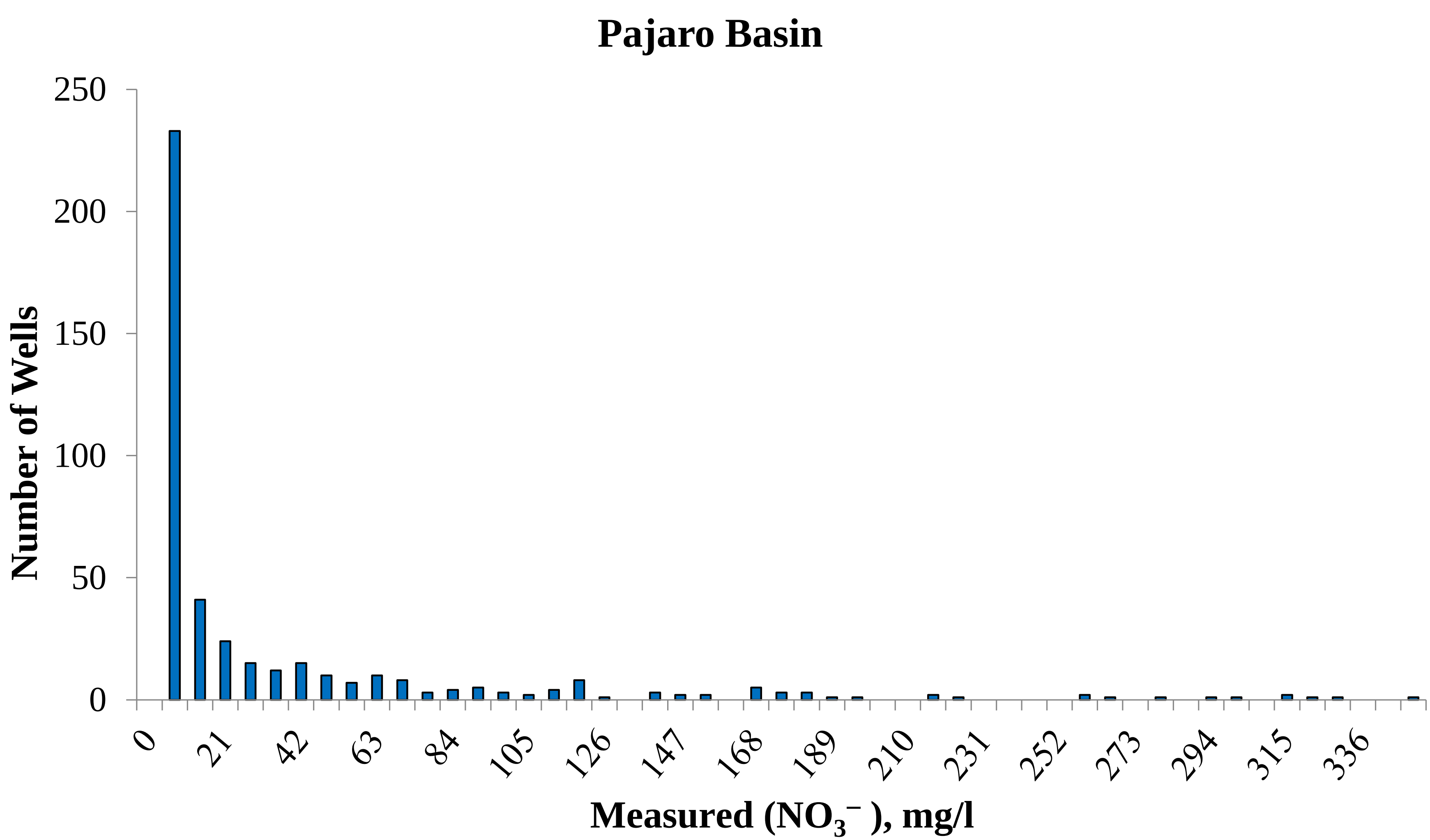


Figure A-1: Histogram of the nitrate data

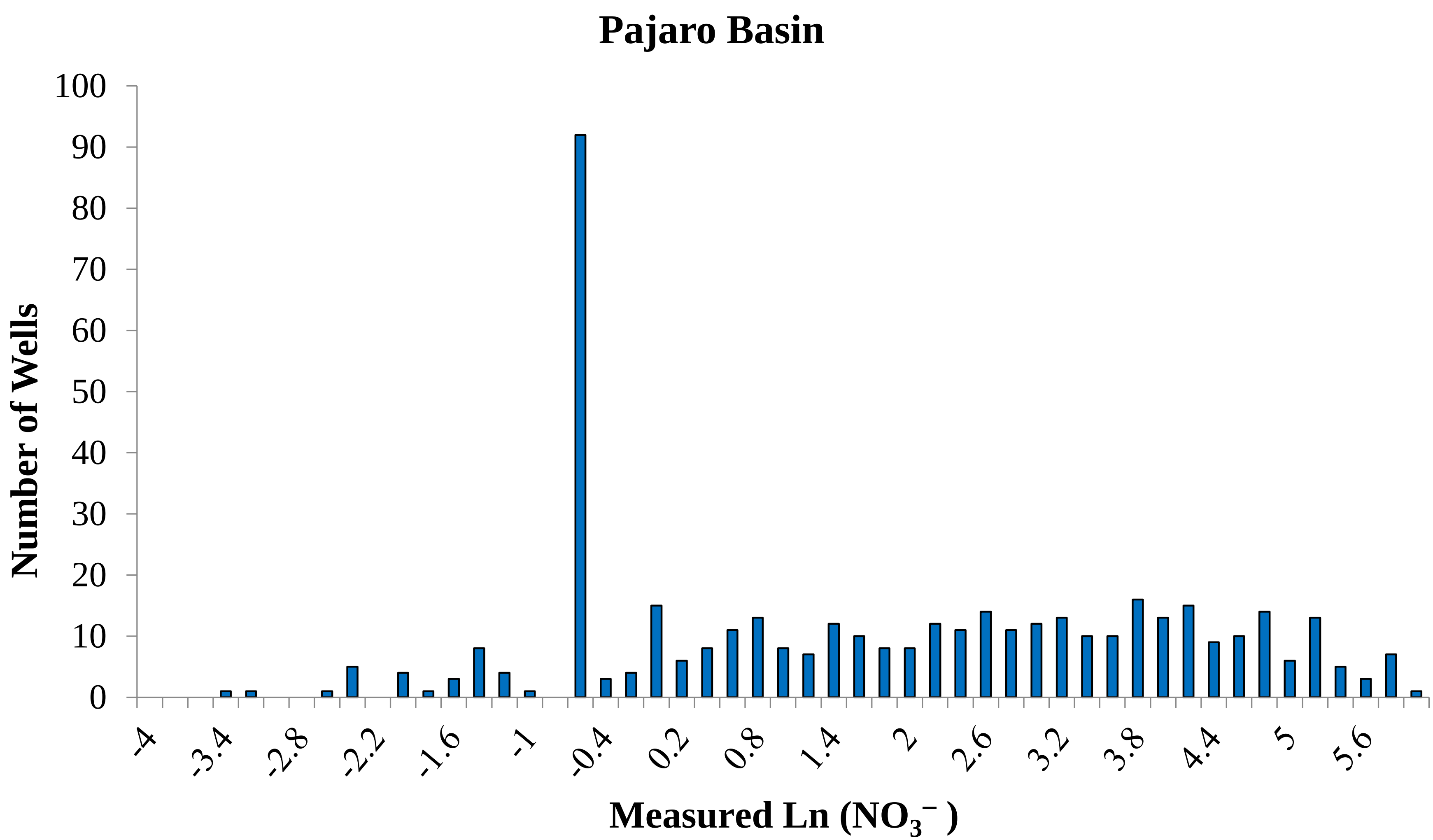


Figure A-2: Histogram of the natural log of nitrate data

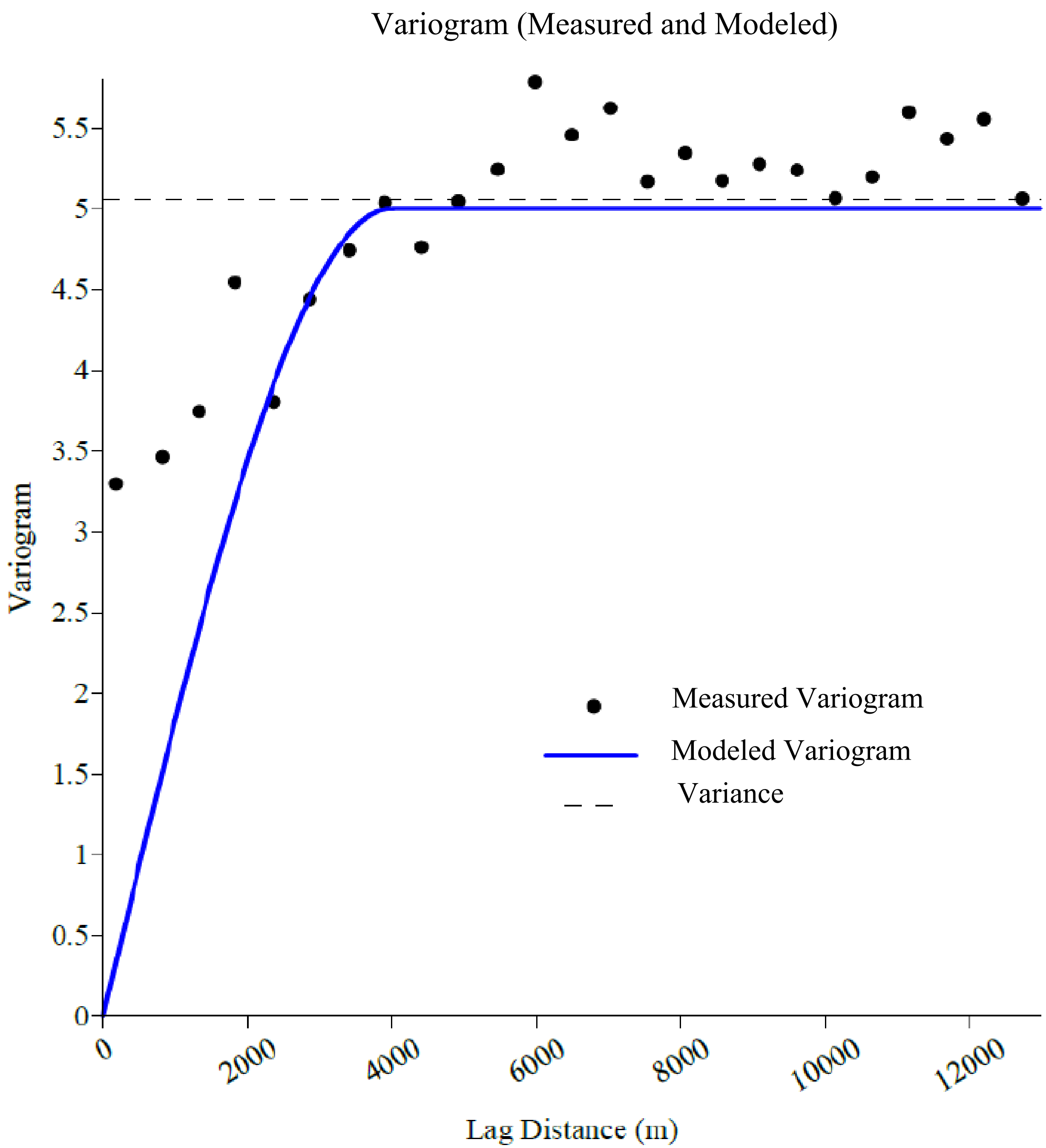


Figure A-3: Variogram and its fit based on natural log of nitrate data

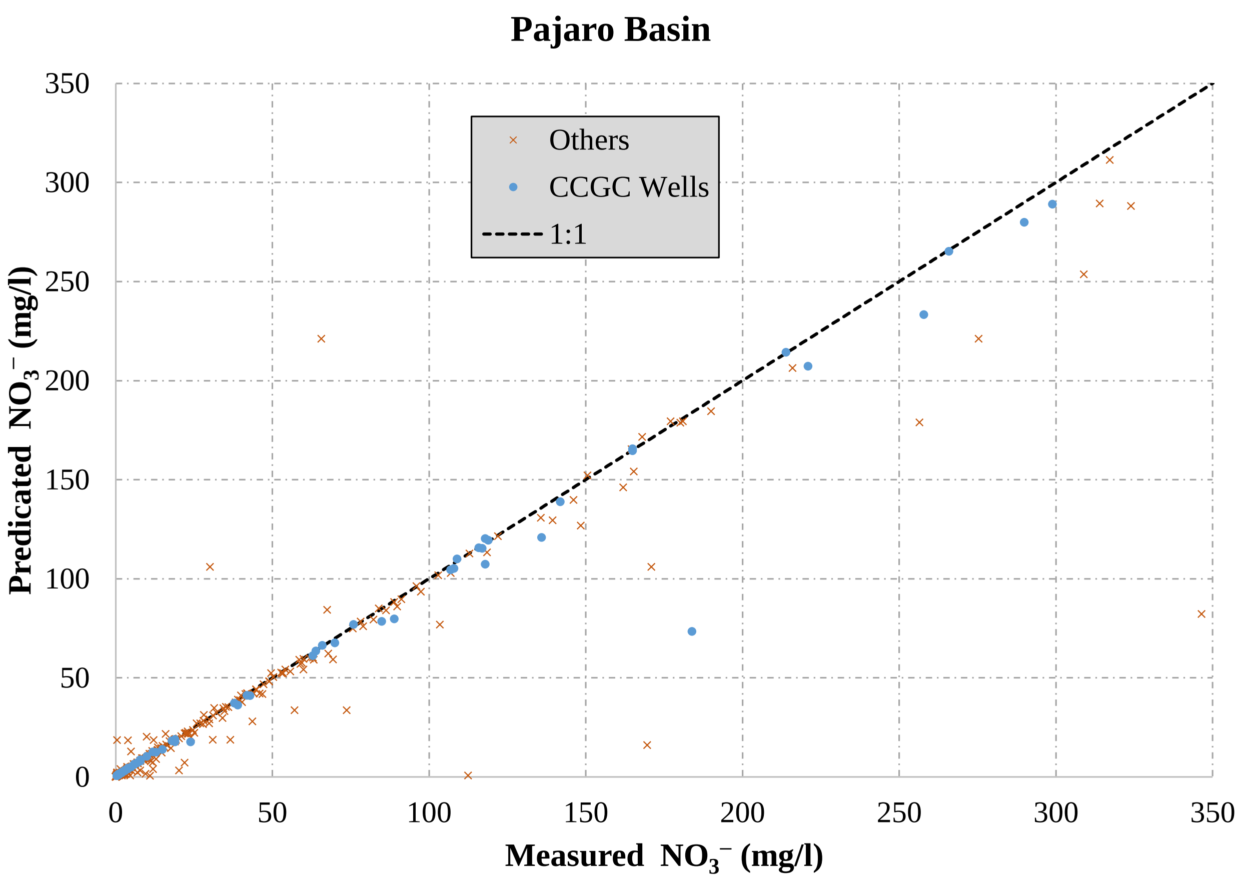


Figure A-4: Scatter plot of measured and estimated nitrate categorized based on data sources

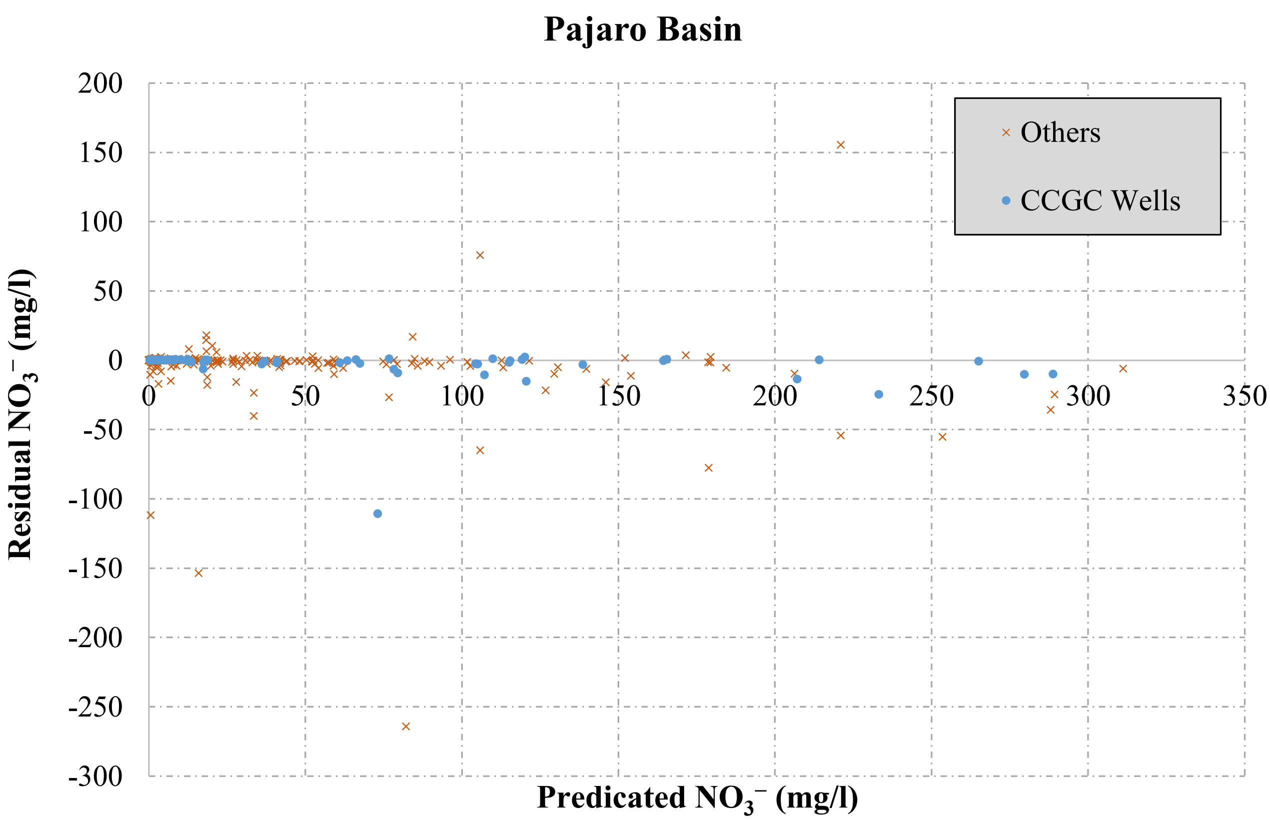


Figure A-5: Residual versus estimated nitrate based on data sources

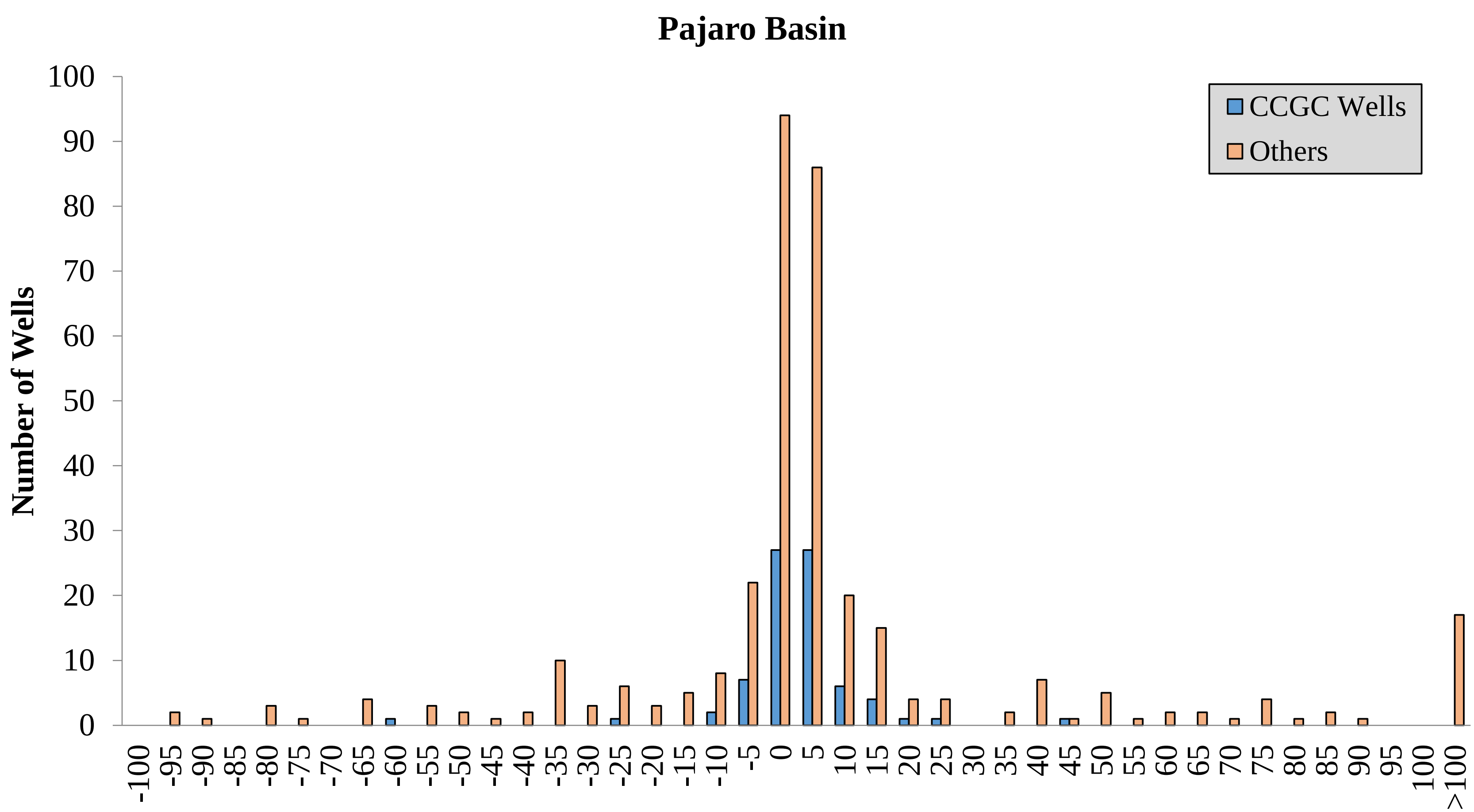


Figure A-6: Relative error histogram categorized based on data sources

APPENDIX B

WELLS EXCLUDED FROM NITRATE MAPPING

We excluded 17 wells from the kriging dataset for estimation of nitrate concentrations for the following reason. We assumed the shallow aquifer extends to 400 feet deep, and we therefore excluded 17 wells with known well depths greater than 400 feet. There are 5 wells included in the kriging that have well depth greater than 400 feet because they were thought to have been mostly screened in the upper 400 foot portion of the aquifer system. **Figure B-1** shows the excluded well locations and **Table B-2** lists the wells excluded.

Summary statistics for nitrate concentrations from excluded wells are shown in **Table B-1**. The mean concentration was 11.1 mg/L, and the median was 1 mg/L. Values ranged from 0.13 mg/L to 81 mg/L. One well (6 %) had a maximum concentration over the MCL of 45 mg/L.

Table B-1. Summary Statistics for Maximum Groundwater Nitrate Concentrations from Excluded Wells

Statistics	Excluded Wells
Mean (mg/L)	11.10
Median (mg/L)	1.00
Standard Deviation (mg/L)	21.12
Minimum (mg/L)	0.13
Maximum (mg/L)	81.00
Number of Wells	17.00
Number of Wells (percent) with concentrations over the MCL	1 (6%)

Table B-2. Excluded Wells

Well Name	Average NO3 (mg/L)	Maximum NO3 (mg/L)	Well Depth (ft)	Use	Source	Reason For Exclusion
USGS_365541121405801	4.110	4.11	460	Unknown	USGS-NWIS	Well Depth > 400
USGS_365500121470001	0.407	0.407	466	Unknown	USGS-NWIS; GAMA	Well Depth > 400
USGS_365016121383701	4.910	4.91	480	Unknown	USGS-NWIS	Well Depth > 400
USGS_PV-3 (D)	0.500	0.5	480	Observation	USGS-WRIR 03-4096; PVWMA	Well Depth > 400
AW1416_ROSNUDI	0.382	0.5	500	Dom/Irrig	Field Visit; eNOI	Well Depth > 400
AW1556_RBFTYN	15.000	15	520	Dom/Irrig	Field Visit	Well Depth > 400
AW1570_MOBANU2	1.000	1	520	Dom/Irrig	Field Visit	Well Depth > 400
AW1908_ASPENDI	12.000	12	520	Dom/Irrig	Field Visit	Well Depth > 400
AW1465_DBCMBD4	0.500	0.5	530	Domestic	Field Visit	Well Depth > 400
AW1597_REGFADI	0.500	0.5	538	Dom/Irrig	Field Visit	Well Depth > 400
USGS_365943121504101	25.600	25.6	600	Unknown	USGS-NWIS	Well Depth > 400
AW1556_COLCHAM	40.000	40	620	Irrigation	Field Visit	Well Depth > 400
USGS_PV-6 (MD)	0.500	0.5	640	Observation	USGS-WRIR 03-4096; PVWMA	Well Depth > 400
USGS_365816121500101	1.470	1.47	700	Domestic	USGS-GAP	Well Depth > 400
AW1433_STDMLSD	81.000	81	710	Domestic	Field Visit	Well Depth

						> 400
USGS_PV-6 (D)	0.431	0.5	750	Observation	USGS-WRIR 03-4096; PVWMA	Well Depth > 400
USGS_365218121490301	0.111	0.133	800	Unknown	USGS-NWIS; GAMA	Well Depth > 400

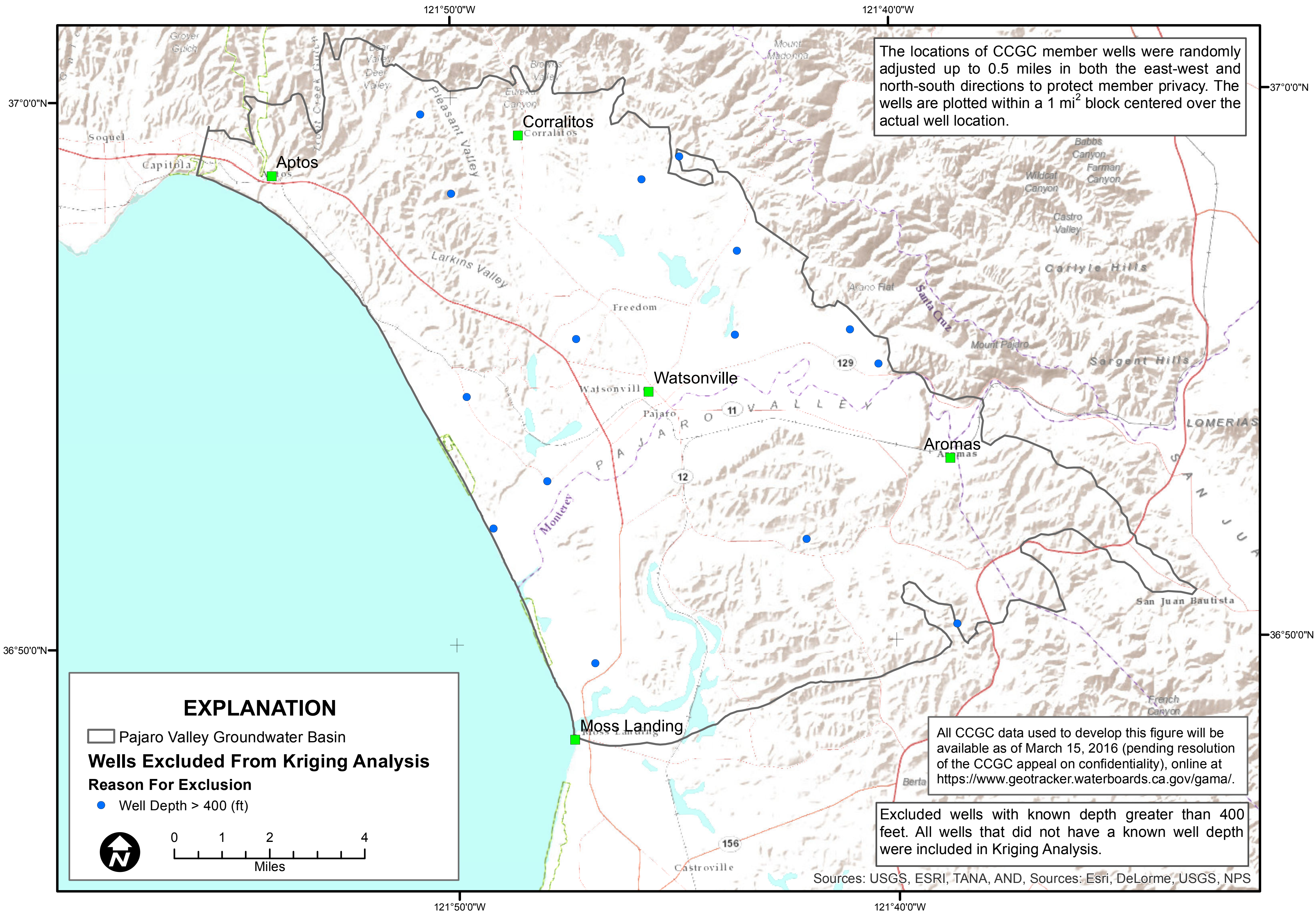


Figure B-1. Excluded Wells with Nitrate Data

Appendix C – Quality Assurance and Quality Control

Field Blanks

Field blanks detect possible constituent sources contributed from sampling methods and equipment. Examples include, but are not limited to, improperly cleaned sampling equipment, persistent airborne constituents in the sampling environment, and constituent sources in the sample containers. Six field blanks were collected.[2]

Alkalinity, nitrate + nitrite as N, nitrite as N, and bicarbonate were detected in the field blanks. Detected concentrations were less than or equal to the PQL in all samples. The table below summarizes detected values of nitrate species in the field blanks.

Table C1. Concentrations of NO3, NO3 as N, NO3+NO2 as N, and NO2 as N in the field blanks.

Field Point	Date	NO3 (mg/L)	NO3 as N (mg/L)	NO3+NO2 as N (mg/L)	NO2 as N (mg/L)
	PQL	*1*	*0.1*	*0.1*	*0.1*
CCGC_0091	2/18/2014	ND	ND	ND	ND
CCGC_0082	2/19/2014	ND	ND	0.1	0.1
CCGC_0103	2/20/2014	ND	ND	0.1	0.1
SunstU_Irr	7/16/2014	ND	ND	ND	ND
GrV275_D/I	7/16/2014	ND	ND	ND	ND
CCGC_0446	8/22/2014	ND	ND	ND	ND

Field Duplicates

Duplicates monitor matrix consistency or heterogeneity. Six field duplicates were collected. All duplicate sample results (100 percent) agreed or had differences within 10-percent of the constituents analyzed. The following table lists the sample duplicates and the percent differences for nitrate species.

[2] Field blanks were collected by pumping deionized water through a length of clean tubing. Sample bottles were filled, preserved, stored, and transported using the same procedures as used for the well water samples.

Table C2. Sample and duplicate NO_3, NO_3 as N, NO_3+NO_2 as N, and NO_2 as N concentrations and percent differences.

Field Point	Date	NO3 (mg/L)	NO3 as N (mg/L)	NO3+NO2 as N (mg/L)	NO2 as N (mg/L)
CCGC_0091	2/18/2014	ND	ND	0.5	0.4
CCGC_0091	2/18/2014	ND	ND	0.5	0.4
Percent Difference		**0.0%**	**0.0%**	**0.0%**	**0.0%**
CCGC_0082	2/19/2014	142	32	32.4	0.3
CCGC_0082	2/19/2014	142	32.2	32.5	0.3
Percent Difference		**0.0%**	**0.6%**	**0.3%**	**0.0%**
CCGC_0103	2/20/2014	ND	ND	0.2	0.2
CCGC_0103	2/20/2014	ND	ND	0.2	0.2
Percent Difference		**0.0%**	**0.0%**	**0.0%**	**0.0%**
SunstU_Irr	7/16/2014	162	36.5	36.7	0.2
SunstU_Irr	7/16/2014	162	36.5	36.7	0.2
Percent Difference		**0.0%**	**0.0%**	**0.0%**	**0.0%**
GrV275_D/I	7/16/2014	5	1.1	1.4	0.2
GrV275_D/I	7/16/2014	5	1.2	1.4	0.2
Percent Difference		**0.0%**	**8.7%**	**0.0%**	**0.0%**
CCGC_0446	8/22/2014	19	4.2	4.6	0.4
CCGC_0446	8/22/2014	19	4.2	4.6	0.4
Percent Difference		**0.0%**	**0.0%**	**0.0%**	**0.0%**

Anion-Cation Charge Balance

Anion-cation charge balance was calculated using concentrations of the major anions and cations in milliequivalents per liter (meq/L). The difference between the two sums was calculated as a percentage:

$$\frac{Anions - Cations}{Anions + Cations} \times 100$$

We use +/- 5 percent as a guide for an acceptable percent difference. The cation/anion balance difference exceeded 5 percent for 4 of 108 samples (3.7 %). The results are summarized in the following table.

Table C3. Sum cations and anions and cation/anion balance.

Field Point	Date	Sum Cations (meq/L)	Sum Anions (meq/L)	Anion/Cation balance (% difference)	Use
AG_BV	1/10/2014	4.49	4.66	-1.8%	I
PVWMA167_I	1/10/2014	5.20	5.38	-1.7%	I
SAKAE_HOME	1/10/2014	8.54	8.66	-0.7%	I
SunstB_D/I	1/23/2014	7.90	8.17	-1.6%	D/I
SunstU_Irr	1/23/2014	9.29	9.76	-2.5%	I
CaserlyJ_I	1/31/2014	4.35	4.03	3.8%	I
GrV275_D/I	1/31/2014	4.11	3.70	**5.3%**	D/I
GrV1279_I	1/31/2014	3.83	3.44	**5.4%**	I
HckerP_D/I	1/31/2014	6.45	5.89	4.5%	D/I
Litchf_D/I	1/31/2014	5.97	5.60	3.2%	D/I
Pioneer_I	1/31/2014	5.28	4.87	4.1%	I
CCGC_0093	2/18/2014	4.79	4.49	3.2%	D/I

Field Point	Date	Sum Cations (meq/L)	Sum Anions (meq/L)	Anion/Cation balance (% difference)	Use
CCGC_0081	2/18/2014	9.11	8.80	1.7%	I
CCGC_0094	2/18/2014	5.10	4.77	3.4%	D
CCGC_0076	2/18/2014	14.12	13.38	2.7%	D
CCGC_0080	2/18/2014	9.30	9.07	1.3%	D/I
CCGC_0091	2/18/2014	6.27	5.72	4.6%	D/I
CCGC_0091	2/18/2014	6.09	5.70	3.3%	D/I
CCGC_0077	2/18/2014	22.21	20.67	3.6%	D
CCGC_0079	2/18/2014	12.30	11.74	2.3%	D
CCGC_0092	2/18/2014	4.12	3.93	2.4%	D/I
CCGC_0078	2/18/2014	16.51	15.82	2.1%	D/I
CCGC_0086	2/19/2014	3.51	3.23	4.2%	D/I
CCGC_0096	2/19/2014	6.92	6.44	3.6%	D
CCGC_0100	2/19/2014	13.27	12.04	4.8%	D/I
CCGC_0083	2/19/2014	4.76	4.46	3.3%	D
CCGC_0084	2/19/2014	5.14	4.77	3.7%	D
CCGC_0085	2/19/2014	5.05	4.69	3.7%	D/I
CCGC_0101	2/19/2014	3.00	2.76	4.2%	D
CCGC_0095	2/19/2014	6.29	5.85	3.6%	D/I
CCGC_0102	2/19/2014	10.32	9.78	2.7%	D/I
CCGC_0082	2/19/2014	10.22	9.50	3.7%	D
CCGC_0082	2/19/2014	10.18	9.51	3.4%	D
CCGC_0097	2/19/2014	6.93	7.18	-1.8%	D
CCGC_0098	2/19/2014	6.18	5.77	3.5%	D/I
CCGC_0099	2/19/2014	5.33	4.91	4.1%	D/I
CCGC_0088	2/20/2014	6.86	6.32	4.1%	D/I
CCGC_0090	2/20/2014	25.34	22.69	**5.5%**	D
CCGC_0089	2/20/2014	8.17	7.63	3.4%	D/I
CCGC_0103	2/20/2014	7.58	7.22	2.4%	D
CCGC_0103	2/20/2014	7.71	7.17	3.6%	D
CCGC_0104	2/20/2014	27.28	25.29	3.8%	D
CCGC_0105	2/20/2014	43.64	41.10	3.0%	D
CCGC_0106	2/20/2014	25.21	22.92	4.7%	D
CCGC_0279	3/27/2014	3.76	3.33	**6.1%**	D/I
CCGC_0364	4/29/2014	9.38	8.67	4.0%	D/I
CCGC_0330	4/29/2014	11.82	11.60	0.9%	D/I
CCGC_0325	4/29/2014	8.94	8.48	2.6%	D/I
CCGC_0333	4/29/2014	5.49	5.40	0.9%	D/I
CCGC_0328	4/29/2014	10.07	9.76	1.6%	D/I
CCGC_0360	4/29/2014	2.67	2.54	2.5%	D/I
CCGC_0324	4/29/2014	12.40	11.46	4.0%	D/I
CCGC_0326	4/29/2014	18.96	18.09	2.3%	D/I
CCGC_0329	4/29/2014	6.48	6.45	0.2%	D/I
CCGC_0332	4/29/2014	7.78	7.33	2.9%	D/I
CCGC_0361	4/29/2014	3.99	3.87	1.6%	D/I
CCGC_0323	4/30/2014	17.35	16.77	1.7%	D
CCGC_0334	4/30/2014	13.57	13.13	1.7%	D/I
CCGC_0335	4/30/2014	11.34	11.11	1.0%	I
CCGC_0337	4/30/2014	20.88	20.25	1.5%	D/I
CCGC_0336	4/30/2014	9.20	8.91	1.6%	D/I
CCGC_0338	4/30/2014	5.08	4.77	3.1%	D/I
CCGC_0370	4/30/2014	23.24	24.38	-2.4%	D
CCGC_0373	4/30/2014	21.92	21.56	0.8%	D
CCGC_0374	4/30/2014	7.60	7.24	2.4%	D

Field Point	Date	Sum Cations (meq/L)	Sum Anions (meq/L)	Anion/Cation balance (% difference)	Use
CCGC_0383	4/30/2014	21.92	21.39	1.2%	D/I
CCGC_0371	4/30/2014	26.70	26.77	-0.1%	D
CCGC_0377	4/30/2014	56.15	55.30	0.8%	D
CCGC_0372	4/30/2014	18.80	18.73	0.2%	D
CCGC_0375	4/30/2014	5.93	5.80	1.1%	D/I
CCGC_0376	4/30/2014	10.89	10.55	1.6%	D
CCGC_0341	5/1/2014	13.05	12.81	0.9%	D
CCGC_0340	5/1/2014	12.62	12.02	2.5%	D/I
CCGC_0339	5/1/2014	15.09	14.45	2.2%	D/I
CCGC_0379	5/1/2014	6.84	6.62	1.6%	D/I
CCGC_0380	5/1/2014	5.52	5.10	4.0%	D/I
CCGC_0381	5/1/2014	6.82	6.39	3.2%	D/I
CCGC_0343	5/1/2014	6.54	6.25	2.3%	D/I
CCGC_0342	5/1/2014	19.43	18.40	2.7%	I
AG_BV	7/14/2014	4.85	4.67	1.9%	I
PVWMA167_I	7/14/2014	5.62	5.54	0.6%	I
CCGC_0384	7/16/2014	6.65	6.55	0.7%	D/I
SunstB_D/I	7/16/2014	7.98	7.70	1.8%	D/I
SunstU_Irr	7/16/2014	9.81	9.60	1.1%	I
SunstU_Irr	7/16/2014	9.86	9.64	1.1%	I
CaserlyJ_I	7/16/2014	4.08	4.17	-1.0%	I
GrV275_D/I	7/16/2014	3.96	3.72	3.1%	D/I
GrV275_D/I	7/16/2014	3.97	3.77	2.5%	D/I
GrV1279_I	7/16/2014	3.55	3.57	-0.2%	I
HckerP_D/I	7/16/2014	6.07	5.94	1.1%	D/I
Litchf_D/I	7/16/2014	5.73	5.67	0.5%	D/I
Pioneer_I	7/16/2014	4.99	5.09	-1.0%	I
CCGC_0452	8/22/2014	11.87	11.53	1.5%	D
CCGC_0470	8/27/2014	13.48	13.16	1.2%	D
CCGC_0337	8/21/2014	22.53	20.88	3.8%	D/I
CCGC_0094	8/15/2014	5.42	5.08	3.3%	D
CCGC_0326	8/8/2014	18.96	18.53	1.1%	D/I
CCGC_0326	8/21/2014	19.62	18.52	2.9%	D/I
CCGC_0449	8/22/2014	19.48	18.08	3.7%	D
CCGC_0450	8/22/2014	7.93	7.43	3.3%	D/I
CCGC_0451	8/22/2014	20.92	19.72	2.9%	D
CCGC_0092	8/15/2014	4.45	4.09	4.2%	D/I
CCGC_0383	8/15/2014	22.27	21.41	2.0%	D/I
CCGC_0445	8/8/2014	8.82	8.46	2.1%	D/I
CCGC_0097	8/15/2014	8.14	7.88	1.6%	D
CCGC_0446	8/22/2014	15.98	15.30	2.1%	D
CCGC_0446	8/22/2014	15.85	15.17	2.2%	D
CCGC_0447	8/22/2014	18.94	18.04	2.4%	D

Ratio of Calculated Sum of Dissolved Solids to Specific Conductance

The ratio of the calculated sum of dissolved solids (mg/L) to specific conductance was calculated. The ratio was calculated as follows:

$$\frac{Sum\ of\ dissolved\ solids\ in\ mg/L}{Specific\ conductance}$$

The sum of dissolved solids divided by the specific conductance should fall within the range 0.55 to 0.81. 41 of the 108 samples (38 percent) do not fall within this range.

Ratio of the Sum of Reacting Constituents to Specific Conductance

The ratio of the sum of reacting cations (meq/L) to 0.01 times specific conductance, as well as the sum of reacting anions (meq/L) to 0.01 times specific conductance, should be within the range 0.92 to 1.242. This ratio was calculated as follows:

$$\frac{Sum\ of\ reacting\ cations\ (or\ anions) in\ meq/L}{0.01 \times Specific\ Conductance}$$

Of the 108 samples, 16 (15 percent) do not fall within the range for cations and 13 (12 percent) do not fall within the range for anions.

Laboratory Flags

One well has associated laboratory flags that deal with nitrate, summarized in the following table. This well was excluded from our analysis (see Appendix B) due to possible fertilizer contamination at the sampling spigot location. A second sample was obtained at the well head and no laboratory flag was associated with that sample.

WellCode	SampleDate	SampleTypeCode	LabSampleID	Replicate	LabReplicate	QACode
CCGC_0327	**8/8/2014**	MS1	**AB19221+MS**	1	**1**	BC, LM
			AB19221+MSD	1	**2**	BC, LM

QA Code	Description
BC	Matrix spike out of control, lab control sample within limits
LM	MS and/or MSD above acceptance limits. See Blank Spike(LCS).

An extensive review of the laboratory QA/QC data will be available in the Groundwater Characterization Report.

Appendix D – CCGC Sampled Well Information and Results

Analytical results for all wells sampled in the Salinas Valley under Characterization Monitoring can be found in the following tables.

Any data excluded from the analysis can be found in Appendix B.

FieldPointName	Use	Top Of Screened Interval	Bottom Of Screened Interval	WellDepth	SampleDate	AnalyteName	Result	ResQual Code	QACode	GW Basin
CCGC_0076	D			250	18/Feb/2014	Nitrate as NO3	2	=	None	PAJARO VALLEY
CCGC_0077	D	205	235	250	18/Feb/2014	Nitrate as NO3	136	=	None	PAJARO VALLEY
CCGC_0078	D/I			375	18/Feb/2014	Nitrate as NO3	221	=	None	PAJARO VALLEY
CCGC_0079	D	300	400	420	18/Feb/2014	Nitrate as NO3	<1	ND	None	PAJARO VALLEY
CCGC_0080	D/I				18/Feb/2014	Nitrate as NO3	<1	ND	None	PAJARO VALLEY
CCGC_0081	I	90 170	120 290	290	18/Feb/2014	Nitrate as NO3	89	=	None	PAJARO VALLEY
CCGC_0082	D	180 220	200 240	245	19/Feb/2014	Nitrate as NO3	142	=	None	PAJARO VALLEY
CCGC_0083	D			283	19/Feb/2014	Nitrate as NO3	8	=	None	PAJARO VALLEY
CCGC_0084	D			530	19/Feb/2014	Nitrate as NO3	<1	ND	None	PAJARO VALLEY
CCGC_0085	D/I			148	19/Feb/2014	Nitrate as NO3	<1	ND	None	PAJARO VALLEY
CCGC_0086	D/I			300	19/Feb/2014	Nitrate as NO3	19	=	None	PAJARO VALLEY
CCGC_0088	D/I				20/Feb/2014	Nitrate as NO3	<1	ND	None	PAJARO VALLEY
CCGC_0089	D/I	420	520	520	20/Feb/2014	Nitrate as NO3	1	=	None	PAJARO VALLEY
CCGC_0090	D			120	20/Feb/2014	Nitrate as NO3	258	=	None	PAJARO VALLEY
CCGC_0091	D/I	320	380	500	18/Feb/2014	Nitrate as NO3	<1	ND	None	PAJARO VALLEY
CCGC_0092	D/I			400	18/Feb/2014	Nitrate as NO3	41	=	None	PAJARO VALLEY
CCGC_0092	D/I			400	15/Aug/2014	Nitrate as NO3	43	=	None	PAJARO VALLEY
CCGC_0093	D/I	390 510	500 520	520	18/Feb/2014	Nitrate as NO3	12	=	None	PAJARO VALLEY
CCGC_0094	D	168	188	196	18/Feb/2014	Nitrate as NO3	42	=	None	PAJARO VALLEY
CCGC_0094	D	168	188	196	15/Aug/2014	Nitrate as NO3	39	=	None	PAJARO VALLEY
CCGC_0095	D/I			160	19/Feb/2014	Nitrate as NO3	<1	ND	None	PAJARO VALLEY
CCGC_0096	D	90	130	140	19/Feb/2014	Nitrate as NO3	<1	ND	None	PAJARO VALLEY
CCGC_0097	D			350	19/Feb/2014	Nitrate as NO3	40	=	None	PAJARO VALLEY
CCGC_0097	D			350	15/Aug/2014	Nitrate as NO3	63	=	None	PAJARO VALLEY
CCGC_0098	D/I			400	19/Feb/2014	Nitrate as NO3	<1	ND	None	PAJARO VALLEY
CCGC_0099	D/I	340	420	420	19/Feb/2014	Nitrate as NO3	18	=	None	PAJARO VALLEY
CCGC_0100	D/I	229	429	429	19/Feb/2014	Nitrate as NO3	<1	ND	None	PAJARO VALLEY
CCGC_0101	D			360	19/Feb/2014	Nitrate as NO3	7	=	None	PAJARO VALLEY
CCGC_0102	D/I	160	200	200	19/Feb/2014	Nitrate as NO3	118	=	None	PAJARO VALLEY
CCGC_0103	D				20/Feb/2014	Nitrate as NO3	<1	ND	None	PAJARO VALLEY
CCGC_0104	D				20/Feb/2014	Nitrate as NO3	290	=	None	PAJARO VALLEY
CCGC_0105	D	135	165	175	20/Feb/2014	Nitrate as NO3	266	=	None	PAJARO VALLEY
CCGC_0106	D				20/Feb/2014	Nitrate as NO3	299	=	None	PAJARO VALLEY
CCGC_0279	D/I				27/Mar/2014	Nitrate as NO3	2	=	None	PAJARO VALLEY
CCGC_0323	D				30/Apr/2014	Nitrate as NO3	118	=	None	PAJARO VALLEY
CCGC_0324	D/I				29/Apr/2014	Nitrate as NO3	119	=	None	PAJARO VALLEY
CCGC_0325	D/I				29/Apr/2014	Nitrate as NO3	6	=	None	PAJARO VALLEY
CCGC_0326	D/I	107 160	142 185	208	29/Apr/2014	Nitrate as NO3	76	=	None	PAJARO VALLEY
CCGC_0326	D/I	107 160	142 185	208	08/Aug/2014	Nitrate as NO3	84	=	None	PAJARO VALLEY
CCGC_0326	D/I	107 160	142 185	208	21/Aug/2014	Nitrate as NO3	85	=	None	PAJARO VALLEY
CCGC_0327	D/I			168	29/Apr/2014	Nitrate as NO3	835	=	None	PAJARO VALLEY
CCGC_0327	D/I			168	08/Aug/2014	Nitrate as NO3	279	=	None	PAJARO VALLEY
CCGC_0328	D/I				29/Apr/2014	Nitrate as NO3	2	=	None	PAJARO VALLEY
CCGC_0329	D/I				29/Apr/2014	Nitrate as NO3	<1	ND	None	PAJARO VALLEY
CCGC_0330	D/I				29/Apr/2014	Nitrate as NO3	10	=	None	PAJARO VALLEY

FieldPointName	Use	Top Of Screened Interval	Bottom Of Screened Interval	WellDepth	SampleDate	AnalyteName	Result	ResQual Code	QACode	GW Basin
CCGC_0332	D/I				29/Apr/2014	Nitrate as NO3	<1	ND	None	PAJARO VALLEY
CCGC_0333	D/I				29/Apr/2014	Nitrate as NO3	<1	ND	None	PAJARO VALLEY
CCGC_0334	D/I				30/Apr/2014	Nitrate as NO3	76	=	None	PAJARO VALLEY
CCGC_0335	I	270 350 540	330 430 600	620	30/Apr/2014	Nitrate as NO3	40	=	None	PAJARO VALLEY
CCGC_0336	D/I				30/Apr/2014	Nitrate as NO3	2	=	None	PAJARO VALLEY
CCGC_0337	D/I				30/Apr/2014	Nitrate as NO3	64	=	None	PAJARO VALLEY
CCGC_0337	D/I				21/Aug/2014	Nitrate as NO3	61	=	None	PAJARO VALLEY
CCGC_0338	D/I				30/Apr/2014	Nitrate as NO3	1	=	None	PAJARO VALLEY
CCGC_0339	D/I				01/May/2014	Nitrate as NO3	214	=	None	PAJARO VALLEY
CCGC_0340	D/I				01/May/2014	Nitrate as NO3	184	=	None	PAJARO VALLEY
CCGC_0341	D				01/May/2014	Nitrate as NO3	4	=	None	PAJARO VALLEY
CCGC_0342	I				01/May/2014	Nitrate as NO3	107	=	None	PAJARO VALLEY
CCGC_0343	D/I				01/May/2014	Nitrate as NO3	1	=	None	PAJARO VALLEY
CCGC_0360	D/I	320	360	400	29/Apr/2014	Nitrate as NO3	5	=	None	PAJARO VALLEY
CCGC_0361	D/I			300	29/Apr/2014	Nitrate as NO3	3	=	None	PAJARO VALLEY
CCGC_0364	D/I				29/Apr/2014	Nitrate as NO3	108	=	None	PAJARO VALLEY
CCGC_0370	D				30/Apr/2014	Nitrate as NO3	66	=	None	PAJARO VALLEY
CCGC_0371	D				30/Apr/2014	Nitrate as NO3	<1	ND	None	PAJARO VALLEY
CCGC_0372	D				30/Apr/2014	Nitrate as NO3	<1	ND	None	PAJARO VALLEY
CCGC_0373	D				30/Apr/2014	Nitrate as NO3	116	=	None	PAJARO VALLEY
CCGC_0374	D				30/Apr/2014	Nitrate as NO3	<1	ND	None	PAJARO VALLEY
CCGC_0375	D/I				30/Apr/2014	Nitrate as NO3	1	=	None	PAJARO VALLEY
CCGC_0376	D				30/Apr/2014	Nitrate as NO3	4	=	None	PAJARO VALLEY
CCGC_0377	D	660	700	710	30/Apr/2014	Nitrate as NO3	81	=	None	PAJARO VALLEY
CCGC_0379	D/I	210	290	300	01/May/2014	Nitrate as NO3	1	=	None	PAJARO VALLEY
CCGC_0380	D/I				01/May/2014	Nitrate as NO3	117	=	None	PAJARO VALLEY
CCGC_0381	D/I				01/May/2014	Nitrate as NO3	15	=	None	PAJARO VALLEY
CCGC_0383	D/I				30/Apr/2014	Nitrate as NO3	39	=	None	PAJARO VALLEY
CCGC_0383	D/I				15/Aug/2014	Nitrate as NO3	27	=	None	PAJARO VALLEY
CCGC_0384	D/I				16/Jul/2014	Nitrate as NO3	13	=	None	PAJARO VALLEY
CCGC_0445	D/I	124	162	168	08/Aug/2014	Nitrate as NO3	1	=	None	PAJARO VALLEY
CCGC_0446	D	98	154	154	22/Aug/2014	Nitrate as NO3	19	=	None	PAJARO VALLEY
CCGC_0447	D				22/Aug/2014	Nitrate as NO3	24	=	None	PAJARO VALLEY
CCGC_0449	D				22/Aug/2014	Nitrate as NO3	165	=	None	PAJARO VALLEY
CCGC_0450	D/I	400	520	520	22/Aug/2014	Nitrate as NO3	15	=	None	PAJARO VALLEY
CCGC_0451	D				22/Aug/2014	Nitrate as NO3	38	=	None	PAJARO VALLEY
CCGC_0452	D	90	130	150	22/Aug/2014	Nitrate as NO3	70	=	None	PAJARO VALLEY
CCGC_0470	D			200	27/Aug/2014	Nitrate as NO3	3	=	None	PAJARO VALLEY

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0076	18/Feb/2014	Alkalinity as CaCO3	353	=	None
CCGC_0076	18/Feb/2014	Bicarbonate	431	=	None
CCGC_0076	18/Feb/2014	Calcium	112	=	None
CCGC_0076	18/Feb/2014	Chloride	109	=	None
CCGC_0076	18/Feb/2014	Hardness as CaCO3	527	=	None
CCGC_0076	18/Feb/2014	Magnesium	60	=	None
CCGC_0076	18/Feb/2014	Nitrate + Nitrite as N	0.7	=	None
CCGC_0076	18/Feb/2014	Nitrate as NO3-N	0.5	=	None
CCGC_0076	18/Feb/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0076	18/Feb/2014	Potassium	3	=	None
CCGC_0076	18/Feb/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0076	18/Feb/2014	Sodium	81	=	None
CCGC_0076	18/Feb/2014	SpecificConductivity	1257	=	None
CCGC_0076	18/Feb/2014	Sulfate	154	=	None
CCGC_0076	18/Feb/2014	Total Dissolved Solids	806	=	None
CCGC_0077	18/Feb/2014	Alkalinity as CaCO3	455	=	None
CCGC_0077	18/Feb/2014	Bicarbonate	555	=	None
CCGC_0077	18/Feb/2014	Calcium	178	=	None
CCGC_0077	18/Feb/2014	Chloride	150	=	None
CCGC_0077	18/Feb/2014	Hardness as CaCO3	897	=	None
CCGC_0077	18/Feb/2014	Magnesium	110	=	None
CCGC_0077	18/Feb/2014	Nitrate + Nitrite as N	30.9	=	None
CCGC_0077	18/Feb/2014	Nitrate as NO3-N	30.8	=	None
CCGC_0077	18/Feb/2014	Nitrite as NO2-N	0.1	=	None
CCGC_0077	18/Feb/2014	Potassium	2.5	=	None
CCGC_0077	18/Feb/2014	QC Ratio TDS/SEC	0.67	=	None
CCGC_0077	18/Feb/2014	Sodium	97	=	None
CCGC_0077	18/Feb/2014	SpecificConductivity	1949	=	None
CCGC_0077	18/Feb/2014	Sulfate	247	=	None
CCGC_0077	18/Feb/2014	Total Dissolved Solids	1306	=	None
CCGC_0078	18/Feb/2014	Alkalinity as CaCO3	302	=	None
CCGC_0078	18/Feb/2014	Bicarbonate	368	=	None
CCGC_0078	18/Feb/2014	Calcium	125	=	None
CCGC_0078	18/Feb/2014	Chloride	92	=	None
CCGC_0078	18/Feb/2014	Hardness as CaCO3	691	=	None
CCGC_0078	18/Feb/2014	Magnesium	92	=	None
CCGC_0078	18/Feb/2014	Nitrate + Nitrite as N	50.2	=	None
CCGC_0078	18/Feb/2014	Nitrate as NO3-N	49.9	=	None
CCGC_0078	18/Feb/2014	Nitrite as NO2-N	0.2	=	None

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0078	18/Feb/2014	Potassium	2	=	None
CCGC_0078	18/Feb/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0078	18/Feb/2014	Sodium	61	=	None
CCGC_0078	18/Feb/2014	SpecificConductivity	1548	=	None
CCGC_0078	18/Feb/2014	Sulfate	174	=	None
CCGC_0078	18/Feb/2014	Total Dissolved Solids	988	=	None
CCGC_0079	18/Feb/2014	Alkalinity as CaCO3	307	=	None
CCGC_0079	18/Feb/2014	Bicarbonate	375	=	None
CCGC_0079	18/Feb/2014	Calcium	92	=	None
CCGC_0079	18/Feb/2014	Chloride	85	=	None
CCGC_0079	18/Feb/2014	Hardness as CaCO3	464	=	None
CCGC_0079	18/Feb/2014	Magnesium	57	=	None
CCGC_0079	18/Feb/2014	Nitrate + Nitrite as N	0.3	=	None
CCGC_0079	18/Feb/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0079	18/Feb/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0079	18/Feb/2014	Potassium	2.5	=	None
CCGC_0079	18/Feb/2014	QC Ratio TDS/SEC	0.65	=	None
CCGC_0079	18/Feb/2014	Sodium	68	=	None
CCGC_0079	18/Feb/2014	SpecificConductivity	1129	=	None
CCGC_0079	18/Feb/2014	Sulfate	154	=	None
CCGC_0079	18/Feb/2014	Total Dissolved Solids	731	=	None
CCGC_0080	18/Feb/2014	Alkalinity as CaCO3	315	=	None
CCGC_0080	18/Feb/2014	Bicarbonate	384	=	None
CCGC_0080	18/Feb/2014	Calcium	66	=	None
CCGC_0080	18/Feb/2014	Chloride	48	=	None
CCGC_0080	18/Feb/2014	Hardness as CaCO3	330	=	None
CCGC_0080	18/Feb/2014	Magnesium	40	=	None
CCGC_0080	18/Feb/2014	Nitrate + Nitrite as N	0.4	=	None
CCGC_0080	18/Feb/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0080	18/Feb/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0080	18/Feb/2014	Potassium	2.5	=	None
CCGC_0080	18/Feb/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0080	18/Feb/2014	Sodium	61	=	None
CCGC_0080	18/Feb/2014	SpecificConductivity	860	=	None
CCGC_0080	18/Feb/2014	Sulfate	68	=	None
CCGC_0080	18/Feb/2014	Total Dissolved Solids	543	=	None
CCGC_0081	18/Feb/2014	Alkalinity as CaCO3	179	=	None
CCGC_0081	18/Feb/2014	Alkalinity as CaCO3	179	=	None
CCGC_0081	18/Feb/2014	Bicarbonate	218	=	None

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0081	18/Feb/2014	Bicarbonate	218	=	None
CCGC_0081	18/Feb/2014	Calcium	96	=	None
CCGC_0081	18/Feb/2014	Calcium	96	=	None
CCGC_0081	18/Feb/2014	Chloride	45	=	None
CCGC_0081	18/Feb/2014	Chloride	45	=	None
CCGC_0081	18/Feb/2014	Hardness as CaCO3	384	=	None
CCGC_0081	18/Feb/2014	Hardness as CaCO3	384	=	None
CCGC_0081	18/Feb/2014	Magnesium	35	=	None
CCGC_0081	18/Feb/2014	Magnesium	35	=	None
CCGC_0081	18/Feb/2014	Nitrate + Nitrite as N	20.4	=	None
CCGC_0081	18/Feb/2014	Nitrate + Nitrite as N	20.4	=	None
CCGC_0081	18/Feb/2014	Nitrate as NO3-N	20	=	None
CCGC_0081	18/Feb/2014	Nitrate as NO3-N	20	=	None
CCGC_0081	18/Feb/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0081	18/Feb/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0081	18/Feb/2014	Potassium	1.9	=	None
CCGC_0081	18/Feb/2014	Potassium	1.9	=	None
CCGC_0081	18/Feb/2014	QC Ratio TDS/SEC	0.68	=	None
CCGC_0081	18/Feb/2014	QC Ratio TDS/SEC	0.68	=	None
CCGC_0081	18/Feb/2014	Sodium	32	=	None
CCGC_0081	18/Feb/2014	Sodium	32	=	None
CCGC_0081	18/Feb/2014	SpecificConductivity	892	=	None
CCGC_0081	18/Feb/2014	SpecificConductivity	892	=	None
CCGC_0081	18/Feb/2014	Sulfate	121	=	None
CCGC_0081	18/Feb/2014	Sulfate	121	=	None
CCGC_0081	18/Feb/2014	Total Dissolved Solids	603	=	None
CCGC_0081	18/Feb/2014	Total Dissolved Solids	603	=	None
CCGC_0082	19/Feb/2014	Alkalinity as CaCO3	116	=	None
CCGC_0082	19/Feb/2014	Alkalinity as CaCO3	116	=	None
CCGC_0082	19/Feb/2014	Bicarbonate	142	=	None
CCGC_0082	19/Feb/2014	Bicarbonate	142	=	None
CCGC_0082	19/Feb/2014	Calcium	69	=	None
CCGC_0082	19/Feb/2014	Calcium	69	=	None
CCGC_0082	19/Feb/2014	Chloride	42	=	None
CCGC_0082	19/Feb/2014	Chloride	42	=	None
CCGC_0082	19/Feb/2014	Hardness as CaCO3	423	=	None
CCGC_0082	19/Feb/2014	Hardness as CaCO3	423	=	None
CCGC_0082	19/Feb/2014	Magnesium	61	=	None
CCGC_0082	19/Feb/2014	Magnesium	61	=	None
CCGC_0082	19/Feb/2014	Nitrate + Nitrite as N	32.4	=	None
CCGC_0082	19/Feb/2014	Nitrate + Nitrite as N	32.4	=	None
CCGC_0082	19/Feb/2014	Nitrate as NO3-N	32	=	None
CCGC_0082	19/Feb/2014	Nitrate as NO3-N	32	=	None
CCGC_0082	19/Feb/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0082	19/Feb/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0082	19/Feb/2014	Potassium	2.4	=	None
CCGC_0082	19/Feb/2014	Potassium	2.4	=	None
CCGC_0082	19/Feb/2014	QC Ratio TDS/SEC	0.67	=	None
CCGC_0082	19/Feb/2014	QC Ratio TDS/SEC	0.67	=	None
CCGC_0082	19/Feb/2014	Sodium	39	=	None
CCGC_0082	19/Feb/2014	Sodium	39	=	None
CCGC_0082	19/Feb/2014	SpecificConductivity	990	=	None
CCGC_0082	19/Feb/2014	SpecificConductivity	990	=	None
CCGC_0082	19/Feb/2014	Sulfate	178	=	None
CCGC_0082	19/Feb/2014	Sulfate	178	=	None
CCGC_0082	19/Feb/2014	Total Dissolved Solids	666	=	None
CCGC_0082	19/Feb/2014	Total Dissolved Solids	666	=	None
CCGC_0083	19/Feb/2014	Alkalinity as CaCO3	157	=	None
CCGC_0083	19/Feb/2014	Bicarbonate	192	=	None
CCGC_0083	19/Feb/2014	Calcium	34	=	None
CCGC_0083	19/Feb/2014	Chloride	20	=	None
CCGC_0083	19/Feb/2014	Hardness as CaCO3	192	=	None
CCGC_0083	19/Feb/2014	Magnesium	26	=	None
CCGC_0083	19/Feb/2014	Nitrate + Nitrite as N	2.3	=	None
CCGC_0083	19/Feb/2014	Nitrate as NO3-N	1.8	=	None
CCGC_0083	19/Feb/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0083	19/Feb/2014	Potassium	2.2	=	None
CCGC_0083	19/Feb/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0083	19/Feb/2014	Sodium	20	=	None
CCGC_0083	19/Feb/2014	SpecificConductivity	457	=	None
CCGC_0083	19/Feb/2014	Sulfate	30	=	None
CCGC_0083	19/Feb/2014	Total Dissolved Solids	288	=	None
CCGC_0084	19/Feb/2014	Alkalinity as CaCO3	180	=	None
CCGC_0084	19/Feb/2014	Bicarbonate	220	=	None
CCGC_0084	19/Feb/2014	Calcium	41	=	None
CCGC_0084	19/Feb/2014	Chloride	14	=	None
CCGC_0084	19/Feb/2014	Hardness as CaCO3	209	=	None
CCGC_0084	19/Feb/2014	Magnesium	26	=	None

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0084	19/Feb/2014	Nitrate + Nitrite as N	0.6	=	None
CCGC_0084	19/Feb/2014	Nitrate as NO3-N	0.1	=	None
CCGC_0084	19/Feb/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0084	19/Feb/2014	Potassium	3.2	=	None
CCGC_0084	19/Feb/2014	QC Ratio TDS/SEC	0.65	=	None
CCGC_0084	19/Feb/2014	Sodium	20	=	None
CCGC_0084	19/Feb/2014	SpecificConductivity	467	=	None
CCGC_0084	19/Feb/2014	Sulfate	37	=	None
CCGC_0084	19/Feb/2014	Total Dissolved Solids	303	=	None
CCGC_0085	19/Feb/2014	Alkalinity as CaCO3	156	=	None
CCGC_0085	19/Feb/2014	Bicarbonate	190	=	None
CCGC_0085	19/Feb/2014	Calcium	28	=	None
CCGC_0085	19/Feb/2014	Chloride	41	=	None
CCGC_0085	19/Feb/2014	Hardness as CaCO3	189	=	None
CCGC_0085	19/Feb/2014	Magnesium	29	=	None
CCGC_0085	19/Feb/2014	Nitrate + Nitrite as N	0.4	=	None
CCGC_0085	19/Feb/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0085	19/Feb/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0085	19/Feb/2014	Potassium	1.9	=	None
CCGC_0085	19/Feb/2014	QC Ratio TDS/SEC	0.58	=	None
CCGC_0085	19/Feb/2014	Sodium	28	=	None
CCGC_0085	19/Feb/2014	SpecificConductivity	484	=	None
CCGC_0085	19/Feb/2014	Sulfate	20	=	None
CCGC_0085	19/Feb/2014	Total Dissolved Solids	282	=	None
CCGC_0086	19/Feb/2014	Alkalinity as CaCO3	92	=	None
CCGC_0086	19/Feb/2014	Bicarbonate	112	=	None
CCGC_0086	19/Feb/2014	Calcium	26	=	None
CCGC_0086	19/Feb/2014	Chloride	14	=	None
CCGC_0086	19/Feb/2014	Hardness as CaCO3	139	=	None
CCGC_0086	19/Feb/2014	Magnesium	18	=	None
CCGC_0086	19/Feb/2014	Nitrate + Nitrite as N	4.8	=	None
CCGC_0086	19/Feb/2014	Nitrate as NO3-N	4.3	=	None
CCGC_0086	19/Feb/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0086	19/Feb/2014	Potassium	1.5	=	None
CCGC_0086	19/Feb/2014	QC Ratio TDS/SEC	0.66	=	None
CCGC_0086	19/Feb/2014	Sodium	16	=	None
CCGC_0086	19/Feb/2014	SpecificConductivity	339	=	None
CCGC_0086	19/Feb/2014	Sulfate	33	=	None
CCGC_0086	19/Feb/2014	Total Dissolved Solids	223	=	None

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0088	20/Feb/2014	Alkalinity as CaCO3	192	=	None
CCGC_0088	20/Feb/2014	Bicarbonate	234	=	None
CCGC_0088	20/Feb/2014	Calcium	57	=	None
CCGC_0088	20/Feb/2014	Chloride	26	=	None
CCGC_0088	20/Feb/2014	Hardness as CaCO3	282	=	None
CCGC_0088	20/Feb/2014	Magnesium	34	=	None
CCGC_0088	20/Feb/2014	Nitrate + Nitrite as N	0.6	=	None
CCGC_0088	20/Feb/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0088	20/Feb/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0088	20/Feb/2014	Potassium	1.7	=	None
CCGC_0088	20/Feb/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0088	20/Feb/2014	Sodium	27	=	None
CCGC_0088	20/Feb/2014	SpecificConductivity	629	=	None
CCGC_0088	20/Feb/2014	Sulfate	84	=	None
CCGC_0088	20/Feb/2014	Total Dissolved Solids	403	=	None
CCGC_0089	20/Feb/2014	Alkalinity as CaCO3	274	=	None
CCGC_0089	20/Feb/2014	Bicarbonate	334	=	None
CCGC_0089	20/Feb/2014	Calcium	50	=	None
CCGC_0089	20/Feb/2014	Chloride	44	=	None
CCGC_0089	20/Feb/2014	Hardness as CaCO3	277	=	None
CCGC_0089	20/Feb/2014	Magnesium	37	=	None
CCGC_0089	20/Feb/2014	Nitrate + Nitrite as N	0.7	=	None
CCGC_0089	20/Feb/2014	Nitrate as NO3-N	0.2	=	None
CCGC_0089	20/Feb/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0089	20/Feb/2014	Potassium	2.4	=	None
CCGC_0089	20/Feb/2014	QC Ratio TDS/SEC	0.58	=	None
CCGC_0089	20/Feb/2014	Sodium	59	=	None
CCGC_0089	20/Feb/2014	SpecificConductivity	748	=	None
CCGC_0089	20/Feb/2014	Sulfate	43	=	None
CCGC_0089	20/Feb/2014	Total Dissolved Solids	434	=	None
CCGC_0090	20/Feb/2014	Alkalinity as CaCO3	124	=	None
CCGC_0090	20/Feb/2014	Bicarbonate	151	=	None
CCGC_0090	20/Feb/2014	Calcium	176	=	None
CCGC_0090	20/Feb/2014	Chloride	343	=	None
CCGC_0090	20/Feb/2014	Hardness as CaCO3	983	=	None
CCGC_0090	20/Feb/2014	Magnesium	132	=	None
CCGC_0090	20/Feb/2014	Nitrate + Nitrite as N	58.4	=	None
CCGC_0090	20/Feb/2014	Nitrate as NO3-N	58.3	=	None
CCGC_0090	20/Feb/2014	Nitrite as NO2-N	<0.1	ND	None

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0090	20/Feb/2014	Potassium	3.5	=	None
CCGC_0090	20/Feb/2014	QC Ratio TDS/SEC	0.67	=	None
CCGC_0090	20/Feb/2014	Sodium	129	=	None
CCGC_0090	20/Feb/2014	SpecificConductivity	2334	=	None
CCGC_0090	20/Feb/2014	Sulfate	306	=	None
CCGC_0090	20/Feb/2014	Total Dissolved Solids	1574	=	None
CCGC_0091	18/Feb/2014	Alkalinity as CaCO3	214	=	None
CCGC_0091	18/Feb/2014	Bicarbonate	261	=	None
CCGC_0091	18/Feb/2014	Calcium	51	=	None
CCGC_0091	18/Feb/2014	Chloride	26	=	None
CCGC_0091	18/Feb/2014	Hardness as CaCO3	239	=	None
CCGC_0091	18/Feb/2014	Magnesium	27	=	None
CCGC_0091	18/Feb/2014	Nitrate + Nitrite as N	0.5	=	None
CCGC_0091	18/Feb/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0091	18/Feb/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0091	18/Feb/2014	Potassium	2.6	=	None
CCGC_0091	18/Feb/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0091	18/Feb/2014	Sodium	33	=	None
CCGC_0091	18/Feb/2014	SpecificConductivity	551	=	None
CCGC_0091	18/Feb/2014	Sulfate	34	=	None
CCGC_0091	18/Feb/2014	Total Dissolved Solids	346	=	None
CCGC_0092	18/Feb/2014	Alkalinity as CaCO3	100	=	None
CCGC_0092	18/Feb/2014	Bicarbonate	122	=	None
CCGC_0092	18/Feb/2014	Calcium	29	=	None
CCGC_0092	18/Feb/2014	Chloride	31	=	None
CCGC_0092	18/Feb/2014	Hardness as CaCO3	130	=	None
CCGC_0092	18/Feb/2014	Magnesium	14	=	None
CCGC_0092	18/Feb/2014	Nitrate + Nitrite as N	9.6	=	None
CCGC_0092	18/Feb/2014	Nitrate as NO3-N	9.2	=	None
CCGC_0092	18/Feb/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0092	18/Feb/2014	Potassium	1.8	=	None
CCGC_0092	18/Feb/2014	QC Ratio TDS/SEC	0.69	=	None
CCGC_0092	18/Feb/2014	Sodium	34	=	None
CCGC_0092	18/Feb/2014	SpecificConductivity	428	=	None
CCGC_0092	18/Feb/2014	Sulfate	19	=	None
CCGC_0092	18/Feb/2014	Total Dissolved Solids	297	=	None
CCGC_0092	15/Aug/2014	Alkalinity as CaCO3	104	=	None
CCGC_0092	15/Aug/2014	Bicarbonate	127	=	None
CCGC_0092	15/Aug/2014	Calcium	32	=	D

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0092	15/Aug/2014	Chloride	32	=	None
CCGC_0092	15/Aug/2014	Hardness as CaCO3	142	=	None
CCGC_0092	15/Aug/2014	Magnesium	15	=	D
CCGC_0092	15/Aug/2014	Nitrate + Nitrite as N	9.9	=	None
CCGC_0092	15/Aug/2014	Nitrate as NO3-N	9.7	=	None
CCGC_0092	15/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0092	15/Aug/2014	Potassium	2	=	D
CCGC_0092	15/Aug/2014	QC Ratio TDS/SEC	0.73	=	None
CCGC_0092	15/Aug/2014	Sodium	36	=	D
CCGC_0092	15/Aug/2014	SpecificConductivity	437	=	None
CCGC_0092	15/Aug/2014	Sulfate	20	=	None
CCGC_0092	15/Aug/2014	Total Dissolved Solids	320	=	None
CCGC_0093	18/Feb/2014	Alkalinity as CaCO3	159	=	None
CCGC_0093	18/Feb/2014	Alkalinity as CaCO3	159	=	None
CCGC_0093	18/Feb/2014	Bicarbonate	194	=	None
CCGC_0093	18/Feb/2014	Bicarbonate	194	=	None
CCGC_0093	18/Feb/2014	Calcium	35	=	None
CCGC_0093	18/Feb/2014	Calcium	35	=	None
CCGC_0093	18/Feb/2014	Chloride	23	=	None
CCGC_0093	18/Feb/2014	Chloride	23	=	None
CCGC_0093	18/Feb/2014	Hardness as CaCO3	194	=	None
CCGC_0093	18/Feb/2014	Hardness as CaCO3	194	=	None
CCGC_0093	18/Feb/2014	Magnesium	26	=	None
CCGC_0093	18/Feb/2014	Magnesium	26	=	None
CCGC_0093	18/Feb/2014	Nitrate + Nitrite as N	3	=	None
CCGC_0093	18/Feb/2014	Nitrate + Nitrite as N	3	=	None
CCGC_0093	18/Feb/2014	Nitrate as NO3-N	2.6	=	None
CCGC_0093	18/Feb/2014	Nitrate as NO3-N	2.6	=	None
CCGC_0093	18/Feb/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0093	18/Feb/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0093	18/Feb/2014	Potassium	1.4	=	None
CCGC_0093	18/Feb/2014	Potassium	1.4	=	None
CCGC_0093	18/Feb/2014	QC Ratio TDS/SEC	0.67	=	None
CCGC_0093	18/Feb/2014	QC Ratio TDS/SEC	0.67	=	None
CCGC_0093	18/Feb/2014	Sodium	20	=	None
CCGC_0093	18/Feb/2014	Sodium	20	=	None
CCGC_0093	18/Feb/2014	SpecificConductivity	442	=	None
CCGC_0093	18/Feb/2014	SpecificConductivity	442	=	None
CCGC_0093	18/Feb/2014	Sulfate	23	=	None

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0093	18/Feb/2014	Sulfate	23	=	None
CCGC_0093	18/Feb/2014	Total Dissolved Solids	297	=	None
CCGC_0093	18/Feb/2014	Total Dissolved Solids	297	=	None
CCGC_0094	18/Feb/2014	Alkalinity as CaCO3	76	=	None
CCGC_0094	18/Feb/2014	Bicarbonate	93	=	None
CCGC_0094	18/Feb/2014	Calcium	28	=	None
CCGC_0094	18/Feb/2014	Chloride	78	=	None
CCGC_0094	18/Feb/2014	Hardness as CaCO3	136	=	None
CCGC_0094	18/Feb/2014	Magnesium	16	=	None
CCGC_0094	18/Feb/2014	Nitrate + Nitrite as N	9.6	=	None
CCGC_0094	18/Feb/2014	Nitrate as NO3-N	9.4	=	None
CCGC_0094	18/Feb/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0094	18/Feb/2014	Potassium	1.4	=	None
CCGC_0094	18/Feb/2014	QC Ratio TDS/SEC	0.65	=	None
CCGC_0094	18/Feb/2014	Sodium	54	=	None
CCGC_0094	18/Feb/2014	SpecificConductivity	541	=	None
CCGC_0094	18/Feb/2014	Sulfate	18	=	None
CCGC_0094	18/Feb/2014	Total Dissolved Solids	349	=	None
CCGC_0094	15/Aug/2014	Alkalinity as CaCO3	79	=	None
CCGC_0094	15/Aug/2014	Bicarbonate	96	=	None
CCGC_0094	15/Aug/2014	Calcium	30	=	D
CCGC_0094	15/Aug/2014	Chloride	90	=	None
CCGC_0094	15/Aug/2014	Hardness as CaCO3	141	=	None
CCGC_0094	15/Aug/2014	Magnesium	16	=	D
CCGC_0094	15/Aug/2014	Nitrate + Nitrite as N	9	=	None
CCGC_0094	15/Aug/2014	Nitrate as NO3-N	8.8	=	None
CCGC_0094	15/Aug/2014	Nitrite as NO2-N	0.1	=	None
CCGC_0094	15/Aug/2014	Potassium	1.7	=	D
CCGC_0094	15/Aug/2014	QC Ratio TDS/SEC	0.65	=	None
CCGC_0094	15/Aug/2014	Sodium	59	=	D
CCGC_0094	15/Aug/2014	SpecificConductivity	572	=	None
CCGC_0094	15/Aug/2014	Sulfate	16	=	None
CCGC_0094	15/Aug/2014	Total Dissolved Solids	371	=	None
CCGC_0095	19/Feb/2014	Alkalinity as CaCO3	210	=	None
CCGC_0095	19/Feb/2014	Bicarbonate	256	=	None
CCGC_0095	19/Feb/2014	Calcium	61	=	None
CCGC_0095	19/Feb/2014	Chloride	38	=	None
CCGC_0095	19/Feb/2014	Hardness as CaCO3	214	=	None
CCGC_0095	19/Feb/2014	Magnesium	15	=	None

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0095	19/Feb/2014	Nitrate + Nitrite as N	0.4	=	None
CCGC_0095	19/Feb/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0095	19/Feb/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0095	19/Feb/2014	Potassium	2	=	None
CCGC_0095	19/Feb/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0095	19/Feb/2014	Sodium	45	=	None
CCGC_0095	19/Feb/2014	SpecificConductivity	594	=	None
CCGC_0095	19/Feb/2014	Sulfate	28	=	None
CCGC_0095	19/Feb/2014	Total Dissolved Solids	354	=	None
CCGC_0096	19/Feb/2014	Alkalinity as CaCO3	188	=	None
CCGC_0096	19/Feb/2014	Bicarbonate	229	=	None
CCGC_0096	19/Feb/2014	Calcium	76	=	None
CCGC_0096	19/Feb/2014	Chloride	16	=	None
CCGC_0096	19/Feb/2014	Hardness as CaCO3	289	=	None
CCGC_0096	19/Feb/2014	Magnesium	24	=	None
CCGC_0096	19/Feb/2014	Nitrate + Nitrite as N	0.5	=	None
CCGC_0096	19/Feb/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0096	19/Feb/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0096	19/Feb/2014	Potassium	2.5	=	None
CCGC_0096	19/Feb/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0096	19/Feb/2014	Sodium	25	=	None
CCGC_0096	19/Feb/2014	SpecificConductivity	623	=	None
CCGC_0096	19/Feb/2014	Sulfate	107	=	None
CCGC_0096	19/Feb/2014	Total Dissolved Solids	397	=	None
CCGC_0097	19/Feb/2014	Alkalinity as CaCO3	222	=	None
CCGC_0097	19/Feb/2014	Bicarbonate	270	=	None
CCGC_0097	19/Feb/2014	Calcium	62	=	None
CCGC_0097	19/Feb/2014	Chloride	33	=	None
CCGC_0097	19/Feb/2014	Hardness as CaCO3	262	=	None
CCGC_0097	19/Feb/2014	Magnesium	26	=	None
CCGC_0097	19/Feb/2014	Nitrate + Nitrite as N	9.5	=	None
CCGC_0097	19/Feb/2014	Nitrate as NO3-N	9	=	None
CCGC_0097	19/Feb/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0097	19/Feb/2014	Potassium	3.4	=	None
CCGC_0097	19/Feb/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0097	19/Feb/2014	Sodium	37	=	None
CCGC_0097	19/Feb/2014	SpecificConductivity	730	=	None
CCGC_0097	19/Feb/2014	Sulfate	56	=	None
CCGC_0097	19/Feb/2014	Total Dissolved Solids	431	=	None

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0097	15/Aug/2014	Alkalinity as CaCO3	239	=	None
CCGC_0097	15/Aug/2014	Bicarbonate	292	=	None
CCGC_0097	15/Aug/2014	Calcium	92	=	D
CCGC_0097	15/Aug/2014	Chloride	35	=	None
CCGC_0097	15/Aug/2014	Hardness as CaCO3	324	=	None
CCGC_0097	15/Aug/2014	Magnesium	23	=	D
CCGC_0097	15/Aug/2014	Nitrate + Nitrite as N	14.5	=	None
CCGC_0097	15/Aug/2014	Nitrate as NO3-N	14.2	=	None
CCGC_0097	15/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0097	15/Aug/2014	Potassium	2	=	D
CCGC_0097	15/Aug/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0097	15/Aug/2014	Sodium	37	=	D
CCGC_0097	15/Aug/2014	SpecificConductivity	770	=	None
CCGC_0097	15/Aug/2014	Sulfate	53	=	None
CCGC_0097	15/Aug/2014	Total Dissolved Solids	491	=	None
CCGC_0098	19/Feb/2014	Alkalinity as CaCO3	223	=	None
CCGC_0098	19/Feb/2014	Bicarbonate	272	=	None
CCGC_0098	19/Feb/2014	Calcium	47	=	None
CCGC_0098	19/Feb/2014	Chloride	22	=	None
CCGC_0098	19/Feb/2014	Hardness as CaCO3	224	=	None
CCGC_0098	19/Feb/2014	Magnesium	26	=	None
CCGC_0098	19/Feb/2014	Nitrate + Nitrite as N	0.5	=	None
CCGC_0098	19/Feb/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0098	19/Feb/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0098	19/Feb/2014	Potassium	1.7	=	None
CCGC_0098	19/Feb/2014	QC Ratio TDS/SEC	0.58	=	None
CCGC_0098	19/Feb/2014	Sodium	38	=	None
CCGC_0098	19/Feb/2014	SpecificConductivity	563	=	None
CCGC_0098	19/Feb/2014	Sulfate	33	=	None
CCGC_0098	19/Feb/2014	Total Dissolved Solids	328	=	None
CCGC_0099	19/Feb/2014	Alkalinity as CaCO3	165	=	None
CCGC_0099	19/Feb/2014	Bicarbonate	201	=	None
CCGC_0099	19/Feb/2014	Calcium	39	=	None
CCGC_0099	19/Feb/2014	Chloride	25	=	None
CCGC_0099	19/Feb/2014	Hardness as CaCO3	217	=	None
CCGC_0099	19/Feb/2014	Magnesium	29	=	None
CCGC_0099	19/Feb/2014	Nitrate + Nitrite as N	4.6	=	None
CCGC_0099	19/Feb/2014	Nitrate as NO3-N	4.2	=	None
CCGC_0099	19/Feb/2014	Nitrite as NO2-N	0.5	=	None

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0099	19/Feb/2014	Potassium	1.5	=	None
CCGC_0099	19/Feb/2014	QC Ratio TDS/SEC	0.62	=	None
CCGC_0099	19/Feb/2014	Sodium	22	=	None
CCGC_0099	19/Feb/2014	SpecificConductivity	496	=	None
CCGC_0099	19/Feb/2014	Sulfate	29	=	None
CCGC_0099	19/Feb/2014	Total Dissolved Solids	306	=	None
CCGC_0100	19/Feb/2014	Alkalinity as CaCO3	383	=	None
CCGC_0100	19/Feb/2014	Bicarbonate	467	=	None
CCGC_0100	19/Feb/2014	Calcium	68	=	None
CCGC_0100	19/Feb/2014	Chloride	61	=	None
CCGC_0100	19/Feb/2014	Hardness as CaCO3	458	=	None
CCGC_0100	19/Feb/2014	Magnesium	70	=	None
CCGC_0100	19/Feb/2014	Nitrate + Nitrite as N	0.4	=	None
CCGC_0100	19/Feb/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0100	19/Feb/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0100	19/Feb/2014	Potassium	2.9	=	None
CCGC_0100	19/Feb/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0100	19/Feb/2014	Sodium	93	=	None
CCGC_0100	19/Feb/2014	SpecificConductivity	1112	=	None
CCGC_0100	19/Feb/2014	Sulfate	128	=	None
CCGC_0100	19/Feb/2014	Total Dissolved Solids	660	=	None
CCGC_0101	19/Feb/2014	Alkalinity as CaCO3	100	=	None
CCGC_0101	19/Feb/2014	Bicarbonate	122	=	None
CCGC_0101	19/Feb/2014	Calcium	18	=	None
CCGC_0101	19/Feb/2014	Chloride	11	=	None
CCGC_0101	19/Feb/2014	Hardness as CaCO3	107	=	None
CCGC_0101	19/Feb/2014	Magnesium	15	=	None
CCGC_0101	19/Feb/2014	Nitrate + Nitrite as N	2.1	=	None
CCGC_0101	19/Feb/2014	Nitrate as NO3-N	1.6	=	None
CCGC_0101	19/Feb/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0101	19/Feb/2014	Potassium	1.5	=	None
CCGC_0101	19/Feb/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0101	19/Feb/2014	Sodium	19	=	None
CCGC_0101	19/Feb/2014	SpecificConductivity	293	=	None
CCGC_0101	19/Feb/2014	Sulfate	16	=	None
CCGC_0101	19/Feb/2014	Total Dissolved Solids	174	=	None
CCGC_0102	19/Feb/2014	Alkalinity as CaCO3	105	=	None
CCGC_0102	19/Feb/2014	Bicarbonate	128	=	None
CCGC_0102	19/Feb/2014	Calcium	80	=	None

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0102	19/Feb/2014	Chloride	137	=	None
CCGC_0102	19/Feb/2014	Hardness as CaCO3	352	=	None
CCGC_0102	19/Feb/2014	Magnesium	37	=	None
CCGC_0102	19/Feb/2014	Nitrate + Nitrite as N	26.7	=	None
CCGC_0102	19/Feb/2014	Nitrate as NO3-N	26.6	=	None
CCGC_0102	19/Feb/2014	Nitrite as NO2-N	0.1	=	None
CCGC_0102	19/Feb/2014	Potassium	2.7	=	None
CCGC_0102	19/Feb/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0102	19/Feb/2014	Sodium	74	=	None
CCGC_0102	19/Feb/2014	SpecificConductivity	1089	=	None
CCGC_0102	19/Feb/2014	Sulfate	92	=	None
CCGC_0102	19/Feb/2014	Total Dissolved Solids	648	=	None
CCGC_0103	20/Feb/2014	Alkalinity as CaCO3	136	=	None
CCGC_0103	20/Feb/2014	Bicarbonate	166	=	None
CCGC_0103	20/Feb/2014	Calcium	7	=	None
CCGC_0103	20/Feb/2014	Chloride	85	=	None
CCGC_0103	20/Feb/2014	Hardness as CaCO3	22	=	None
CCGC_0103	20/Feb/2014	Magnesium	1	=	None
CCGC_0103	20/Feb/2014	Nitrate + Nitrite as N	0.2	=	None
CCGC_0103	20/Feb/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0103	20/Feb/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0103	20/Feb/2014	Potassium	2.1	=	None
CCGC_0103	20/Feb/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0103	20/Feb/2014	Sodium	163	=	None
CCGC_0103	20/Feb/2014	SpecificConductivity	796	=	None
CCGC_0103	20/Feb/2014	Sulfate	101	=	None
CCGC_0103	20/Feb/2014	Total Dissolved Solids	471	=	None
CCGC_0104	20/Feb/2014	Alkalinity as CaCO3	128	=	None
CCGC_0104	20/Feb/2014	Bicarbonate	156	=	None
CCGC_0104	20/Feb/2014	Calcium	140	=	None
CCGC_0104	20/Feb/2014	Chloride	330	=	None
CCGC_0104	20/Feb/2014	Hardness as CaCO3	873	=	None
CCGC_0104	20/Feb/2014	Magnesium	127	=	None
CCGC_0104	20/Feb/2014	Nitrate + Nitrite as N	65.6	=	None
CCGC_0104	20/Feb/2014	Nitrate as NO3-N	65.5	=	None
CCGC_0104	20/Feb/2014	Nitrite as NO2-N	0.1	=	None
CCGC_0104	20/Feb/2014	Potassium	4.1	=	None
CCGC_0104	20/Feb/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0104	20/Feb/2014	Sodium	224	=	None

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0104	20/Feb/2014	SpecificConductivity	2547	=	None
CCGC_0104	20/Feb/2014	Sulfate	420	=	None
CCGC_0104	20/Feb/2014	Total Dissolved Solids	1611	=	None
CCGC_0105	20/Feb/2014	Alkalinity as CaCO3	272	=	None
CCGC_0105	20/Feb/2014	Bicarbonate	332	=	None
CCGC_0105	20/Feb/2014	Calcium	254	=	None
CCGC_0105	20/Feb/2014	Chloride	827	=	None
CCGC_0105	20/Feb/2014	Hardness as CaCO3	1338	=	None
CCGC_0105	20/Feb/2014	Magnesium	171	=	None
CCGC_0105	20/Feb/2014	Nitrate + Nitrite as N	60.2	=	None
CCGC_0105	20/Feb/2014	Nitrate as NO3-N	60.1	=	None
CCGC_0105	20/Feb/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0105	20/Feb/2014	Potassium	6.1	=	None
CCGC_0105	20/Feb/2014	QC Ratio TDS/SEC	0.67	=	None
CCGC_0105	20/Feb/2014	Sodium	385	=	None
CCGC_0105	20/Feb/2014	SpecificConductivity	4103	=	None
CCGC_0105	20/Feb/2014	Sulfate	386	=	None
CCGC_0105	20/Feb/2014	Total Dissolved Solids	2740	=	None
CCGC_0106	20/Feb/2014	Alkalinity as CaCO3	89	=	None
CCGC_0106	20/Feb/2014	Bicarbonate	109	=	None
CCGC_0106	20/Feb/2014	Calcium	100	=	None
CCGC_0106	20/Feb/2014	Chloride	268	=	None
CCGC_0106	20/Feb/2014	Hardness as CaCO3	904	=	None
CCGC_0106	20/Feb/2014	Magnesium	159	=	None
CCGC_0106	20/Feb/2014	Nitrate + Nitrite as N	67.5	=	None
CCGC_0106	20/Feb/2014	Nitrate as NO3-N	67.5	=	None
CCGC_0106	20/Feb/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0106	20/Feb/2014	Potassium	2	=	None
CCGC_0106	20/Feb/2014	QC Ratio TDS/SEC	0.66	=	None
CCGC_0106	20/Feb/2014	Sodium	163	=	None
CCGC_0106	20/Feb/2014	SpecificConductivity	2282	=	None
CCGC_0106	20/Feb/2014	Sulfate	421	=	None
CCGC_0106	20/Feb/2014	Total Dissolved Solids	1506	=	None
CCGC_0279	27/Mar/2014	Alkalinity as CaCO3	106	=	None
CCGC_0279	27/Mar/2014	Bicarbonate	129	=	None
CCGC_0279	27/Mar/2014	Calcium	21	=	D
CCGC_0279	27/Mar/2014	Chloride	40	=	None
CCGC_0279	27/Mar/2014	Hardness as CaCO3	102	=	None
CCGC_0279	27/Mar/2014	Magnesium	12	=	D

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0279	27/Mar/2014	Nitrate + Nitrite as N	0.8	=	None
CCGC_0279	27/Mar/2014	Nitrate as NO3-N	0.5	=	None
CCGC_0279	27/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0279	27/Mar/2014	Potassium	1.1	=	D
CCGC_0279	27/Mar/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0279	27/Mar/2014	Sodium	39	=	D
CCGC_0279	27/Mar/2014	SpecificConductivity	356	=	None
CCGC_0279	27/Mar/2014	Sulfate	2	=	None
CCGC_0279	27/Mar/2014	Total Dissolved Solids	226	=	None
CCGC_0323	30/Apr/2014	Alkalinity as CaCO3	348	=	None
CCGC_0323	30/Apr/2014	Bicarbonate	425	=	None
CCGC_0323	30/Apr/2014	Calcium	93	=	D
CCGC_0323	30/Apr/2014	Chloride	101	=	None
CCGC_0323	30/Apr/2014	Hardness as CaCO3	718	=	None
CCGC_0323	30/Apr/2014	Magnesium	118	=	D
CCGC_0323	30/Apr/2014	Nitrate + Nitrite as N	27.1	=	None
CCGC_0323	30/Apr/2014	Nitrate as NO3-N	26.6	=	None
CCGC_0323	30/Apr/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0323	30/Apr/2014	Potassium	1.6	=	D
CCGC_0323	30/Apr/2014	QC Ratio TDS/SEC	0.65	=	None
CCGC_0323	30/Apr/2014	Sodium	68	=	D
CCGC_0323	30/Apr/2014	SpecificConductivity	1526	=	None
CCGC_0323	30/Apr/2014	Sulfate	243	=	None
CCGC_0323	30/Apr/2014	Total Dissolved Solids	994	=	None
CCGC_0324	29/Apr/2014	Alkalinity as CaCO3	228	=	None
CCGC_0324	29/Apr/2014	Bicarbonate	278	=	None
CCGC_0324	29/Apr/2014	Calcium	88	=	D
CCGC_0324	29/Apr/2014	Chloride	76	=	None
CCGC_0324	29/Apr/2014	Hardness as CaCO3	487	=	None
CCGC_0324	29/Apr/2014	Magnesium	65	=	D
CCGC_0324	29/Apr/2014	Nitrate + Nitrite as N	27.3	=	None
CCGC_0324	29/Apr/2014	Nitrate as NO3-N	26.9	=	None
CCGC_0324	29/Apr/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0324	29/Apr/2014	Potassium	2.1	=	D
CCGC_0324	29/Apr/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0324	29/Apr/2014	Sodium	60	=	D
CCGC_0324	29/Apr/2014	SpecificConductivity	1135	=	None
CCGC_0324	29/Apr/2014	Sulfate	136	=	None
CCGC_0324	29/Apr/2014	Total Dissolved Solids	683	=	None
CCGC_0325	29/Apr/2014	Alkalinity as CaCO3	304	=	None
CCGC_0325	29/Apr/2014	Bicarbonate	371	=	None
CCGC_0325	29/Apr/2014	Calcium	57	=	D
CCGC_0325	29/Apr/2014	Chloride	45	=	None
CCGC_0325	29/Apr/2014	Hardness as CaCO3	319	=	None
CCGC_0325	29/Apr/2014	Magnesium	43	=	D
CCGC_0325	29/Apr/2014	Nitrate + Nitrite as N	1.8	=	None
CCGC_0325	29/Apr/2014	Nitrate as NO3-N	1.3	=	None
CCGC_0325	29/Apr/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0325	29/Apr/2014	Potassium	3	=	D
CCGC_0325	29/Apr/2014	QC Ratio TDS/SEC	0.56	=	None
CCGC_0325	29/Apr/2014	Sodium	57	=	D
CCGC_0325	29/Apr/2014	SpecificConductivity	794	=	None
CCGC_0325	29/Apr/2014	Sulfate	50	=	None
CCGC_0325	29/Apr/2014	Total Dissolved Solids	448	=	None
CCGC_0326	29/Apr/2014	Alkalinity as CaCO3	394	=	None
CCGC_0326	29/Apr/2014	Alkalinity as CaCO3	394	=	None
CCGC_0326	29/Apr/2014	Bicarbonate	481	=	None
CCGC_0326	29/Apr/2014	Bicarbonate	481	=	None
CCGC_0326	29/Apr/2014	Calcium	103	=	D
CCGC_0326	29/Apr/2014	Calcium	103	=	D
CCGC_0326	29/Apr/2014	Chloride	101	=	None
CCGC_0326	29/Apr/2014	Chloride	101	=	None
CCGC_0326	29/Apr/2014	Hardness as CaCO3	731	=	None
CCGC_0326	29/Apr/2014	Hardness as CaCO3	731	=	None
CCGC_0326	29/Apr/2014	Magnesium	115	=	D
CCGC_0326	29/Apr/2014	Magnesium	115	=	D
CCGC_0326	29/Apr/2014	Nitrate + Nitrite as N	18	=	None
CCGC_0326	29/Apr/2014	Nitrate + Nitrite as N	18	=	None
CCGC_0326	29/Apr/2014	Nitrate as NO3-N	17.1	=	None
CCGC_0326	29/Apr/2014	Nitrate as NO3-N	17.1	=	None
CCGC_0326	29/Apr/2014	Nitrite as NO2-N	0.9	=	None
CCGC_0326	29/Apr/2014	Nitrite as NO2-N	0.9	=	None
CCGC_0326	29/Apr/2014	Potassium	2	=	D
CCGC_0326	29/Apr/2014	Potassium	2	=	D
CCGC_0326	29/Apr/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0326	29/Apr/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0326	29/Apr/2014	Sodium	99	=	D
CCGC_0326	29/Apr/2014	Sodium	99	=	D

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0326	29/Apr/2014	SpecificConductivity	1650	=	None
CCGC_0326	29/Apr/2014	SpecificConductivity	1650	=	None
CCGC_0326	29/Apr/2014	Sulfate	295	=	None
CCGC_0326	29/Apr/2014	Sulfate	295	=	None
CCGC_0326	29/Apr/2014	Total Dissolved Solids	1054	=	None
CCGC_0326	29/Apr/2014	Total Dissolved Solids	1054	=	None
CCGC_0326	08/Aug/2014	Alkalinity as CaCO3	370	=	None
CCGC_0326	08/Aug/2014	Alkalinity as CaCO3	370	=	None
CCGC_0326	08/Aug/2014	Bicarbonate	451	=	None
CCGC_0326	08/Aug/2014	Bicarbonate	451	=	None
CCGC_0326	08/Aug/2014	Calcium	102	=	D
CCGC_0326	08/Aug/2014	Calcium	102	=	D
CCGC_0326	08/Aug/2014	Chloride	109	=	None
CCGC_0326	08/Aug/2014	Chloride	109	=	None
CCGC_0326	08/Aug/2014	Hardness as CaCO3	720	=	None
CCGC_0326	08/Aug/2014	Hardness as CaCO3	720	=	None
CCGC_0326	08/Aug/2014	Magnesium	113	=	D
CCGC_0326	08/Aug/2014	Magnesium	113	=	D
CCGC_0326	08/Aug/2014	Nitrate + Nitrite as N	19.4	=	None
CCGC_0326	08/Aug/2014	Nitrate + Nitrite as N	19.4	=	None
CCGC_0326	08/Aug/2014	Nitrate as NO3-N	18.9	=	None
CCGC_0326	08/Aug/2014	Nitrate as NO3-N	18.9	=	None
CCGC_0326	08/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0326	08/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0326	08/Aug/2014	Potassium	1.9	=	D
CCGC_0326	08/Aug/2014	Potassium	1.9	=	D
CCGC_0326	08/Aug/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0326	08/Aug/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0326	08/Aug/2014	Sodium	104	=	D
CCGC_0326	08/Aug/2014	Sodium	104	=	D
CCGC_0326	08/Aug/2014	SpecificConductivity	1665	=	None
CCGC_0326	08/Aug/2014	SpecificConductivity	1665	=	None
CCGC_0326	08/Aug/2014	Sulfate	322	=	None
CCGC_0326	08/Aug/2014	Sulfate	322	=	None
CCGC_0326	08/Aug/2014	Total Dissolved Solids	1060	=	None
CCGC_0326	08/Aug/2014	Total Dissolved Solids	1060	=	None
CCGC_0326	21/Aug/2014	Alkalinity as CaCO3	368	=	None
CCGC_0326	21/Aug/2014	Alkalinity as CaCO3	368	=	None
CCGC_0326	21/Aug/2014	Bicarbonate	449	=	None
CCGC_0326	21/Aug/2014	Bicarbonate	449	=	None
CCGC_0326	21/Aug/2014	Calcium	105	=	D
CCGC_0326	21/Aug/2014	Calcium	105	=	D
CCGC_0326	21/Aug/2014	Chloride	109	=	None
CCGC_0326	21/Aug/2014	Chloride	109	=	None
CCGC_0326	21/Aug/2014	Hardness as CaCO3	756	=	None
CCGC_0326	21/Aug/2014	Hardness as CaCO3	756	=	None
CCGC_0326	21/Aug/2014	Magnesium	120	=	D
CCGC_0326	21/Aug/2014	Magnesium	120	=	D
CCGC_0326	21/Aug/2014	Nitrate + Nitrite as N	19.7	=	None
CCGC_0326	21/Aug/2014	Nitrate + Nitrite as N	19.7	=	None
CCGC_0326	21/Aug/2014	Nitrate as NO3-N	19.3	=	None
CCGC_0326	21/Aug/2014	Nitrate as NO3-N	19.3	=	None
CCGC_0326	21/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0326	21/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0326	21/Aug/2014	Potassium	1.2	=	D
CCGC_0326	21/Aug/2014	Potassium	1.2	=	D
CCGC_0326	21/Aug/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0326	21/Aug/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0326	21/Aug/2014	Sodium	103	=	D
CCGC_0326	21/Aug/2014	Sodium	103	=	D
CCGC_0326	21/Aug/2014	SpecificConductivity	1630	=	None
CCGC_0326	21/Aug/2014	SpecificConductivity	1630	=	None
CCGC_0326	21/Aug/2014	Sulfate	322	=	None
CCGC_0326	21/Aug/2014	Sulfate	322	=	None
CCGC_0326	21/Aug/2014	Total Dissolved Solids	1020	=	None
CCGC_0326	21/Aug/2014	Total Dissolved Solids	1020	=	None
CCGC_0327	29/Apr/2014	Alkalinity as CaCO3	<2	ND	None
CCGC_0327	29/Apr/2014	Bicarbonate	<10	ND	None
CCGC_0327	29/Apr/2014	Calcium	242	=	D
CCGC_0327	29/Apr/2014	Chloride	41	=	None
CCGC_0327	29/Apr/2014	Hardness as CaCO3	864	=	None
CCGC_0327	29/Apr/2014	Magnesium	63	=	D
CCGC_0327	29/Apr/2014	Nitrate + Nitrite as N	189	=	None
CCGC_0327	29/Apr/2014	Nitrate as NO3-N	188	=	None
CCGC_0327	29/Apr/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0327	29/Apr/2014	Potassium	3.6	=	D
CCGC_0327	29/Apr/2014	QC Ratio TDS/SEC	0.27	=	None
CCGC_0327	29/Apr/2014	Sodium	48	=	D

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0327	29/Apr/2014	SpecificConductivity	7695	=	None
CCGC_0327	29/Apr/2014	Sulfate	1510	=	D
CCGC_0327	29/Apr/2014	Total Dissolved Solids	2113	=	None
CCGC_0327	08/Aug/2014	Alkalinity as CaCO3	251	=	None
CCGC_0327	08/Aug/2014	Bicarbonate	306	=	None
CCGC_0327	08/Aug/2014	Calcium	74	=	D
CCGC_0327	08/Aug/2014	Chloride	52	=	None
CCGC_0327	08/Aug/2014	Hardness as CaCO3	420	=	None
CCGC_0327	08/Aug/2014	Magnesium	57	=	D
CCGC_0327	08/Aug/2014	Nitrate + Nitrite as N	68.1	=	None
CCGC_0327	08/Aug/2014	Nitrate as NO3-N	63.1	=	None
CCGC_0327	08/Aug/2014	Nitrite as NO2-N	5	=	None
CCGC_0327	08/Aug/2014	Potassium	91	=	D
CCGC_0327	08/Aug/2014	QC Ratio TDS/SEC	0.62	=	None
CCGC_0327	08/Aug/2014	Sodium	45	=	D
CCGC_0327	08/Aug/2014	SpecificConductivity	1498	=	None
CCGC_0327	08/Aug/2014	Sulfate	115	=	None
CCGC_0327	08/Aug/2014	Total Dissolved Solids	935	=	None
CCGC_0328	29/Apr/2014	Alkalinity as CaCO3	340	=	None
CCGC_0328	29/Apr/2014	Bicarbonate	415	=	None
CCGC_0328	29/Apr/2014	Calcium	91	=	D
CCGC_0328	29/Apr/2014	Chloride	39	=	None
CCGC_0328	29/Apr/2014	Hardness as CaCO3	400	=	None
CCGC_0328	29/Apr/2014	Magnesium	42	=	D
CCGC_0328	29/Apr/2014	Nitrate + Nitrite as N	0.9	=	None
CCGC_0328	29/Apr/2014	Nitrate as NO3-N	0.4	=	None
CCGC_0328	29/Apr/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0328	29/Apr/2014	Potassium	2.9	=	D
CCGC_0328	29/Apr/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0328	29/Apr/2014	Sodium	46	=	D
CCGC_0328	29/Apr/2014	SpecificConductivity	895	=	None
CCGC_0328	29/Apr/2014	Sulfate	88	=	None
CCGC_0328	29/Apr/2014	Total Dissolved Solids	531	=	None
CCGC_0329	29/Apr/2014	Alkalinity as CaCO3	258	=	None
CCGC_0329	29/Apr/2014	Bicarbonate	315	=	None
CCGC_0329	29/Apr/2014	Calcium	53	=	D
CCGC_0329	29/Apr/2014	Chloride	26	=	None
CCGC_0329	29/Apr/2014	Hardness as CaCO3	227	=	None
CCGC_0329	29/Apr/2014	Magnesium	23	=	D

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0329	29/Apr/2014	Nitrate + Nitrite as N	0.5	=	None
CCGC_0329	29/Apr/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0329	29/Apr/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0329	29/Apr/2014	Potassium	2.9	=	D
CCGC_0329	29/Apr/2014	QC Ratio TDS/SEC	0.56	=	None
CCGC_0329	29/Apr/2014	Sodium	43	=	D
CCGC_0329	29/Apr/2014	SpecificConductivity	607	=	None
CCGC_0329	29/Apr/2014	Sulfate	27	=	None
CCGC_0329	29/Apr/2014	Total Dissolved Solids	343	=	None
CCGC_0330	29/Apr/2014	Alkalinity as CaCO3	377	=	None
CCGC_0330	29/Apr/2014	Bicarbonate	460	=	None
CCGC_0330	29/Apr/2014	Calcium	103	=	D
CCGC_0330	29/Apr/2014	Chloride	45	=	None
CCGC_0330	29/Apr/2014	Hardness as CaCO3	492	=	None
CCGC_0330	29/Apr/2014	Magnesium	57	=	D
CCGC_0330	29/Apr/2014	Nitrate + Nitrite as N	2.8	=	None
CCGC_0330	29/Apr/2014	Nitrate as NO3-N	2.3	=	None
CCGC_0330	29/Apr/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0330	29/Apr/2014	Potassium	2.9	=	D
CCGC_0330	29/Apr/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0330	29/Apr/2014	Sodium	44	=	D
CCGC_0330	29/Apr/2014	SpecificConductivity	1052	=	None
CCGC_0330	29/Apr/2014	Sulfate	126	=	None
CCGC_0330	29/Apr/2014	Total Dissolved Solids	642	=	None
CCGC_0332	29/Apr/2014	Alkalinity as CaCO3	225	=	None
CCGC_0332	29/Apr/2014	Bicarbonate	275	=	None
CCGC_0332	29/Apr/2014	Calcium	56	=	D
CCGC_0332	29/Apr/2014	Chloride	37	=	None
CCGC_0332	29/Apr/2014	Hardness as CaCO3	296	=	None
CCGC_0332	29/Apr/2014	Magnesium	38	=	D
CCGC_0332	29/Apr/2014	Nitrate + Nitrite as N	0.5	=	None
CCGC_0332	29/Apr/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0332	29/Apr/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0332	29/Apr/2014	Potassium	2.9	=	D
CCGC_0332	29/Apr/2014	QC Ratio TDS/SEC	0.56	=	None
CCGC_0332	29/Apr/2014	Sodium	41	=	D
CCGC_0332	29/Apr/2014	SpecificConductivity	707	=	None
CCGC_0332	29/Apr/2014	Sulfate	86	=	None
CCGC_0332	29/Apr/2014	Total Dissolved Solids	394	=	None

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0333	29/Apr/2014	Alkalinity as CaCO3	241	=	None
CCGC_0333	29/Apr/2014	Bicarbonate	294	=	None
CCGC_0333	29/Apr/2014	Calcium	48	=	D
CCGC_0333	29/Apr/2014	Chloride	19	=	None
CCGC_0333	29/Apr/2014	Hardness as CaCO3	206	=	None
CCGC_0333	29/Apr/2014	Magnesium	21	=	D
CCGC_0333	29/Apr/2014	Nitrate + Nitrite as N	0.5	=	None
CCGC_0333	29/Apr/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0333	29/Apr/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0333	29/Apr/2014	Potassium	2.6	=	D
CCGC_0333	29/Apr/2014	QC Ratio TDS/SEC	0.53	=	None
CCGC_0333	29/Apr/2014	Sodium	30	=	D
CCGC_0333	29/Apr/2014	SpecificConductivity	508	=	None
CCGC_0333	29/Apr/2014	Sulfate	2	=	None
CCGC_0333	29/Apr/2014	Total Dissolved Solids	271	=	None
CCGC_0334	30/Apr/2014	Alkalinity as CaCO3	315	=	None
CCGC_0334	30/Apr/2014	Bicarbonate	384	=	None
CCGC_0334	30/Apr/2014	Calcium	139	=	D
CCGC_0334	30/Apr/2014	Chloride	93	=	None
CCGC_0334	30/Apr/2014	Hardness as CaCO3	553	=	None
CCGC_0334	30/Apr/2014	Magnesium	50	=	D
CCGC_0334	30/Apr/2014	Nitrate + Nitrite as N	17.7	=	None
CCGC_0334	30/Apr/2014	Nitrate as NO3-N	17.2	=	None
CCGC_0334	30/Apr/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0334	30/Apr/2014	Potassium	3.5	=	D
CCGC_0334	30/Apr/2014	QC Ratio TDS/SEC	0.62	=	None
CCGC_0334	30/Apr/2014	Sodium	56	=	D
CCGC_0334	30/Apr/2014	SpecificConductivity	1246	=	None
CCGC_0334	30/Apr/2014	Sulfate	143	=	None
CCGC_0334	30/Apr/2014	Total Dissolved Solids	771	=	None
CCGC_0335	30/Apr/2014	Alkalinity as CaCO3	307	=	None
CCGC_0335	30/Apr/2014	Alkalinity as CaCO3	307	=	None
CCGC_0335	30/Apr/2014	Alkalinity as CaCO3	307	=	None
CCGC_0335	30/Apr/2014	Bicarbonate	375	=	None
CCGC_0335	30/Apr/2014	Bicarbonate	375	=	None
CCGC_0335	30/Apr/2014	Bicarbonate	375	=	None
CCGC_0335	30/Apr/2014	Calcium	130	=	D
CCGC_0335	30/Apr/2014	Calcium	130	=	D
CCGC_0335	30/Apr/2014	Calcium	130	=	D

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0335	30/Apr/2014	Chloride	52	=	None
CCGC_0335	30/Apr/2014	Chloride	52	=	None
CCGC_0335	30/Apr/2014	Chloride	52	=	None
CCGC_0335	30/Apr/2014	Hardness as CaCO3	469	=	None
CCGC_0335	30/Apr/2014	Hardness as CaCO3	469	=	None
CCGC_0335	30/Apr/2014	Hardness as CaCO3	469	=	None
CCGC_0335	30/Apr/2014	Magnesium	35	=	D
CCGC_0335	30/Apr/2014	Magnesium	35	=	D
CCGC_0335	30/Apr/2014	Magnesium	35	=	D
CCGC_0335	30/Apr/2014	Nitrate + Nitrite as N	9.6	=	None
CCGC_0335	30/Apr/2014	Nitrate + Nitrite as N	9.6	=	None
CCGC_0335	30/Apr/2014	Nitrate + Nitrite as N	9.6	=	None
CCGC_0335	30/Apr/2014	Nitrate as NO3-N	9.1	=	None
CCGC_0335	30/Apr/2014	Nitrate as NO3-N	9.1	=	None
CCGC_0335	30/Apr/2014	Nitrate as NO3-N	9.1	=	None
CCGC_0335	30/Apr/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0335	30/Apr/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0335	30/Apr/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0335	30/Apr/2014	Potassium	2.4	=	D
CCGC_0335	30/Apr/2014	Potassium	2.4	=	D
CCGC_0335	30/Apr/2014	Potassium	2.4	=	D
CCGC_0335	30/Apr/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0335	30/Apr/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0335	30/Apr/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0335	30/Apr/2014	Sodium	44	=	D
CCGC_0335	30/Apr/2014	Sodium	44	=	D
CCGC_0335	30/Apr/2014	Sodium	44	=	D
CCGC_0335	30/Apr/2014	SpecificConductivity	997	=	None
CCGC_0335	30/Apr/2014	SpecificConductivity	997	=	None
CCGC_0335	30/Apr/2014	SpecificConductivity	997	=	None
CCGC_0335	30/Apr/2014	Sulfate	137	=	None
CCGC_0335	30/Apr/2014	Sulfate	137	=	None
CCGC_0335	30/Apr/2014	Sulfate	137	=	None
CCGC_0335	30/Apr/2014	Total Dissolved Solids	640	=	None
CCGC_0335	30/Apr/2014	Total Dissolved Solids	640	=	None
CCGC_0335	30/Apr/2014	Total Dissolved Solids	640	=	None
CCGC_0336	30/Apr/2014	Alkalinity as CaCO3	319	=	None
CCGC_0336	30/Apr/2014	Bicarbonate	389	=	None
CCGC_0336	30/Apr/2014	Calcium	82	=	D

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0336	30/Apr/2014	Chloride	59	=	None
CCGC_0336	30/Apr/2014	Hardness as CaCO3	365	=	None
CCGC_0336	30/Apr/2014	Magnesium	39	=	D
CCGC_0336	30/Apr/2014	Nitrate + Nitrite as N	1	=	None
CCGC_0336	30/Apr/2014	Nitrate as NO3-N	0.5	=	None
CCGC_0336	30/Apr/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0336	30/Apr/2014	Potassium	2.7	=	D
CCGC_0336	30/Apr/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0336	30/Apr/2014	Sodium	42	=	D
CCGC_0336	30/Apr/2014	SpecificConductivity	819	=	None
CCGC_0336	30/Apr/2014	Sulfate	40	=	None
CCGC_0336	30/Apr/2014	Total Dissolved Solids	488	=	None
CCGC_0337	30/Apr/2014	Alkalinity as CaCO3	438	=	None
CCGC_0337	30/Apr/2014	Bicarbonate	534	=	None
CCGC_0337	30/Apr/2014	Calcium	113	=	D
CCGC_0337	30/Apr/2014	Chloride	113	=	None
CCGC_0337	30/Apr/2014	Hardness as CaCO3	842	=	None
CCGC_0337	30/Apr/2014	Magnesium	136	=	D
CCGC_0337	30/Apr/2014	Nitrate + Nitrite as N	14.9	=	None
CCGC_0337	30/Apr/2014	Nitrate as NO3-N	14.5	=	None
CCGC_0337	30/Apr/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0337	30/Apr/2014	Potassium	2.1	=	D
CCGC_0337	30/Apr/2014	QC Ratio TDS/SEC	0.67	=	None
CCGC_0337	30/Apr/2014	Sodium	92	=	D
CCGC_0337	30/Apr/2014	SpecificConductivity	1744	=	None
CCGC_0337	30/Apr/2014	Sulfate	349	=	None
CCGC_0337	30/Apr/2014	Total Dissolved Solids	1174	=	None
CCGC_0337	21/Aug/2014	Alkalinity as CaCO3	436	=	None
CCGC_0337	21/Aug/2014	Bicarbonate	532	=	None
CCGC_0337	21/Aug/2014	Calcium	119	=	D
CCGC_0337	21/Aug/2014	Chloride	120	=	None
CCGC_0337	21/Aug/2014	Hardness as CaCO3	919	=	None
CCGC_0337	21/Aug/2014	Magnesium	151	=	D
CCGC_0337	21/Aug/2014	Nitrate + Nitrite as N	14.2	=	None
CCGC_0337	21/Aug/2014	Nitrate as NO3-N	13.8	=	None
CCGC_0337	21/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0337	21/Aug/2014	Potassium	1.4	=	D
CCGC_0337	21/Aug/2014	QC Ratio TDS/SEC	0.7	=	None
CCGC_0337	21/Aug/2014	Sodium	95	=	D

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0337	21/Aug/2014	SpecificConductivity	1790	=	None
CCGC_0337	21/Aug/2014	Sulfate	374	=	None
CCGC_0337	21/Aug/2014	Total Dissolved Solids	1251	=	None
CCGC_0338	30/Apr/2014	Alkalinity as CaCO3	184	=	None
CCGC_0338	30/Apr/2014	Bicarbonate	224	=	None
CCGC_0338	30/Apr/2014	Calcium	50	=	D
CCGC_0338	30/Apr/2014	Chloride	11	=	None
CCGC_0338	30/Apr/2014	Hardness as CaCO3	207	=	None
CCGC_0338	30/Apr/2014	Magnesium	20	=	D
CCGC_0338	30/Apr/2014	Nitrate + Nitrite as N	0.6	=	None
CCGC_0338	30/Apr/2014	Nitrate as NO3-N	0.2	=	None
CCGC_0338	30/Apr/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0338	30/Apr/2014	Potassium	2.6	=	D
CCGC_0338	30/Apr/2014	QC Ratio TDS/SEC	0.62	=	None
CCGC_0338	30/Apr/2014	Sodium	20	=	D
CCGC_0338	30/Apr/2014	SpecificConductivity	447	=	None
CCGC_0338	30/Apr/2014	Sulfate	37	=	None
CCGC_0338	30/Apr/2014	Total Dissolved Solids	277	=	None
CCGC_0339	01/May/2014	Alkalinity as CaCO3	284	=	None
CCGC_0339	01/May/2014	Bicarbonate	346	=	None
CCGC_0339	01/May/2014	Calcium	172	=	D
CCGC_0339	01/May/2014	Chloride	68	=	None
CCGC_0339	01/May/2014	Hardness as CaCO3	652	=	None
CCGC_0339	01/May/2014	Magnesium	54	=	D
CCGC_0339	01/May/2014	Nitrate + Nitrite as N	48.7	=	None
CCGC_0339	01/May/2014	Nitrate as NO3-N	48.2	=	None
CCGC_0339	01/May/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0339	01/May/2014	Potassium	2.5	=	D
CCGC_0339	01/May/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0339	01/May/2014	Sodium	46	=	D
CCGC_0339	01/May/2014	SpecificConductivity	1396	=	None
CCGC_0339	01/May/2014	Sulfate	164	=	None
CCGC_0339	01/May/2014	Total Dissolved Solids	897	=	None
CCGC_0340	01/May/2014	Alkalinity as CaCO3	269	=	None
CCGC_0340	01/May/2014	Bicarbonate	328	=	None
CCGC_0340	01/May/2014	Calcium	146	=	D
CCGC_0340	01/May/2014	Chloride	43	=	None
CCGC_0340	01/May/2014	Hardness as CaCO3	542	=	None
CCGC_0340	01/May/2014	Magnesium	43	=	D

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0340	01/May/2014	Nitrate + Nitrite as N	42	=	None
CCGC_0340	01/May/2014	Nitrate as NO3-N	41.6	=	None
CCGC_0340	01/May/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0340	01/May/2014	Potassium	2.4	=	D
CCGC_0340	01/May/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0340	01/May/2014	Sodium	40	=	D
CCGC_0340	01/May/2014	SpecificConductivity	1189	=	None
CCGC_0340	01/May/2014	Sulfate	118	=	None
CCGC_0340	01/May/2014	Total Dissolved Solids	760	=	None
CCGC_0341	01/May/2014	Alkalinity as CaCO3	418	=	None
CCGC_0341	01/May/2014	Bicarbonate	510	=	None
CCGC_0341	01/May/2014	Calcium	116	=	D
CCGC_0341	01/May/2014	Chloride	58	=	None
CCGC_0341	01/May/2014	Hardness as CaCO3	549	=	None
CCGC_0341	01/May/2014	Magnesium	63	=	D
CCGC_0341	01/May/2014	Nitrate + Nitrite as N	1.6	=	None
CCGC_0341	01/May/2014	Nitrate as NO3-N	1	=	None
CCGC_0341	01/May/2014	Nitrite as NO2-N	0.6	=	None
CCGC_0341	01/May/2014	Potassium	3.2	=	D
CCGC_0341	01/May/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0341	01/May/2014	Sodium	46	=	D
CCGC_0341	01/May/2014	SpecificConductivity	1138	=	None
CCGC_0341	01/May/2014	Sulfate	132	=	None
CCGC_0341	01/May/2014	Total Dissolved Solids	720	=	None
CCGC_0342	01/May/2014	Alkalinity as CaCO3	433	=	None
CCGC_0342	01/May/2014	Bicarbonate	528	=	None
CCGC_0342	01/May/2014	Calcium	190	=	D
CCGC_0342	01/May/2014	Chloride	54	=	None
CCGC_0342	01/May/2014	Hardness as CaCO3	837	=	None
CCGC_0342	01/May/2014	Magnesium	88	=	D
CCGC_0342	01/May/2014	Nitrate + Nitrite as N	24.6	=	None
CCGC_0342	01/May/2014	Nitrate as NO3-N	24.1	=	None
CCGC_0342	01/May/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0342	01/May/2014	Potassium	2.1	=	D
CCGC_0342	01/May/2014	QC Ratio TDS/SEC	0.7	=	None
CCGC_0342	01/May/2014	Sodium	61	=	D
CCGC_0342	01/May/2014	SpecificConductivity	1621	=	None
CCGC_0342	01/May/2014	Sulfate	312	=	None
CCGC_0342	01/May/2014	Total Dissolved Solids	1137	=	None

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0343	01/May/2014	Alkalinity as CaCO3	232	=	None
CCGC_0343	01/May/2014	Bicarbonate	283	=	None
CCGC_0343	01/May/2014	Calcium	59	=	D
CCGC_0343	01/May/2014	Chloride	23	=	None
CCGC_0343	01/May/2014	Hardness as CaCO3	259	=	None
CCGC_0343	01/May/2014	Magnesium	27	=	D
CCGC_0343	01/May/2014	Nitrate + Nitrite as N	0.8	=	None
CCGC_0343	01/May/2014	Nitrate as NO3-N	0.3	=	None
CCGC_0343	01/May/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0343	01/May/2014	Potassium	2.9	=	D
CCGC_0343	01/May/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0343	01/May/2014	Sodium	30	=	D
CCGC_0343	01/May/2014	SpecificConductivity	588	=	None
CCGC_0343	01/May/2014	Sulfate	45	=	None
CCGC_0343	01/May/2014	Total Dissolved Solids	360	=	None
CCGC_0360	29/Apr/2014	Alkalinity as CaCO3	92	=	None
CCGC_0360	29/Apr/2014	Bicarbonate	112	=	None
CCGC_0360	29/Apr/2014	Calcium	14	=	D
CCGC_0360	29/Apr/2014	Chloride	13	=	None
CCGC_0360	29/Apr/2014	Hardness as CaCO3	101	=	None
CCGC_0360	29/Apr/2014	Magnesium	16	=	D
CCGC_0360	29/Apr/2014	Nitrate + Nitrite as N	1.5	=	None
CCGC_0360	29/Apr/2014	Nitrate as NO3-N	1.2	=	None
CCGC_0360	29/Apr/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0360	29/Apr/2014	Potassium	1.8	=	D
CCGC_0360	29/Apr/2014	QC Ratio TDS/SEC	0.65	=	None
CCGC_0360	29/Apr/2014	Sodium	14	=	D
CCGC_0360	29/Apr/2014	SpecificConductivity	257	=	None
CCGC_0360	29/Apr/2014	Sulfate	12	=	None
CCGC_0360	29/Apr/2014	Total Dissolved Solids	168	=	None
CCGC_0361	29/Apr/2014	Alkalinity as CaCO3	127	=	None
CCGC_0361	29/Apr/2014	Bicarbonate	155	=	None
CCGC_0361	29/Apr/2014	Calcium	22	=	D
CCGC_0361	29/Apr/2014	Chloride	19	=	None
CCGC_0361	29/Apr/2014	Hardness as CaCO3	154	=	None
CCGC_0361	29/Apr/2014	Magnesium	24	=	D
CCGC_0361	29/Apr/2014	Nitrate + Nitrite as N	1	=	None
CCGC_0361	29/Apr/2014	Nitrate as NO3-N	0.6	=	None
CCGC_0361	29/Apr/2014	Nitrite as NO2-N	0.3	=	None

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0361	29/Apr/2014	Potassium	2	=	D
CCGC_0361	29/Apr/2014	QC Ratio TDS/SEC	0.58	=	None
CCGC_0361	29/Apr/2014	Sodium	20	=	D
CCGC_0361	29/Apr/2014	SpecificConductivity	386	=	None
CCGC_0361	29/Apr/2014	Sulfate	36	=	None
CCGC_0361	29/Apr/2014	Total Dissolved Solids	223	=	None
CCGC_0364	29/Apr/2014	Alkalinity as CaCO3	114	=	None
CCGC_0364	29/Apr/2014	Bicarbonate	139	=	None
CCGC_0364	29/Apr/2014	Calcium	61	=	D
CCGC_0364	29/Apr/2014	Chloride	79	=	None
CCGC_0364	29/Apr/2014	Hardness as CaCO3	383	=	None
CCGC_0364	29/Apr/2014	Magnesium	56	=	D
CCGC_0364	29/Apr/2014	Nitrate + Nitrite as N	24.7	=	None
CCGC_0364	29/Apr/2014	Nitrate as NO3-N	24.4	=	None
CCGC_0364	29/Apr/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0364	29/Apr/2014	Potassium	3.1	=	D
CCGC_0364	29/Apr/2014	QC Ratio TDS/SEC	0.58	=	None
CCGC_0364	29/Apr/2014	Sodium	38	=	D
CCGC_0364	29/Apr/2014	SpecificConductivity	928	=	None
CCGC_0364	29/Apr/2014	Sulfate	116	=	None
CCGC_0364	29/Apr/2014	Total Dissolved Solids	537	=	None
CCGC_0370	30/Apr/2014	Alkalinity as CaCO3	663	=	None
CCGC_0370	30/Apr/2014	Bicarbonate	809	=	None
CCGC_0370	30/Apr/2014	Calcium	204	=	D
CCGC_0370	30/Apr/2014	Chloride	103	=	None
CCGC_0370	30/Apr/2014	Hardness as CaCO3	1053	=	None
CCGC_0370	30/Apr/2014	Magnesium	132	=	D
CCGC_0370	30/Apr/2014	Nitrate + Nitrite as N	15.4	=	None
CCGC_0370	30/Apr/2014	Nitrate as NO3-N	14.8	=	None
CCGC_0370	30/Apr/2014	Nitrite as NO2-N	0.6	=	None
CCGC_0370	30/Apr/2014	Potassium	2.8	=	D
CCGC_0370	30/Apr/2014	QC Ratio TDS/SEC	0.69	=	None
CCGC_0370	30/Apr/2014	Sodium	49	=	D
CCGC_0370	30/Apr/2014	SpecificConductivity	2038	=	None
CCGC_0370	30/Apr/2014	Sulfate	344	=	None
CCGC_0370	30/Apr/2014	Total Dissolved Solids	1414	=	None
CCGC_0371	30/Apr/2014	Alkalinity as CaCO3	742	=	None
CCGC_0371	30/Apr/2014	Bicarbonate	905	=	None
CCGC_0371	30/Apr/2014	Calcium	145	=	D

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0371	30/Apr/2014	Chloride	122	=	None
CCGC_0371	30/Apr/2014	Hardness as CaCO3	1095	=	None
CCGC_0371	30/Apr/2014	Magnesium	178	=	D
CCGC_0371	30/Apr/2014	Nitrate + Nitrite as N	0.6	=	None
CCGC_0371	30/Apr/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0371	30/Apr/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0371	30/Apr/2014	Potassium	4.8	=	D
CCGC_0371	30/Apr/2014	QC Ratio TDS/SEC	0.68	=	None
CCGC_0371	30/Apr/2014	Sodium	108	=	D
CCGC_0371	30/Apr/2014	SpecificConductivity	2190	=	None
CCGC_0371	30/Apr/2014	Sulfate	408	=	None
CCGC_0371	30/Apr/2014	Total Dissolved Solids	1491	=	None
CCGC_0372	30/Apr/2014	Alkalinity as CaCO3	580	=	None
CCGC_0372	30/Apr/2014	Bicarbonate	708	=	None
CCGC_0372	30/Apr/2014	Calcium	208	=	D
CCGC_0372	30/Apr/2014	Chloride	61	=	None
CCGC_0372	30/Apr/2014	Hardness as CaCO3	816	=	None
CCGC_0372	30/Apr/2014	Magnesium	72	=	D
CCGC_0372	30/Apr/2014	Nitrate + Nitrite as N	0.6	=	None
CCGC_0372	30/Apr/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0372	30/Apr/2014	Nitrite as NO2-N	0.6	=	None
CCGC_0372	30/Apr/2014	Potassium	2.3	=	D
CCGC_0372	30/Apr/2014	QC Ratio TDS/SEC	0.68	=	None
CCGC_0372	30/Apr/2014	Sodium	56	=	D
CCGC_0372	30/Apr/2014	SpecificConductivity	1575	=	None
CCGC_0372	30/Apr/2014	Sulfate	260	=	None
CCGC_0372	30/Apr/2014	Total Dissolved Solids	1077	=	None
CCGC_0373	30/Apr/2014	Alkalinity as CaCO3	475	=	None
CCGC_0373	30/Apr/2014	Bicarbonate	580	=	None
CCGC_0373	30/Apr/2014	Calcium	127	=	D
CCGC_0373	30/Apr/2014	Chloride	92	=	None
CCGC_0373	30/Apr/2014	Hardness as CaCO3	943	=	None
CCGC_0373	30/Apr/2014	Magnesium	152	=	D
CCGC_0373	30/Apr/2014	Nitrate + Nitrite as N	26.7	=	None
CCGC_0373	30/Apr/2014	Nitrate as NO3-N	26.1	=	None
CCGC_0373	30/Apr/2014	Nitrite as NO2-N	0.6	=	None
CCGC_0373	30/Apr/2014	Potassium	3	=	D
CCGC_0373	30/Apr/2014	QC Ratio TDS/SEC	0.69	=	None
CCGC_0373	30/Apr/2014	Sodium	69	=	D

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0373	30/Apr/2014	SpecificConductivity	1865	=	None
CCGC_0373	30/Apr/2014	Sulfate	365	=	None
CCGC_0373	30/Apr/2014	Total Dissolved Solids	1280	=	None
CCGC_0374	30/Apr/2014	Alkalinity as CaCO3	274	=	None
CCGC_0374	30/Apr/2014	Bicarbonate	334	=	None
CCGC_0374	30/Apr/2014	Calcium	70	=	D
CCGC_0374	30/Apr/2014	Chloride	18	=	None
CCGC_0374	30/Apr/2014	Hardness as CaCO3	298	=	None
CCGC_0374	30/Apr/2014	Magnesium	30	=	D
CCGC_0374	30/Apr/2014	Nitrate + Nitrite as N	0.5	=	None
CCGC_0374	30/Apr/2014	Nitrate as NO3-N	<0.1	ND	None
CCGC_0374	30/Apr/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0374	30/Apr/2014	Potassium	2.8	=	D
CCGC_0374	30/Apr/2014	QC Ratio TDS/SEC	0.57	=	None
CCGC_0374	30/Apr/2014	Sodium	36	=	D
CCGC_0374	30/Apr/2014	SpecificConductivity	687	=	None
CCGC_0374	30/Apr/2014	Sulfate	60	=	None
CCGC_0374	30/Apr/2014	Total Dissolved Solids	391	=	None
CCGC_0375	30/Apr/2014	Alkalinity as CaCO3	233	=	None
CCGC_0375	30/Apr/2014	Bicarbonate	284	=	None
CCGC_0375	30/Apr/2014	Calcium	44	=	D
CCGC_0375	30/Apr/2014	Chloride	22	=	None
CCGC_0375	30/Apr/2014	Hardness as CaCO3	225	=	None
CCGC_0375	30/Apr/2014	Magnesium	28	=	D
CCGC_0375	30/Apr/2014	Nitrate + Nitrite as N	0.8	=	None
CCGC_0375	30/Apr/2014	Nitrate as NO3-N	0.3	=	None
CCGC_0375	30/Apr/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0375	30/Apr/2014	Potassium	3.2	=	D
CCGC_0375	30/Apr/2014	QC Ratio TDS/SEC	0.56	=	None
CCGC_0375	30/Apr/2014	Sodium	31	=	D
CCGC_0375	30/Apr/2014	SpecificConductivity	547	=	None
CCGC_0375	30/Apr/2014	Sulfate	24	=	None
CCGC_0375	30/Apr/2014	Total Dissolved Solids	308	=	None
CCGC_0376	30/Apr/2014	Alkalinity as CaCO3	366	=	None
CCGC_0376	30/Apr/2014	Bicarbonate	447	=	None
CCGC_0376	30/Apr/2014	Calcium	82	=	D
CCGC_0376	30/Apr/2014	Chloride	42	=	None
CCGC_0376	30/Apr/2014	Hardness as CaCO3	444	=	None
CCGC_0376	30/Apr/2014	Magnesium	58	=	D

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0376	30/Apr/2014	Nitrate + Nitrite as N	1.4	=	None
CCGC_0376	30/Apr/2014	Nitrate as NO3-N	0.9	=	None
CCGC_0376	30/Apr/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0376	30/Apr/2014	Potassium	2.8	=	D
CCGC_0376	30/Apr/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0376	30/Apr/2014	Sodium	45	=	D
CCGC_0376	30/Apr/2014	SpecificConductivity	937	=	None
CCGC_0376	30/Apr/2014	Sulfate	95	=	None
CCGC_0376	30/Apr/2014	Total Dissolved Solids	571	=	None
CCGC_0377	30/Apr/2014	Alkalinity as CaCO3	223	=	None
CCGC_0377	30/Apr/2014	Bicarbonate	272	=	None
CCGC_0377	30/Apr/2014	Calcium	458	=	D
CCGC_0377	30/Apr/2014	Chloride	1520	=	D
CCGC_0377	30/Apr/2014	Hardness as CaCO3	2132	=	None
CCGC_0377	30/Apr/2014	Magnesium	240	=	D
CCGC_0377	30/Apr/2014	Nitrate + Nitrite as N	18.3	=	None
CCGC_0377	30/Apr/2014	Nitrate as NO3-N	18.2	=	None
CCGC_0377	30/Apr/2014	Nitrite as NO2-N	<0.1	ND	None
CCGC_0377	30/Apr/2014	Potassium	6.1	=	D
CCGC_0377	30/Apr/2014	QC Ratio TDS/SEC	0.68	=	None
CCGC_0377	30/Apr/2014	Sodium	308	=	D
CCGC_0377	30/Apr/2014	SpecificConductivity	5620	=	None
CCGC_0377	30/Apr/2014	Sulfate	320	=	None
CCGC_0377	30/Apr/2014	Total Dissolved Solids	3831	=	None
CCGC_0379	01/May/2014	Alkalinity as CaCO3	226	=	None
CCGC_0379	01/May/2014	Bicarbonate	276	=	None
CCGC_0379	01/May/2014	Calcium	40	=	D
CCGC_0379	01/May/2014	Chloride	46	=	None
CCGC_0379	01/May/2014	Hardness as CaCO3	228	=	None
CCGC_0379	01/May/2014	Magnesium	31	=	D
CCGC_0379	01/May/2014	Nitrate + Nitrite as N	0.7	=	None
CCGC_0379	01/May/2014	Nitrate as NO3-N	0.2	=	None
CCGC_0379	01/May/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0379	01/May/2014	Potassium	3	=	D
CCGC_0379	01/May/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0379	01/May/2014	Sodium	51	=	D
CCGC_0379	01/May/2014	SpecificConductivity	630	=	None
CCGC_0379	01/May/2014	Sulfate	38	=	None
CCGC_0379	01/May/2014	Total Dissolved Solids	383	=	None

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0380	01/May/2014	Alkalinity as CaCO3	56	=	None
CCGC_0380	01/May/2014	Bicarbonate	68	=	None
CCGC_0380	01/May/2014	Calcium	40	=	D
CCGC_0380	01/May/2014	Chloride	52	=	None
CCGC_0380	01/May/2014	Hardness as CaCO3	178	=	None
CCGC_0380	01/May/2014	Magnesium	19	=	D
CCGC_0380	01/May/2014	Nitrate + Nitrite as N	26.6	=	None
CCGC_0380	01/May/2014	Nitrate as NO3-N	26.4	=	None
CCGC_0380	01/May/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0380	01/May/2014	Potassium	2	=	D
CCGC_0380	01/May/2014	QC Ratio TDS/SEC	0.71	=	None
CCGC_0380	01/May/2014	Sodium	44	=	D
CCGC_0380	01/May/2014	SpecificConductivity	603	=	None
CCGC_0380	01/May/2014	Sulfate	30	=	None
CCGC_0380	01/May/2014	Total Dissolved Solids	431	=	None
CCGC_0381	01/May/2014	Alkalinity as CaCO3	131	=	None
CCGC_0381	01/May/2014	Bicarbonate	160	=	None
CCGC_0381	01/May/2014	Calcium	47	=	D
CCGC_0381	01/May/2014	Chloride	114	=	None
CCGC_0381	01/May/2014	Hardness as CaCO3	183	=	None
CCGC_0381	01/May/2014	Magnesium	16	=	D
CCGC_0381	01/May/2014	Nitrate + Nitrite as N	3.8	=	None
CCGC_0381	01/May/2014	Nitrate as NO3-N	3.4	=	None
CCGC_0381	01/May/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0381	01/May/2014	Potassium	2.6	=	D
CCGC_0381	01/May/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0381	01/May/2014	Sodium	71	=	D
CCGC_0381	01/May/2014	SpecificConductivity	713	=	None
CCGC_0381	01/May/2014	Sulfate	15	=	None
CCGC_0381	01/May/2014	Total Dissolved Solids	420	=	None
CCGC_0383	30/Apr/2014	Alkalinity as CaCO3	504	=	None
CCGC_0383	30/Apr/2014	Bicarbonate	615	=	None
CCGC_0383	30/Apr/2014	Calcium	220	=	D
CCGC_0383	30/Apr/2014	Chloride	78	=	None
CCGC_0383	30/Apr/2014	Hardness as CaCO3	961	=	None
CCGC_0383	30/Apr/2014	Magnesium	100	=	D
CCGC_0383	30/Apr/2014	Nitrate + Nitrite as N	9.4	=	None
CCGC_0383	30/Apr/2014	Nitrate as NO3-N	8.9	=	None
CCGC_0383	30/Apr/2014	Nitrite as NO2-N	0.5	=	None

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0383	30/Apr/2014	Potassium	2.4	=	D
CCGC_0383	30/Apr/2014	QC Ratio TDS/SEC	0.71	=	None
CCGC_0383	30/Apr/2014	Sodium	61	=	D
CCGC_0383	30/Apr/2014	SpecificConductivity	1805	=	None
CCGC_0383	30/Apr/2014	Sulfate	407	=	None
CCGC_0383	30/Apr/2014	Total Dissolved Solids	1280	=	None
CCGC_0383	15/Aug/2014	Alkalinity as CaCO3	522	=	None
CCGC_0383	15/Aug/2014	Bicarbonate	637	=	None
CCGC_0383	15/Aug/2014	Calcium	218	=	D
CCGC_0383	15/Aug/2014	Chloride	80	=	None
CCGC_0383	15/Aug/2014	Hardness as CaCO3	977	=	None
CCGC_0383	15/Aug/2014	Magnesium	105	=	D
CCGC_0383	15/Aug/2014	Nitrate + Nitrite as N	6.5	=	None
CCGC_0383	15/Aug/2014	Nitrate as NO3-N	6	=	None
CCGC_0383	15/Aug/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0383	15/Aug/2014	Potassium	2.2	=	D
CCGC_0383	15/Aug/2014	QC Ratio TDS/SEC	0.73	=	None
CCGC_0383	15/Aug/2014	Sodium	62	=	D
CCGC_0383	15/Aug/2014	SpecificConductivity	1797	=	None
CCGC_0383	15/Aug/2014	Sulfate	398	=	None
CCGC_0383	15/Aug/2014	Total Dissolved Solids	1311	=	None
CCGC_0384	16/Jul/2014	Alkalinity as CaCO3	216	=	None
CCGC_0384	16/Jul/2014	Bicarbonate	264	=	None
CCGC_0384	16/Jul/2014	Calcium	70	=	D
CCGC_0384	16/Jul/2014	Chloride	15	=	None
CCGC_0384	16/Jul/2014	Hardness as CaCO3	282	=	None
CCGC_0384	16/Jul/2014	Magnesium	26	=	D
CCGC_0384	16/Jul/2014	Nitrate + Nitrite as N	3.2	=	None
CCGC_0384	16/Jul/2014	Nitrate as NO3-N	2.9	=	None
CCGC_0384	16/Jul/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0384	16/Jul/2014	Potassium	2.4	=	D
CCGC_0384	16/Jul/2014	QC Ratio TDS/SEC	0.66	=	None
CCGC_0384	16/Jul/2014	Sodium	22	=	D
CCGC_0384	16/Jul/2014	SpecificConductivity	621	=	None
CCGC_0384	16/Jul/2014	Sulfate	77	=	None
CCGC_0384	16/Jul/2014	Total Dissolved Solids	408	=	None
CCGC_0445	08/Aug/2014	Alkalinity as CaCO3	285	=	None
CCGC_0445	08/Aug/2014	Bicarbonate	348	=	None
CCGC_0445	08/Aug/2014	Calcium	43	=	D

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0445	08/Aug/2014	Chloride	35	=	None
CCGC_0445	08/Aug/2014	Hardness as CaCO3	342	=	None
CCGC_0445	08/Aug/2014	Magnesium	57	=	D
CCGC_0445	08/Aug/2014	Nitrate + Nitrite as N	0.7	=	None
CCGC_0445	08/Aug/2014	Nitrate as NO3-N	0.3	=	None
CCGC_0445	08/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0445	08/Aug/2014	Potassium	2.8	=	D
CCGC_0445	08/Aug/2014	QC Ratio TDS/SEC	0.62	=	None
CCGC_0445	08/Aug/2014	Sodium	44	=	D
CCGC_0445	08/Aug/2014	SpecificConductivity	788	=	None
CCGC_0445	08/Aug/2014	Sulfate	84	=	None
CCGC_0445	08/Aug/2014	Total Dissolved Solids	488	=	None
CCGC_0446	22/Aug/2014	Alkalinity as CaCO3	411	=	None
CCGC_0446	22/Aug/2014	Bicarbonate	501	=	None
CCGC_0446	22/Aug/2014	Calcium	150	=	D
CCGC_0446	22/Aug/2014	Chloride	59	=	None
CCGC_0446	22/Aug/2014	Hardness as CaCO3	655	=	None
CCGC_0446	22/Aug/2014	Magnesium	68	=	D
CCGC_0446	22/Aug/2014	Nitrate + Nitrite as N	4.6	=	None
CCGC_0446	22/Aug/2014	Nitrate as NO3-N	4.2	=	None
CCGC_0446	22/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0446	22/Aug/2014	Potassium	2.7	=	D
CCGC_0446	22/Aug/2014	QC Ratio TDS/SEC	0.69	=	None
CCGC_0446	22/Aug/2014	Sodium	65	=	D
CCGC_0446	22/Aug/2014	SpecificConductivity	1318	=	None
CCGC_0446	22/Aug/2014	Sulfate	246	=	None
CCGC_0446	22/Aug/2014	Total Dissolved Solids	914	=	None
CCGC_0447	22/Aug/2014	Alkalinity as CaCO3	461	=	None
CCGC_0447	22/Aug/2014	Bicarbonate	562	=	None
CCGC_0447	22/Aug/2014	Calcium	206	=	D
CCGC_0447	22/Aug/2014	Chloride	77	=	None
CCGC_0447	22/Aug/2014	Hardness as CaCO3	819	=	None
CCGC_0447	22/Aug/2014	Magnesium	74	=	D
CCGC_0447	22/Aug/2014	Nitrate + Nitrite as N	5.8	=	None
CCGC_0447	22/Aug/2014	Nitrate as NO3-N	5.4	=	None
CCGC_0447	22/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0447	22/Aug/2014	Potassium	1.9	=	D
CCGC_0447	22/Aug/2014	QC Ratio TDS/SEC	0.7	=	None
CCGC_0447	22/Aug/2014	Sodium	58	=	D

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0447	22/Aug/2014	SpecificConductivity	1532	=	None
CCGC_0447	22/Aug/2014	Sulfate	301	=	None
CCGC_0447	22/Aug/2014	Total Dissolved Solids	1077	=	None
CCGC_0449	22/Aug/2014	Alkalinity as CaCO3	351	=	None
CCGC_0449	22/Aug/2014	Bicarbonate	428	=	None
CCGC_0449	22/Aug/2014	Calcium	99	=	D
CCGC_0449	22/Aug/2014	Chloride	102	=	None
CCGC_0449	22/Aug/2014	Hardness as CaCO3	783	=	None
CCGC_0449	22/Aug/2014	Magnesium	130	=	D
CCGC_0449	22/Aug/2014	Nitrate + Nitrite as N	37.6	=	None
CCGC_0449	22/Aug/2014	Nitrate as NO3-N	37.4	=	None
CCGC_0449	22/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0449	22/Aug/2014	Potassium	0.6	=	D
CCGC_0449	22/Aug/2014	QC Ratio TDS/SEC	0.69	=	None
CCGC_0449	22/Aug/2014	Sodium	88	=	D
CCGC_0449	22/Aug/2014	SpecificConductivity	1630	=	None
CCGC_0449	22/Aug/2014	Sulfate	265	=	None
CCGC_0449	22/Aug/2014	Total Dissolved Solids	1120	=	None
CCGC_0450	22/Aug/2014	Alkalinity as CaCO3	253	=	None
CCGC_0450	22/Aug/2014	Bicarbonate	309	=	None
CCGC_0450	22/Aug/2014	Calcium	57	=	D
CCGC_0450	22/Aug/2014	Chloride	31	=	None
CCGC_0450	22/Aug/2014	Hardness as CaCO3	307	=	None
CCGC_0450	22/Aug/2014	Magnesium	40	=	D
CCGC_0450	22/Aug/2014	Nitrate + Nitrite as N	3.8	=	None
CCGC_0450	22/Aug/2014	Nitrate as NO3-N	3.5	=	None
CCGC_0450	22/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0450	22/Aug/2014	Potassium	2.3	=	D
CCGC_0450	22/Aug/2014	QC Ratio TDS/SEC	0.62	=	None
CCGC_0450	22/Aug/2014	Sodium	40	=	D
CCGC_0450	22/Aug/2014	SpecificConductivity	688	=	None
CCGC_0450	22/Aug/2014	Sulfate	60	=	None
CCGC_0450	22/Aug/2014	Total Dissolved Solids	426	=	None
CCGC_0451	22/Aug/2014	Alkalinity as CaCO3	402	=	None
CCGC_0451	22/Aug/2014	Bicarbonate	490	=	None
CCGC_0451	22/Aug/2014	Calcium	121	=	D
CCGC_0451	22/Aug/2014	Chloride	122	=	None
CCGC_0451	22/Aug/2014	Hardness as CaCO3	805	=	None
CCGC_0451	22/Aug/2014	Magnesium	122	=	D

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0451	22/Aug/2014	Nitrate + Nitrite as N	9.2	=	None
CCGC_0451	22/Aug/2014	Nitrate as NO3-N	8.7	=	None
CCGC_0451	22/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0451	22/Aug/2014	Potassium	2.4	=	D
CCGC_0451	22/Aug/2014	QC Ratio TDS/SEC	0.7	=	None
CCGC_0451	22/Aug/2014	Sodium	110	=	D
CCGC_0451	22/Aug/2014	SpecificConductivity	1712	=	None
CCGC_0451	22/Aug/2014	Sulfate	366	=	None
CCGC_0451	22/Aug/2014	Total Dissolved Solids	1194	=	None
CCGC_0452	22/Aug/2014	Alkalinity as CaCO3	292	=	None
CCGC_0452	22/Aug/2014	Bicarbonate	356	=	None
CCGC_0452	22/Aug/2014	Calcium	133	=	D
CCGC_0452	22/Aug/2014	Chloride	58	=	None
CCGC_0452	22/Aug/2014	Hardness as CaCO3	484	=	None
CCGC_0452	22/Aug/2014	Magnesium	37	=	D
CCGC_0452	22/Aug/2014	Nitrate + Nitrite as N	16.2	=	None
CCGC_0452	22/Aug/2014	Nitrate as NO3-N	15.9	=	None
CCGC_0452	22/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0452	22/Aug/2014	Potassium	2.2	=	D
CCGC_0452	22/Aug/2014	QC Ratio TDS/SEC	0.68	=	None

Field Point Name	Sample Date	Analyte Name	Result	ResQualCode	QACode
CCGC_0452	22/Aug/2014	Sodium	49	=	D
CCGC_0452	22/Aug/2014	SpecificConductivity	1057	=	None
CCGC_0452	22/Aug/2014	Sulfate	140	=	None
CCGC_0452	22/Aug/2014	Total Dissolved Solids	724	=	None
CCGC_0470	27/Aug/2014	Alkalinity as CaCO3	353	=	None
CCGC_0470	27/Aug/2014	Bicarbonate	431	=	None
CCGC_0470	27/Aug/2014	Calcium	104	=	D
CCGC_0470	27/Aug/2014	Chloride	106	=	None
CCGC_0470	27/Aug/2014	Hardness as CaCO3	494	=	None
CCGC_0470	27/Aug/2014	Magnesium	57	=	D
CCGC_0470	27/Aug/2014	Nitrate + Nitrite as N	1.2	=	None
CCGC_0470	27/Aug/2014	Nitrate as NO3-N	0.7	=	None
CCGC_0470	27/Aug/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0470	27/Aug/2014	Potassium	2.9	=	D
CCGC_0470	27/Aug/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0470	27/Aug/2014	Sodium	81	=	D
CCGC_0470	27/Aug/2014	SpecificConductivity	1218	=	None
CCGC_0470	27/Aug/2014	Sulfate	147	=	None
CCGC_0470	27/Aug/2014	Total Dissolved Solids	777	=	None

QA Code	Definition
D	EPA Flag - Analytes analyzed at a secondary dilution

Field Point Name	Sample Date	Analyte Name	Result	Unit Name
CCGC_0076	18/Feb/2014	Oxidation-Reduction Potential	42	mV
CCGC_0076	18/Feb/2014	Oxygen, Dissolved	1.51	mg/L
CCGC_0076	18/Feb/2014	pH	7.29	none
CCGC_0076	18/Feb/2014	SpecificConductivity	1162	uS/cm
CCGC_0076	18/Feb/2014	Temperature	18.5	Deg C
CCGC_0077	18/Feb/2014	Oxidation-Reduction Potential	108.1	mV
CCGC_0077	18/Feb/2014	Oxygen, Dissolved	2.3	mg/L
CCGC_0077	18/Feb/2014	pH	6.99	none
CCGC_0077	18/Feb/2014	SpecificConductivity	1728	uS/cm
CCGC_0077	18/Feb/2014	Temperature	16.5	Deg C
CCGC_0078	18/Feb/2014	Oxidation-Reduction Potential	132.7	mV
CCGC_0078	18/Feb/2014	Oxygen, Dissolved	7.13	mg/L
CCGC_0078	18/Feb/2014	pH	7.24	none
CCGC_0078	18/Feb/2014	SpecificConductivity	1382	uS/cm
CCGC_0078	18/Feb/2014	Temperature	16.8	Deg C
CCGC_0079	18/Feb/2014	Oxidation-Reduction Potential	-195.2	mV
CCGC_0079	18/Feb/2014	Oxygen, Dissolved	3.21	mg/L
CCGC_0079	18/Feb/2014	pH	7.61	none
CCGC_0079	18/Feb/2014	SpecificConductivity	1135	uS/cm
CCGC_0079	18/Feb/2014	Temperature	16.7	Deg C
CCGC_0080	18/Feb/2014	Oxidation-Reduction Potential	-65	mV
CCGC_0080	18/Feb/2014	Oxygen, Dissolved	7.96	mg/L
CCGC_0080	18/Feb/2014	pH	7.32	none
CCGC_0080	18/Feb/2014	SpecificConductivity	875	uS/cm
CCGC_0080	18/Feb/2014	Temperature	19	Deg C
CCGC_0081	18/Feb/2014	Oxidation-Reduction Potential	102.7	mV
CCGC_0081	18/Feb/2014	Oxygen, Dissolved	11.46	mg/L
CCGC_0081	18/Feb/2014	pH	6.61	none
CCGC_0081	18/Feb/2014	SpecificConductivity	878	uS/cm
CCGC_0081	18/Feb/2014	Temperature	14.4	Deg C
CCGC_0082	19/Feb/2014	Oxidation-Reduction Potential	166	mV
CCGC_0082	19/Feb/2014	Oxygen, Dissolved	7.12	mg/L
CCGC_0082	19/Feb/2014	pH	6.81	none
CCGC_0082	19/Feb/2014	SpecificConductivity	881	uS/cm
CCGC_0082	19/Feb/2014	Temperature	15	Deg C
CCGC_0083	19/Feb/2014	Oxidation-Reduction Potential	159.9	mV
CCGC_0083	19/Feb/2014	Oxygen, Dissolved	6.05	mg/L
CCGC_0083	19/Feb/2014	pH	7.55	none
CCGC_0083	19/Feb/2014	SpecificConductivity	247	uS/cm

Field Point Name	Sample Date	Analyte Name	Result	Unit Name
CCGC_0083	19/Feb/2014	Temperature	19.2	Deg C
CCGC_0084	19/Feb/2014	Oxidation-Reduction Potential	150.9	mV
CCGC_0084	19/Feb/2014	Oxygen, Dissolved	4	mg/L
CCGC_0084	19/Feb/2014	pH	7.69	none
CCGC_0084	19/Feb/2014	SpecificConductivity	425.9	uS/cm
CCGC_0084	19/Feb/2014	Temperature	19.7	Deg C
CCGC_0085	19/Feb/2014	Oxidation-Reduction Potential	71.5	mV
CCGC_0085	19/Feb/2014	Oxygen, Dissolved	1.59	mg/L
CCGC_0085	19/Feb/2014	pH	6.77	none
CCGC_0085	19/Feb/2014	SpecificConductivity	434.4	uS/cm
CCGC_0085	19/Feb/2014	Temperature	16.3	Deg C
CCGC_0086	19/Feb/2014	Oxidation-Reduction Potential	138.6	mV
CCGC_0086	19/Feb/2014	Oxygen, Dissolved	7.54	mg/L
CCGC_0086	19/Feb/2014	pH	7.73	none
CCGC_0086	19/Feb/2014	SpecificConductivity	306.1	uS/cm
CCGC_0086	19/Feb/2014	Temperature	13.1	Deg C
CCGC_0088	20/Feb/2014	Oxidation-Reduction Potential	222.5	mV
CCGC_0088	20/Feb/2014	Oxygen, Dissolved	2.7	mg/L
CCGC_0088	20/Feb/2014	pH	7.02	none
CCGC_0088	20/Feb/2014	SpecificConductivity	637.8	uS/cm
CCGC_0088	20/Feb/2014	Temperature	12.2	Deg C
CCGC_0089	20/Feb/2014	Oxidation-Reduction Potential	171.9	mV
CCGC_0089	20/Feb/2014	Oxygen, Dissolved	6.43	mg/L
CCGC_0089	20/Feb/2014	pH	7.73	none
CCGC_0089	20/Feb/2014	SpecificConductivity	764	uS/cm
CCGC_0089	20/Feb/2014	Temperature	15.4	Deg C
CCGC_0090	20/Feb/2014	Oxidation-Reduction Potential	178.8	mV
CCGC_0090	20/Feb/2014	Oxygen, Dissolved	8.49	mg/L
CCGC_0090	20/Feb/2014	pH	7.02	none
CCGC_0090	20/Feb/2014	SpecificConductivity	2257	uS/cm
CCGC_0090	20/Feb/2014	Temperature	12.6	Deg C
CCGC_0091	18/Feb/2014	Oxidation-Reduction Potential	149.8	mV
CCGC_0091	18/Feb/2014	Oxygen, Dissolved	5.28	mg/L
CCGC_0091	18/Feb/2014	pH	7.93	none
CCGC_0091	18/Feb/2014	SpecificConductivity	554	uS/cm
CCGC_0091	18/Feb/2014	Temperature	17.2	Deg C
CCGC_0092	18/Feb/2014	Oxidation-Reduction Potential	98.1	mV
CCGC_0092	18/Feb/2014	Oxygen, Dissolved	5.08	mg/L
CCGC_0092	18/Feb/2014	pH	6.87	none

Field Point Name	Sample Date	Analyte Name	Result	Unit Name
CCGC_0092	18/Feb/2014	SpecificConductivity	433.3	uS/cm
CCGC_0092	18/Feb/2014	Temperature	16.7	Deg C
CCGC_0092	15/Aug/2014	Oxidation-Reduction Potential	184.5	mV
CCGC_0092	15/Aug/2014	Oxygen, Dissolved	6.35	mg/L
CCGC_0092	15/Aug/2014	pH	6.47	none
CCGC_0092	15/Aug/2014	SpecificConductivity	386.5	uS/cm
CCGC_0092	15/Aug/2014	Temperature	17.8	Deg C
CCGC_0093	18/Feb/2014	Oxidation-Reduction Potential	160.3	mV
CCGC_0093	18/Feb/2014	Oxygen, Dissolved	9.15	mg/L
CCGC_0093	18/Feb/2014	pH	7.47	none
CCGC_0093	18/Feb/2014	SpecificConductivity	443.1	uS/cm
CCGC_0093	18/Feb/2014	Temperature	15.1	Deg C
CCGC_0094	18/Feb/2014	Oxidation-Reduction Potential	179.6	mV
CCGC_0094	18/Feb/2014	Oxygen, Dissolved	9.19	mg/L
CCGC_0094	18/Feb/2014	pH	6.57	none
CCGC_0094	18/Feb/2014	SpecificConductivity	552.3	uS/cm
CCGC_0094	18/Feb/2014	Temperature	19.2	Deg C
CCGC_0094	15/Aug/2014	Oxidation-Reduction Potential	146	mV
CCGC_0094	15/Aug/2014	Oxygen, Dissolved	5.12	mg/L
CCGC_0094	15/Aug/2014	pH	6.5	none
CCGC_0094	15/Aug/2014	SpecificConductivity	496.2	uS/cm
CCGC_0094	15/Aug/2014	Temperature	18.8	Deg C
CCGC_0095	19/Feb/2014	Oxidation-Reduction Potential	-13	mV
CCGC_0095	19/Feb/2014	Oxygen, Dissolved	0.38	mg/L
CCGC_0095	19/Feb/2014	pH	7.07	none
CCGC_0095	19/Feb/2014	SpecificConductivity	583.3	uS/cm
CCGC_0095	19/Feb/2014	Temperature	17	Deg C
CCGC_0096	19/Feb/2014	Oxidation-Reduction Potential	141.9	mV
CCGC_0096	19/Feb/2014	Oxygen, Dissolved	5.86	mg/L
CCGC_0096	19/Feb/2014	pH	7.23	none
CCGC_0096	19/Feb/2014	SpecificConductivity	622.7	uS/cm
CCGC_0096	19/Feb/2014	Temperature	13.8	Deg C
CCGC_0097	19/Feb/2014	Oxidation-Reduction Potential	190.5	mV
CCGC_0097	19/Feb/2014	Oxygen, Dissolved	2.63	mg/L
CCGC_0097	19/Feb/2014	pH	7.32	none
CCGC_0097	19/Feb/2014	SpecificConductivity	652	uS/cm
CCGC_0097	19/Feb/2014	Temperature	14.5	Deg C
CCGC_0097	15/Aug/2014	Oxidation-Reduction Potential	168	mV
CCGC_0097	15/Aug/2014	Oxygen, Dissolved	1.49	mg/L

Field Point Name	Sample Date	Analyte Name	Result	Unit Name
CCGC_0097	15/Aug/2014	pH	6.44	none
CCGC_0097	15/Aug/2014	SpecificConductivity	686	uS/cm
CCGC_0097	15/Aug/2014	Temperature	17.3	Deg C
CCGC_0098	19/Feb/2014	Oxidation-Reduction Potential	-224.3	mV
CCGC_0098	19/Feb/2014	Oxygen, Dissolved	0.05	mg/L
CCGC_0098	19/Feb/2014	pH	7.86	none
CCGC_0098	19/Feb/2014	SpecificConductivity	584.2	uS/cm
CCGC_0098	19/Feb/2014	Temperature	16.3	Deg C
CCGC_0099	19/Feb/2014	Oxidation-Reduction Potential	163.6	mV
CCGC_0099	19/Feb/2014	Oxygen, Dissolved	9.81	mg/L
CCGC_0099	19/Feb/2014	pH	7.49	none
CCGC_0099	19/Feb/2014	SpecificConductivity	484.8	uS/cm
CCGC_0099	19/Feb/2014	Temperature	16.5	Deg C
CCGC_0100	19/Feb/2014	Oxidation-Reduction Potential	-33.5	mV
CCGC_0100	19/Feb/2014	Oxygen, Dissolved	0.42	mg/L
CCGC_0100	19/Feb/2014	pH	7.64	none
CCGC_0100	19/Feb/2014	SpecificConductivity	1118	uS/cm
CCGC_0100	19/Feb/2014	Temperature	20.2	Deg C
CCGC_0101	19/Feb/2014	Oxidation-Reduction Potential	172.1	mV
CCGC_0101	19/Feb/2014	Oxygen, Dissolved	6.73	mg/L
CCGC_0101	19/Feb/2014	pH	7.22	none
CCGC_0101	19/Feb/2014	SpecificConductivity	276.1	uS/cm
CCGC_0101	19/Feb/2014	Temperature	15.2	Deg C
CCGC_0102	19/Feb/2014	Oxidation-Reduction Potential	149.6	mV
CCGC_0102	19/Feb/2014	Oxygen, Dissolved	4.95	mg/L
CCGC_0102	19/Feb/2014	pH	6.67	none
CCGC_0102	19/Feb/2014	SpecificConductivity	982	uS/cm
CCGC_0102	19/Feb/2014	Temperature	17.5	Deg C
CCGC_0103	20/Feb/2014	Oxidation-Reduction Potential	638.7	mV
CCGC_0103	20/Feb/2014	Oxygen, Dissolved	0.64	mg/L
CCGC_0103	20/Feb/2014	pH	8.7	none
CCGC_0103	20/Feb/2014	SpecificConductivity	7.27	uS/cm
CCGC_0103	20/Feb/2014	Temperature	18.1	Deg C
CCGC_0104	20/Feb/2014	Oxidation-Reduction Potential	316	mV
CCGC_0104	20/Feb/2014	Oxygen, Dissolved	7.04	mg/L
CCGC_0104	20/Feb/2014	pH	6.79	none
CCGC_0104	20/Feb/2014	SpecificConductivity	2492	uS/cm
CCGC_0104	20/Feb/2014	Temperature	15.3	Deg C
CCGC_0105	20/Feb/2014	Oxidation-Reduction Potential	269.7	mV

Field Point Name	Sample Date	Analyte Name	Result	Unit Name
CCGC_0105	20/Feb/2014	Oxygen, Dissolved	2.42	mg/L
CCGC_0105	20/Feb/2014	pH	7.2	none
CCGC_0105	20/Feb/2014	SpecificConductivity	4020	uS/cm
CCGC_0105	20/Feb/2014	Temperature	17.2	Deg C
CCGC_0106	20/Feb/2014	Oxidation-Reduction Potential	334	mV
CCGC_0106	20/Feb/2014	Oxygen, Dissolved	8.26	mg/L
CCGC_0106	20/Feb/2014	pH	6.5	none
CCGC_0106	20/Feb/2014	SpecificConductivity	2246	uS/cm
CCGC_0106	20/Feb/2014	Temperature	17.7	Deg C
CCGC_0279	27/Mar/2014	Oxidation-Reduction Potential	136.7	mV
CCGC_0279	27/Mar/2014	Oxygen, Dissolved	5.54	mg/L
CCGC_0279	27/Mar/2014	pH	7.2	none
CCGC_0279	27/Mar/2014	SpecificConductivity	350	uS/cm
CCGC_0279	27/Mar/2014	Temperature	20.5	Deg C
CCGC_0323	30/Apr/2014	Oxidation-Reduction Potential	169.3	mV
CCGC_0323	30/Apr/2014	Oxygen, Dissolved	5.43	mg/L
CCGC_0323	30/Apr/2014	pH	7.01	none
CCGC_0323	30/Apr/2014	SpecificConductivity	1504	uS/cm
CCGC_0323	30/Apr/2014	Temperature	17.8	Deg C
CCGC_0324	29/Apr/2014	Oxidation-Reduction Potential	150.7	mV
CCGC_0324	29/Apr/2014	Oxygen, Dissolved	5.99	mg/L
CCGC_0324	29/Apr/2014	pH	7.02	none
CCGC_0324	29/Apr/2014	SpecificConductivity	1106	uS/cm
CCGC_0324	29/Apr/2014	Temperature	17.3	Deg C
CCGC_0325	29/Apr/2014	Oxidation-Reduction Potential	122.8	mV
CCGC_0325	29/Apr/2014	Oxygen, Dissolved	0.98	mg/L
CCGC_0325	29/Apr/2014	pH	7.39	none
CCGC_0325	29/Apr/2014	SpecificConductivity	775	uS/cm
CCGC_0325	29/Apr/2014	Temperature	19.4	Deg C
CCGC_0326	29/Apr/2014	Oxidation-Reduction Potential	116.7	mV
CCGC_0326	29/Apr/2014	Oxygen, Dissolved	0.12	mg/L
CCGC_0326	29/Apr/2014	pH	7.28	none
CCGC_0326	29/Apr/2014	SpecificConductivity	1608	uS/cm
CCGC_0326	29/Apr/2014	Temperature	15.3	Deg C
CCGC_0326	08/Aug/2014	Oxidation-Reduction Potential	111.3	mV
CCGC_0326	08/Aug/2014	Oxygen, Dissolved	0.1	mg/L
CCGC_0326	08/Aug/2014	pH	7.19	none
CCGC_0326	08/Aug/2014	SpecificConductivity	1600	uS/cm
CCGC_0326	08/Aug/2014	Temperature	17.8	Deg C

Field Point Name	Sample Date	Analyte Name	Result	Unit Name
CCGC_0326	21/Aug/2014	Oxidation-Reduction Potential	118.1	mV
CCGC_0326	21/Aug/2014	Oxygen, Dissolved	1.2	mg/L
CCGC_0326	21/Aug/2014	pH	7.18	none
CCGC_0326	21/Aug/2014	SpecificConductivity	1466	uS/cm
CCGC_0326	21/Aug/2014	Temperature	17.6	Deg C
CCGC_0327	29/Apr/2014	Oxidation-Reduction Potential	527.8	mV
CCGC_0327	29/Apr/2014	Oxygen, Dissolved	1.23	mg/L
CCGC_0327	29/Apr/2014	pH	2.06	none
CCGC_0327	29/Apr/2014	SpecificConductivity	7569	uS/cm
CCGC_0327	29/Apr/2014	Temperature	16.8	Deg C
CCGC_0327	08/Aug/2014	Oxidation-Reduction Potential	102.8	mV
CCGC_0327	08/Aug/2014	Oxygen, Dissolved	0.45	mg/L
CCGC_0327	08/Aug/2014	pH	6.94	none
CCGC_0327	08/Aug/2014	SpecificConductivity	1461	uS/cm
CCGC_0327	08/Aug/2014	Temperature	18.8	Deg C
CCGC_0328	29/Apr/2014	Oxidation-Reduction Potential	-17.7	mV
CCGC_0328	29/Apr/2014	Oxygen, Dissolved	0.17	mg/L
CCGC_0328	29/Apr/2014	pH	7.34	none
CCGC_0328	29/Apr/2014	SpecificConductivity	866	uS/cm
CCGC_0328	29/Apr/2014	Temperature	19.2	Deg C
CCGC_0329	29/Apr/2014	Oxidation-Reduction Potential	-45.9	mV
CCGC_0329	29/Apr/2014	Oxygen, Dissolved	0.07	mg/L
CCGC_0329	29/Apr/2014	pH	7.63	none
CCGC_0329	29/Apr/2014	SpecificConductivity	582.3	uS/cm
CCGC_0329	29/Apr/2014	Temperature	15.1	Deg C
CCGC_0330	29/Apr/2014	Oxidation-Reduction Potential	104.7	mV
CCGC_0330	29/Apr/2014	Oxygen, Dissolved	0.82	mg/L
CCGC_0330	29/Apr/2014	pH	7.33	none
CCGC_0330	29/Apr/2014	SpecificConductivity	1018	uS/cm
CCGC_0330	29/Apr/2014	Temperature	17.8	Deg C
CCGC_0332	29/Apr/2014	Oxidation-Reduction Potential	144.3	mV
CCGC_0332	29/Apr/2014	Oxygen, Dissolved	4.46	mg/L
CCGC_0332	29/Apr/2014	pH	7.39	none
CCGC_0332	29/Apr/2014	SpecificConductivity	686	uS/cm
CCGC_0332	29/Apr/2014	Temperature	21.6	Deg C
CCGC_0333	29/Apr/2014	Oxidation-Reduction Potential	-36.3	mV
CCGC_0333	29/Apr/2014	Oxygen, Dissolved	0.49	mg/L
CCGC_0333	29/Apr/2014	pH	7.2	none
CCGC_0333	29/Apr/2014	SpecificConductivity	487	uS/cm

Field Point Name	Sample Date	Analyte Name	Result	Unit Name
CCGC_0333	29/Apr/2014	Temperature	16.6	Deg C
CCGC_0334	30/Apr/2014	Oxidation-Reduction Potential	153	mV
CCGC_0334	30/Apr/2014	Oxygen, Dissolved	4.72	mg/L
CCGC_0334	30/Apr/2014	pH	7.1	none
CCGC_0334	30/Apr/2014	SpecificConductivity	1225	uS/cm
CCGC_0334	30/Apr/2014	Temperature	18.6	Deg C
CCGC_0335	30/Apr/2014	Oxidation-Reduction Potential	86.7	mV
CCGC_0335	30/Apr/2014	Oxygen, Dissolved	6.01	mg/L
CCGC_0335	30/Apr/2014	pH	7.14	none
CCGC_0335	30/Apr/2014	SpecificConductivity	1012	uS/cm
CCGC_0335	30/Apr/2014	Temperature	17.4	Deg C
CCGC_0336	30/Apr/2014	Oxidation-Reduction Potential	131.7	mV
CCGC_0336	30/Apr/2014	Oxygen, Dissolved	2.69	mg/L
CCGC_0336	30/Apr/2014	pH	7.24	none
CCGC_0336	30/Apr/2014	SpecificConductivity	817	uS/cm
CCGC_0336	30/Apr/2014	Temperature	21.3	Deg C
CCGC_0337	30/Apr/2014	Oxidation-Reduction Potential	137.6	mV
CCGC_0337	30/Apr/2014	Oxygen, Dissolved	0.07	mg/L
CCGC_0337	30/Apr/2014	pH	7.4	none
CCGC_0337	30/Apr/2014	SpecificConductivity	1748	uS/cm
CCGC_0337	30/Apr/2014	Temperature	21.7	Deg C
CCGC_0337	21/Aug/2014	Oxidation-Reduction Potential	168.4	mV
CCGC_0337	21/Aug/2014	Oxygen, Dissolved	0.1	mg/L
CCGC_0337	21/Aug/2014	pH	7.25	none
CCGC_0337	21/Aug/2014	SpecificConductivity	1510	uS/cm
CCGC_0337	21/Aug/2014	Temperature	21.4	Deg C
CCGC_0338	30/Apr/2014	Oxidation-Reduction Potential	104.5	mV
CCGC_0338	30/Apr/2014	Oxygen, Dissolved	6.44	mg/L
CCGC_0338	30/Apr/2014	pH	7.5	none
CCGC_0338	30/Apr/2014	SpecificConductivity	435.5	uS/cm
CCGC_0338	30/Apr/2014	Temperature	14.3	Deg C
CCGC_0339	01/May/2014	Oxidation-Reduction Potential	145	mV
CCGC_0339	01/May/2014	Oxygen, Dissolved	7.31	mg/L
CCGC_0339	01/May/2014	pH	7.16	none
CCGC_0339	01/May/2014	SpecificConductivity	1367	uS/cm
CCGC_0339	01/May/2014	Temperature	17.4	Deg C
CCGC_0340	01/May/2014	Oxidation-Reduction Potential	167	mV
CCGC_0340	01/May/2014	Oxygen, Dissolved	8.67	mg/L
CCGC_0340	01/May/2014	pH	6.81	none

Field Point Name	Sample Date	Analyte Name	Result	Unit Name
CCGC_0340	01/May/2014	SpecificConductivity	1157	uS/cm
CCGC_0340	01/May/2014	Temperature	16.4	Deg C
CCGC_0341	01/May/2014	Oxidation-Reduction Potential	138.1	mV
CCGC_0341	01/May/2014	Oxygen, Dissolved	0.09	mg/L
CCGC_0341	01/May/2014	pH	7.38	none
CCGC_0341	01/May/2014	SpecificConductivity	1115	uS/cm
CCGC_0341	01/May/2014	Temperature	18.5	Deg C
CCGC_0342	01/May/2014	Oxidation-Reduction Potential	102.4	mV
CCGC_0342	01/May/2014	Oxygen, Dissolved	2.84	mg/L
CCGC_0342	01/May/2014	pH	7.05	none
CCGC_0342	01/May/2014	SpecificConductivity	1511	uS/cm
CCGC_0342	01/May/2014	Temperature	20.3	Deg C
CCGC_0343	01/May/2014	Oxidation-Reduction Potential	91.6	mV
CCGC_0343	01/May/2014	Oxygen, Dissolved	1.03	mg/L
CCGC_0343	01/May/2014	pH	7.5	none
CCGC_0343	01/May/2014	SpecificConductivity	613	uS/cm
CCGC_0343	01/May/2014	Temperature	19.6	Deg C
CCGC_0360	29/Apr/2014	Oxidation-Reduction Potential	248.9	mV
CCGC_0360	29/Apr/2014	Oxygen, Dissolved	7.66	mg/L
CCGC_0360	29/Apr/2014	pH	7.1	none
CCGC_0360	29/Apr/2014	SpecificConductivity	254	uS/cm
CCGC_0360	29/Apr/2014	Temperature	18.3	Deg C
CCGC_0361	29/Apr/2014	Oxidation-Reduction Potential	251.2	mV
CCGC_0361	29/Apr/2014	Oxygen, Dissolved	5.97	mg/L
CCGC_0361	29/Apr/2014	pH	7	none
CCGC_0361	29/Apr/2014	SpecificConductivity	381.5	uS/cm
CCGC_0361	29/Apr/2014	Temperature	17.7	Deg C
CCGC_0364	29/Apr/2014	Oxidation-Reduction Potential	125.8	mV
CCGC_0364	29/Apr/2014	Oxygen, Dissolved	9.22	mg/L
CCGC_0364	29/Apr/2014	pH	7.84	none
CCGC_0364	29/Apr/2014	SpecificConductivity	854	uS/cm
CCGC_0364	29/Apr/2014	Temperature	18	Deg C
CCGC_0370	30/Apr/2014	Oxidation-Reduction Potential	169.2	mV
CCGC_0370	30/Apr/2014	Oxygen, Dissolved	0.2	mg/L
CCGC_0370	30/Apr/2014	pH	6.86	none
CCGC_0370	30/Apr/2014	SpecificConductivity	2016	uS/cm
CCGC_0370	30/Apr/2014	Temperature	19.7	Deg C
CCGC_0371	30/Apr/2014	Oxidation-Reduction Potential	-46.2	mV
CCGC_0371	30/Apr/2014	Oxygen, Dissolved	0.07	mg/L

Field Point Name	Sample Date	Analyte Name	Result	Unit Name
CCGC_0371	30/Apr/2014	pH	7.2	none
CCGC_0371	30/Apr/2014	SpecificConductivity	2131	uS/cm
CCGC_0371	30/Apr/2014	Temperature	18.3	Deg C
CCGC_0372	30/Apr/2014	Oxidation-Reduction Potential	46.5	mV
CCGC_0372	30/Apr/2014	Oxygen, Dissolved	0.03	mg/L
CCGC_0372	30/Apr/2014	pH	7.15	none
CCGC_0372	30/Apr/2014	SpecificConductivity	1577	uS/cm
CCGC_0372	30/Apr/2014	Temperature	17.3	Deg C
CCGC_0373	30/Apr/2014	Oxidation-Reduction Potential	191.7	mV
CCGC_0373	30/Apr/2014	Oxygen, Dissolved	1.07	mg/L
CCGC_0373	30/Apr/2014	pH	7.27	none
CCGC_0373	30/Apr/2014	SpecificConductivity	1834	uS/cm
CCGC_0373	30/Apr/2014	Temperature	18.1	Deg C
CCGC_0374	30/Apr/2014	Oxidation-Reduction Potential	28.3	mV
CCGC_0374	30/Apr/2014	Oxygen, Dissolved	3.36	mg/L
CCGC_0374	30/Apr/2014	pH	7.54	none
CCGC_0374	30/Apr/2014	SpecificConductivity	704	uS/cm
CCGC_0374	30/Apr/2014	Temperature	19.8	Deg C
CCGC_0375	30/Apr/2014	Oxidation-Reduction Potential	179.4	mV
CCGC_0375	30/Apr/2014	Oxygen, Dissolved	6.46	mg/L
CCGC_0375	30/Apr/2014	pH	7.93	none
CCGC_0375	30/Apr/2014	SpecificConductivity	531.4	uS/cm
CCGC_0375	30/Apr/2014	Temperature	19.3	Deg C
CCGC_0376	30/Apr/2014	Oxidation-Reduction Potential	198	mV
CCGC_0376	30/Apr/2014	Oxygen, Dissolved	5	mg/L
CCGC_0376	30/Apr/2014	pH	7.79	none
CCGC_0376	30/Apr/2014	SpecificConductivity	955	uS/cm
CCGC_0376	30/Apr/2014	Temperature	22.3	Deg C
CCGC_0377	30/Apr/2014	Oxidation-Reduction Potential	164.7	mV
CCGC_0377	30/Apr/2014	Oxygen, Dissolved	6.9	mg/L
CCGC_0377	30/Apr/2014	pH	7.4	none
CCGC_0377	30/Apr/2014	SpecificConductivity	5692	uS/cm
CCGC_0377	30/Apr/2014	Temperature	20.5	Deg C
CCGC_0379	01/May/2014	Oxidation-Reduction Potential	67.5	mV
CCGC_0379	01/May/2014	Oxygen, Dissolved	1.67	mg/L
CCGC_0379	01/May/2014	pH	7.61	none
CCGC_0379	01/May/2014	SpecificConductivity	663	uS/cm
CCGC_0379	01/May/2014	Temperature	21.6	Deg C
CCGC_0380	01/May/2014	Oxidation-Reduction Potential	169.6	mV
CCGC_0380	01/May/2014	Oxygen, Dissolved	8.36	mg/L
CCGC_0380	01/May/2014	pH	6.62	none
CCGC_0380	01/May/2014	SpecificConductivity	555.6	uS/cm
CCGC_0380	01/May/2014	Temperature	19.5	Deg C
CCGC_0381	01/May/2014	Oxidation-Reduction Potential	184.2	mV
CCGC_0381	01/May/2014	Oxygen, Dissolved	5.36	mg/L
CCGC_0381	01/May/2014	pH	6.78	none
CCGC_0381	01/May/2014	SpecificConductivity	659	uS/cm
CCGC_0381	01/May/2014	Temperature	22.5	Deg C
CCGC_0383	30/Apr/2014	Oxidation-Reduction Potential	180.6	mV
CCGC_0383	30/Apr/2014	Oxygen, Dissolved	6.62	mg/L
CCGC_0383	30/Apr/2014	pH	7.45	none
CCGC_0383	30/Apr/2014	SpecificConductivity	1835	uS/cm
CCGC_0383	30/Apr/2014	Temperature	21.7	Deg C
CCGC_0383	15/Aug/2014	Oxidation-Reduction Potential	164	mV
CCGC_0383	15/Aug/2014	Oxygen, Dissolved	7.03	mg/L
CCGC_0383	15/Aug/2014	pH	7.08	none
CCGC_0383	15/Aug/2014	SpecificConductivity	1558	uS/cm
CCGC_0383	15/Aug/2014	Temperature	18.4	Deg C
CCGC_0384	16/Jul/2014	Oxidation-Reduction Potential	213	mV
CCGC_0384	16/Jul/2014	Oxygen, Dissolved	6.75	mg/L
CCGC_0384	16/Jul/2014	pH	6.84	none
CCGC_0384	16/Jul/2014	SpecificConductivity	509.2	uS/cm
CCGC_0384	16/Jul/2014	Temperature	22.8	Deg C
CCGC_0445	08/Aug/2014	Oxidation-Reduction Potential	103.4	mV
CCGC_0445	08/Aug/2014	Oxygen, Dissolved	0.23	mg/L
CCGC_0445	08/Aug/2014	pH	7.47	none
CCGC_0445	08/Aug/2014	SpecificConductivity	674	uS/cm
CCGC_0445	08/Aug/2014	Temperature	21.4	Deg C
CCGC_0446	22/Aug/2014	Oxidation-Reduction Potential	208.4	mV
CCGC_0446	22/Aug/2014	Oxygen, Dissolved	0.45	mg/L
CCGC_0446	22/Aug/2014	pH	7.19	none
CCGC_0446	22/Aug/2014	SpecificConductivity	1190	uS/cm
CCGC_0446	22/Aug/2014	Temperature	17.5	Deg C
CCGC_0447	22/Aug/2014	Oxidation-Reduction Potential	155.2	mV
CCGC_0447	22/Aug/2014	Oxygen, Dissolved	0.19	mg/L
CCGC_0447	22/Aug/2014	pH	6.93	none
CCGC_0447	22/Aug/2014	SpecificConductivity	1370	uS/cm
CCGC_0447	22/Aug/2014	Temperature	17	Deg C

Field Point Name	Sample Date	Analyte Name	Result	Unit Name
CCGC_0449	22/Aug/2014	Oxidation-Reduction Potential	156.2	mV
CCGC_0449	22/Aug/2014	Oxygen, Dissolved	4.75	mg/L
CCGC_0449	22/Aug/2014	pH	7.02	none
CCGC_0449	22/Aug/2014	SpecificConductivity	1476	uS/cm
CCGC_0449	22/Aug/2014	Temperature	18.2	Deg C
CCGC_0450	22/Aug/2014	Oxidation-Reduction Potential	130.8	mV
CCGC_0450	22/Aug/2014	Oxygen, Dissolved	6.96	mg/L
CCGC_0450	22/Aug/2014	pH	7.68	none
CCGC_0450	22/Aug/2014	SpecificConductivity	655	uS/cm
CCGC_0450	22/Aug/2014	Temperature	22.4	Deg C
CCGC_0451	22/Aug/2014	Oxidation-Reduction Potential	107.2	mV
CCGC_0451	22/Aug/2014	Oxygen, Dissolved	0.08	mg/L
CCGC_0451	22/Aug/2014	pH	7.3	none
CCGC_0451	22/Aug/2014	SpecificConductivity	1466	uS/cm
CCGC_0451	22/Aug/2014	Temperature	17.6	Deg C
CCGC_0470	27/Aug/2014	Oxidation-Reduction Potential	106.2	mV
CCGC_0470	27/Aug/2014	Oxygen, Dissolved	0.83	mg/L
CCGC_0470	27/Aug/2014	pH	6.9	none
CCGC_0470	27/Aug/2014	SpecificConductivity	1098	uS/cm
CCGC_0470	27/Aug/2014	Temperature	19.4	Deg C

APPENDIX E

EXCEEDANCE NOTIFICATION FOLLOW-UP REPORT

The exceedance notification information is provided in the complete Northern Counties Groundwater Characterization Report.

APPENDIX F

RESPONSE TO SUBMITTAL OF ANCILLARY SAMPLING DATA

PO Box 828, Salinas, CA 93902
www.centralcoastgc.org

Phone: 831-585-1435

Fax: 831-422-0868

May 29, 2015

MEMORANDUM

TO: Angela Schroeter

FROM: Parry Klassen

SUBJECT: Response to Submittal of Ancillary Sampling Data

DATE: May 29, 2015

Pursuant your request for additional information regarding ancillary data (e.g., stable isotopes, pharmaceuticals, noble gases) outlined in the CCGC Work Plan, the CCGC hereby submits this response:

1. The CCGC is not submitting the ancillary sampling data outlined in the CCGC Work Plan for several substantive reasons relating to scientific defensibility. The CCGC has consulted with its hydrogeologist (Luhdorff and Scalmanini Consulting Engineers (LSCE)) with respect to what would be the most technically and scientifically sound approach for gathering and interpreting ancillary data. According to LSCE, to adequately interpret ancillary data, other additional data and information needs to be obtained. Specifically, additional data and analyses need to include:

- Well depths and well screen intervals;
- Mapping of potential nitrate sources;
- Water quality sampling (including ancillary constituents) in the unsaturated and saturated zones directly beneath various types of nitrate sources in each groundwater basin;
- Evaluation of groundwater flow paths including vertical flow and horizontal flow components; and,
- Development of a comprehensive hydrogeologic conceptual model (including, for example, evaluation of potential mixing of recharge waters from various sources such as streamflow percolation, precipitation recharge, irrigation recharge that may be derived from older water, underflow from adjacent groundwater basins or subbasins, etc.).

None of this additional work was undertaken, except as explained below. For a majority of wells sampled, members often attempted to estimate well depths, but in many cases reliable well depth data was not available. Further, the CCGC made an initial effort to obtain well logs, and use the well logs of member wells to determine well depth and well screen intervals. For well logs that were obtained, the effort to connect the well logs to a member well was both time-consuming and often unsuccessful.

2. The CCGC program emphasis was on collecting nitrate data from all domestic wells for its members as required in the approved Work Plan. As directed by Central Coast Regional Water Quality Control Board (CCRWQCB) staff in various communications, including a supplemental sheet prepared by CCRWQCB staff giving direction to the CCGC on its Monitoring and Reporting Program (Supplemental Sheet for Regular Meeting of May 22-23, 2014, page 3, final paragraph), the CCGC focused its efforts on the required elements of the Work Plan and did not spend further resources on obtaining additional data and analyses necessary for proper interpretation of other data not specifically required in that Work Plan.

In completing required elements of the approved Work Plan, the CCGC expended all its available resources obtaining the nitrate monitoring data, notifying its members of nitrate exceedances, conducting follow-up on member responses, and preparing the required technical reports.

3. Finally, inclusion of the raw ancillary data without the additional scientific information or analysis in this report or as a later addendum to the characterization report could result in misinterpretation and/or derivation of unsupported conclusions. Such a result is contrary to one of the CCGC's most important principles, which is that all data and information collected and/or prepared by the CCGC must be scientifically defensible.

The CCGC remains committed to providing the CCRWQCB with scientifically defensible information, and according to our expert consultants, the raw ancillary data without the additional data and analyses would not reach this threshold. Accordingly, the CCGC has determined that it is not appropriate, scientifically or technically, to report raw ancillary data with the Technical Memorandum.

APPENDIX D

GILROY-HOLLISTER VALLEY

TECHNICAL MEMORANDUM

Distribution of Groundwater Nitrate Concentrations Gilroy-Hollister Valley, California

Prepared for:
Central Coast Groundwater Coalition

Prepared By:
Luhdorff & Scalmanini Consulting Engineers

Peter Leffler, P.G., C.Hg.
Principal Hydrogeologist

June 1, 2015

Table of Contents

1 EXECUTIVE SUMMARY 1
2 INTRODUCTION AND BACKGROUND 4
2.1 Hydrogeologic Context 5
2.1.1 Hydrogeologic Characteristics of Subbasins 6
2.1.2 Groundwater Inflows and Outflows 7
2.2 Previous Groundwater Quality Studies and Data 8
3 METHODS AND DATA SOURCING 10
3.1 Sampling of CCGC Member Wells 10
3.2 Analytical Methods 14
3.2.1 Nitrate 14
3.2.2 Major Ions and Total Dissolved Solids 14
3.3 Ancillary Sampling 14
3.3.1 Sampling Methods 15
3.3.2 Analytical Methods 15
3.4 Other Sources of Nitrate Data 16
3.5 Mapping of Nitrate Concentrations in Groundwater 16
3.6 Mapping Assumptions 17
3.7 Well Construction Information 19
4 RESULTS AND DISCUSSION 20
4.1 Well Construction 20
4.1.1 Llagas Subbasin 21
4.1.2 Bolsa Subbasin 22
4.1.3 Hollister Subbasin 22
4.1.4 San Juan Bautista Subbasin 22
4.2 Distribution of Groundwater Nitrate Concentrations 26
4.3 Factors Affecting the Distribution of Nitrate Concentrations 29
4.3.1 Major Ions and Piper Diagrams 30
4.3.2 Nitrate Concentrations and Oxidation-Reduction Potential and Dissolved Oxygen Concentrations 30
4.3.3 Relation of Nitrate Concentrations to Spatially Variable Soil Texture 31
5 SUMMARY AND CONCLUSIONS 31
5.1 Study Objectives 31

5.2 General Findings 31
5.3 Data Gaps 33

Tables

Table 1	Wells Sampled Under the CCGC by Well Use
Table 2	Wells Sampled by the CCGC
Table 3	Supplemental Constituents
Table 4	List of Wells Deeper than 420 feet included in the Nitrate Mapping Analysis
Table 5	Summary Statistics for Domestic Depth and Screen Bottom Reported on Well Completion Reports by Subarea
Table 6	Summary Statistics for Public Supply Wells - Well Depth and Screen Bottom Reported on DWR Well Completion Reports
Table 7	Average Nitrate Concentrations by Subbasin and Well Type
Table 8	Summary Statistics for Maximum Groundwater Nitrate Concentrations
Table 9	Summary Statistics for Groundwater Nitrate Concentrations Sampled under the CCGC

Figures

Figure 1	Subbasins and Locations of Wells Used for Mapping of Nitrate Concentrations
Figure 2	Geologic Cross-Section of the Llagas Subbasin Modified from Olin Corporations Llagas Subbasin Characterization 2008
Figure 3	Locations of CCGC Member Parcels and Wells Used for Analysis
Figure 4a	Average and Range of Domestic Well Depths by Township in Llagas Subbasin
Figure 4b	Well Depths by Section, Other Basins
Figure 5	Distribution of Known Well Depths
Figure 6	Average Public Supply Well Depth by Section
Figure 7	Known Domestic Wells Sampled by CCGC
Figure 8	Boxplot Showing Medians and Ranges of Maximum Nitrate Concentrations for the Four Subbasins
Figure 9a	Boxplot Showing Medians and Ranges for Average Nitrate Concentrations for the Llagas Subbasin by Depth
Figure 9b	Boxplot Showing Medians and Ranges for Average Nitrate Concentrations for the Hollister Subbasin by Depth
Figure 9c	Boxplot Showing Medians and Ranges for Average Nitrate Concentrations for the San Juan Bautista Subbasin by Depth

Figure 10 Kriged Nitrate Concentrations in Gilroy Hollister Valley

Figure 11 Kriged Nitrate Concentrations and CCGC Member Parcels

Figure 12 Distribution of Estimated Probability of Exceeding Nitrate (as NO_3) Concentrations of 45 mg/L in Groundwater

Figure 13 Chemical Characteristics and Areas of Ionic Dominance Represented by the Piper Diagram

Figure 14 Piper Plot for GHV Wells Sampled by the CCGC for the Llagas Subbasin

Figure 15 Piper Plot for GHV Wells Sampled by the CCGC for the Bolsa Subbasin

Figure 16 Piper Plot for GHV Wells Sampled by the CCGC for the Hollister Subbasin

Figure 17 Piper Plot for GHV Wells Sampled by the CCGC for the San Juan Bautista Subbasin

Figure 18 Relation of Groundwater Nitrate Concentrations to Oxidation-Reduction Potential for CCGC Samples

Figure 19 Distribution of ORP Values for CCGC Samples

Figure 20 Estimated Nitrate Concentrations and Distribution of Percent Sand in Soils

Appendices

Appendix A Kriging and Development of Variogram Models

Appendix B Wells Excluded from Nitrate Mapping

Appendix C Quality Assurance and Quality Control

Appendix D CCGC Sampled Well Information and Results

Appendix E Exceedance Notification Follow-Up Report

Appendix F Response to Submittal of Ancillary Sampling Data

1 EXECUTIVE SUMMARY

The Central Coast Regional Water Quality Control Board (Regional Water Board) adopted Order No. R3-2012-0011 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Conditional Waiver) and associated Monitoring and Reporting Program Orders (MRPs) on March 15, 2012. The Conditional Waiver and the MRPs specify that landowners and growers may meet groundwater monitoring requirements by either monitoring groundwater individually on their agricultural operations, or by joining a groundwater cooperative monitoring program. The approved workplan submitted by the Central Coast Groundwater Coalition (CCGC) set forth plans for satisfying the objectives in the MRP. The CCGC aims to provide information that fills the gaps in the current understanding of groundwater quality for domestic consumption throughout the region. Nitrate is the primary constituent of concern and the focus of this report. The program also commits to provide information about the effects of land and water management practices that will result in improved groundwater quality over time.

The primary objectives of the tasks described in the CCGC workplan are to develop 1) a process-level understanding of the spatial distribution of nitrate concentrations in domestic supply wells with single connections or a small number of connections, and 2) identify regions for evaluation of agricultural land and water management practices to reduce discharges to groundwater. In addition, the MRP requires that, at a minimum, the cooperative groundwater monitoring effort must include sufficient monitoring to adequately characterize the groundwater aquifer(s) in the local area of the participating Dischargers, characterize the groundwater quality of the uppermost aquifer, and identify and evaluate groundwater used for domestic drinking water purposes. This Technical Memorandum (TM) is one of three TMs for the northern counties region, and attempts to satisfy the objectives of the CCGC workplan and requirements of the MRP in the Gilroy-Hollister Valley.

The Gilroy-Hollister Groundwater Basin contains four primary subareas or subbasins. The Llagas, Bolsa, Hollister, and San Juan Bautista Subbasins are separated by rivers or faults. The boundary between the Llagas and Bolsa Subbasins occurs at the Pajaro River, while fault barrier boundaries define the Hollister and San Juan Bautista Subbasins. Groundwater recharge in the Gilroy-Hollister Valley (GHV) occurs primarily as infiltration from rivers and streams, infiltration of rainfall and irrigation water, and subsurface flow from adjacent basins.

Results of laboratory analysis of groundwater samples collected from wells on CCGC member landowners and growers (L&Gs) properties in the Gilroy-Hollister Valley are evaluated and presented herein. Other sources of nitrate data for mapping included GAMA, Lawrence Livermore National Laboratory, SCVWD, SBCWD, USGS, the Central Coast Regional Water Quality Control Board, samples submitted to SWRCB associated with the Olin Site, and samples collected under the auspices of the CCGC groundwater program. It was assumed that water quality data collected from 2000 to 2014 are most representative of current conditions for the area. The overall approach was to process and evaluate available analytical data for inclusion in nitrate mapping by subbasin, and then integrate the data to create water quality maps for Llagas Subbasin and for the other three subbasins in the Gilroy-Hollister Valley.

Water samples were collected and field parameters measured from 145 wells on CCGC properties. Field parameters (pH, water temperature, specific conductance, oxidation-reduction potential (ORP) and dissolved oxygen (DO)) were measured at each well. Concentrations of nitrate and major ions (calcium, magnesium, potassium, sodium, chloride, sulfate and bicarbonate) were determined in all samples.

Geostatistics (kriging) was used to create a map of estimated groundwater nitrate concentrations in the Gilroy-Hollister Valley. Kriging is an interpolation technique based on surrounding measured values used to derive estimated values for unsampled locations. Using well completion reports gathered from DWR from throughout the Gilroy-Hollister Valley and hydrogeologic information, an attempt was made to restrict the data for mapping to wells completed within 400 feet of land surface to best characterize groundwater quality in the shallow aquifer used for domestic supply. Results from 1,105 wells were used to characterize the distribution of groundwater nitrate (as NO_3) concentrations. For wells with multiple sample dates from 2000 to 2014, the maximum nitrate concentrations were used for each well.

Based on the processing and analysis of over 3,000 DWR well completion reports, the large majority of domestic wells (95%) in the GHV Basin are screened within 420 feet of land surface. Results from 1,105 wells were used to characterize the distribution of groundwater nitrate (as NO3) concentrations in the GHV Basin. The mean concentration was 36 mg/L, and the median was 30 mg/L. Concentrations ranged from less than the detection limit of 0.05 mg/L to 513 mg/L. Two hundred and eighty-five wells (26%) had maximum concentrations over the MCL of 45 mg/L. One-hundred and forty-five wells were sampled on CCGC parcels. Within the four subbasins, the percentage of wells exceeding the MCL varied from 16% in the San Juan Bautista Subbasin to 32% in the Bolsa Subbasin. Within the part of the GHV Basin where nitrate concentrations were estimated, 15% of the area was mapped as having nitrate concentrations over the MCL.

Groundwater nitrate concentrations did not show distinct trends with depth. In the Llagas Subbasin, median nitrate concentrations were between 20 and 40 mg/L for depths ranging from 50 to 500 feet. In the Hollister Subbasin, median nitrate concentrations were less than 25 mg/L for all depth intervals. In the San Juan Bautista Subbasin, median nitrate concentrations were less than 15 mg/L for all depth intervals.

Mapped groundwater nitrate concentrations in the Llagas Subbasin are generally less than one-half of the MCL near the basin boundary. Nitrate concentrations are generally greater than the MCL along the valley axis. Twenty-seven percent of the Llagas Subbasin is mapped as having concentrations greater than the MCL. In the Hollister Subbasin, mapped groundwater nitrate concentrations are generally less than one-half of the MCL. Exceptions include the southwest corner of the subbasin near Hollister. Five percent of the Hollister Subbasin is mapped as having concentrations greater than the MCL. In the San Juan Bautista Subbasin, mapped groundwater nitrate concentrations were limited to the northern half of the subbasin where the most nitrate data are available. Eleven percent of this area is mapped as over the MCL. Nine percent of the Bolsa Subbasin is mapped as having concentrations greater than the MCL.

Uncertainty was addressed using indicator kriging to show the estimated probability of exceeding the nitrate MCL (45 mg/L). The map shows several areas throughout the Gilroy-Hollister Valley with a probability of greater than 50% for exceeding the nitrate MCL in shallow groundwater, including the northeastern and southeastern portions of the Llagas Subbasin, the southern portion of Bolsa Subbasin, the northern portion of San Juan Bautista Subbasin, and a few small areas of Hollister Subbasin. The majority of the areas within the Bolsa, San Juan Bautista, and Hollister Subbasins have probabilities of less than 50% for exceeding the nitrate MCL.

Groundwater nitrate concentrations in the Gilroy-Hollister Valley subbasins are affected by different hydrogeologic and geochemical processes. Major-ion data (calcium, magnesium, sodium, potassium, sulfate, chloride, bicarbonate) were summarized using Piper diagrams. Points representing groundwater samples collected in the four subbasins indicate there may be a general chemical shift from calcium-magnesium/chloride-sulfate waters to sodium/potassium bicarbonate waters.

Lower nitrate concentrations in CCGC samples were generally associated with chemically reducing conditions with oxidation-reduction potential values less than 75 mV. The line delineating an ORP value of 75 mV indicates the theoretical redox potential below which nitrate is denitrified. The majority of the samples with oxidation-reduction potential values below 75 mV were collected in wells in the Hollister and San Juan Bautista subbasins.

Higher nitrate concentrations are sometimes associated with higher sand content in near-surface soils. However, there is no discernable relationship between nitrate concentrations and soil texture in the Gilroy-Hollister Groundwater Basin. High nitrate concentrations occur across a range of soil textures.

Based on review of nitrate data and various factors as described above, there are likely several factors that influence nitrate concentrations in any given area.

Due to lack of specific well construction information for wells used in the analysis, the results of processing several thousand DWR well completion logs were used to make statements about well depths. While the results of the analysis indicate that the large majority of domestic wells are screened within 420 feet of land surface, there is a relatively small amount of uncertainty about the water-quality influence of data from deeper wells that may be included in the mapping. Since nitrate concentrations generally decrease with depth, there could be inclusion of lower nitrate concentration data not necessarily associated with the shallow drinking water supply. However, for GeoTracker data the maximum values were used for wells with multiple values and for multiple wells mapped at the same location. While this also introduces uncertainty, maximum values tend to result in conservative estimates of where nitrate concentrations are high.

High spatial variability in nitrate concentrations and obfuscation and clustering in GeoTracker create uncertainty in mapping nitrate distribution. Uncertainty due to spatial variability associated with the estimated nitrate concentration maps is addressed with a map that shows the probability of exceeding the nitrate MCL throughout the basin. The effects of obfuscation and clustering are very difficult to fully quantify. The primary effect is diminished spatial resolution about where drinking water wells are at risk for high nitrate concentrations.

2 INTRODUCTION AND BACKGROUND

The Central Coast Regional Water Quality Control Board (Regional Water Board) adopted Order No. R3-2012-0011 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Conditional Waiver) and associated Monitoring and Reporting Program Orders (MRPs) on March 15, 2012. The Conditional Waiver and the MRPs specify that landowners and growers (L&Gs) may meet groundwater monitoring requirements by either monitoring groundwater individually on their agricultural operations, or by joining a groundwater cooperative monitoring program. A workplan approved by the Regional Water Quality Board on June 20, 2013, set forth the plan for a Northern Central Coast Cooperative Groundwater Program that satisfies the requirements in the Conditional Waiver and MRPs for participating L&Gs in Monterey, Santa Cruz, Santa Clara, and San Benito Counties. The steps outlined in the workplan provide a foundation for a Groundwater Cooperative Program (GCP) that satisfies the requirements as set forth in the MRPs. A key GCP purpose undertaken by the Central Coast Groundwater Coalition (CCGC) is to provide the Regional Water Board with information that fills the gaps in the current understanding of groundwater quality for domestic consumption throughout the region. Nitrate is the primary constituent of concern and the focus of this report. The program will also provide information about the effects of land and water management practices that will result in improved groundwater quality over time.

The primary objectives of the tasks described in the workplan are to develop: 1) a process-level understanding of the spatial distribution of nitrate concentrations in domestic supply wells with single connections, or a small number of connections, and 2) identify regions for evaluation of agricultural land and water management practices to reduce discharges to groundwater. The workplan also described the approach for sampling and reporting. In addition, the MRP requires that, at a minimum, the cooperative groundwater monitoring effort must include sufficient monitoring to adequately characterize the groundwater aquifer(s) in the local area of the participating Dischargers, characterize the groundwater quality of the uppermost aquifer, and identify and evaluate groundwater used for domestic drinking water purposes.

This Technical Memorandum (TM) is one of three TMs that provide information about the spatial distribution of nitrate concentrations in groundwater used for drinking water in the CCGC service area. This TM also attempts address the probability of domestic drinking water having nitrate concentrations over the Maximum Contaminant Level (MCL) at a given location in the basin.

To assess the spatial variability in groundwater nitrate concentrations, results of laboratory analysis of groundwater samples collected from wells on CCGC member L&G's properties in the Gilroy-Hollister Valley are evaluated and presented herein. Also, the analytical results from other sampling conducted by the California Department of Public Health, US Geological Survey (USGS), Santa Clara Valley Water District (SCVWD), San Benito County Water District (SBCWD), State Water Resources Control Board (SWRCB), and L&Gs who conducted individual sampling were integrated in this study. The approach focused on the uppermost aquifer. The available analytical data for the shallow groundwater used for drinking was processed and evaluated to create water quality maps for the Gilroy-Hollister Valley. Available depth information was used to provide some understanding of the depth-distribution of nitrates in shallow groundwater. **Figure 1** shows the Gilroy-Hollister Valley and subbasins where data were available for mapping[1]: Llagas, Bolsa, Hollister, and San Juan Bautista Subbasins.

This report also provides some data related to factors and processes affecting groundwater nitrate concentrations throughout the Gilroy-Hollister Valley. Included in this report are the data for field parameters and major ions (calcium, magnesium, potassium, sodium, sulfate, chloride and bicarbonate). Field parameter data (oxidation-reduction potential, electrical conductivity, pH, dissolved oxygen and temperature) and major ion data were analyzed in all samples collected from wells on CCGC properties and are required as part of the MRP. Groundwater recharge volumes and sources, soil texture, and hydrogeology have been used to interpret the spatial distribution of groundwater chemical data.

2.1 Hydrogeologic Context

The GHV Basin contains four primary subbasins (**Figure 1**). Much of the discussion in this section is from Department of Water Resources Bulletin 118[2]. There is also substantial data and discussion based on the work conducted in the Llagas Subbasin relative to the Olin perchlorate plume[3]. The GHV Basin lies between the Diablo Range, Gabilan Range, Santa Cruz Mountains, and the San Andreas Fault zone. The four subbasins are further delineated by drainage features or faults. The northern-most Llagas Subbasin is separated from the Bolsa Subbasin by the Pajaro River. The Calaveras fault splits the Hollister Subbasin

[1] The locations of CCGC member wells were obfuscated to protect member privacy. The locations of CCGC member wells shown on Figure 1 were randomly adjusted up to 0.5 miles in both the east-west and north-south directions. The wells are plotted within a 1 mi^2 block centered over the actual well location. This block is consistent with the area of obfuscation required by a Public Records Act Request (PRAR).

[2] DWR. 2004. California's Groundwater Bulletin 118. Gilroy-Hollister Valley Groundwater Basin, Hollister Subbasin.

[3] Mactec Engineering and Consulting, 2009, Llagas Subbasin Characterization – 2008. Santa Clara County Olin/Standard Fusee, Morgan Hill, California. Prepared for Olin Corporation.

from the Bolsa and San Juan Bautista Subbasins and forms a groundwater barrier.[4] The Bolsa Subbasin is bounded on the south by the Sargent Fault and anticline. Finally, the San Juan Bautista Subbasin is bounded by the Sargent Fault to the north and the San Andreas Fault to the south.

2.1.1 Hydrogeologic Characteristics of Subbasins

The Llagas Subbasin has typically been divided into two sections, a northern unconfined recharge area and a southern confined area[5]. The southern confined section contains an aquitard at 20 to 100 feet below land surface that separates the upper (Shallow) and lower (Principal) aquifers[6] (Figure 2). Groundwater generally flows from the north to the south, toward the Pajaro River[7]. The two principal aquifers are denoted as the Shallow and Principal aquifers. The Shallow Aquifer extends to about 150 feet below land surface and is composed of flood plain deposits of unconsolidated clay, silt, and sand. Groundwater in the Shallow Aquifer is generally unconfined to semi-confined[8]. The Principal Aquifer underlies the Shallow Aquifer at depths of around 200 to 400 feet below land surface and provides most of the useable groundwater[9]. The Principal Aquifer consists of alluvial material similar to the Shallow Aquifer and the upper units of the Santa Clara Formation, which is composed of fairly consolidated silt, clay, and sand with some gravel. During extensive work for hydrogeologic characterization of the perchlorate contamination at the Olin site in the Llagas Subbasin[10], three groundwater bearing zones (shallow, intermediate and deep) were identified (**Figure 2**).

The Principal Aquifer in the Hollister Subbasin is composed of clay, silt, sand, and gravel deposits. This primary water bearing unit includes Holocene alluvium and the San Benito Gravels of Lawson (1893), defined as the Undifferentiated Unit.[11] Water bearing units under the Hollister Subbasin have been differentiated into three units. Confirmed by a well boring in the area, Unit 1 begins approximately 420

---

[4] Kilburn C. 1972. Ground-Water Hydrology of the Hollister and San Juan Valleys San Benito County, California, 1913-68. U.S. Geological Survey Open-File Report 73-144.
[5] Santa Clara Valley Water District (SCVWD) 2012 Groundwater Management Plan.
[6] ibid
[7] Todd Engineers and Kennedy/Jenks Consultants. 2010. Revised Final Groundwater Vulnerability Study Santa Clara County, California.
[8] Todd Engineers. 2013. Draft Technical Memorandum 1 Hydrogeologic Conceptual Model for Llagas Subbasin Salt and Nutrient Management Plan. The terms confined and semi-confined refer to the depth distribution of water levels in wells screened in different aquifers. In a confined aquifer, groundwater is under sufficient pressure such that the water level in a well screened solely in the confined aquifer rises above the elevation of the top of aquifer. Semi-confined aquifers are intermediate between confined and unconfined aquifers. The extent of confinement is due to the heterogeneous nature of the subsurface fine-grained layers which causes spatially varying degrees of confinement.
[9] Todd Engineers and Kennedy/Jenks Consultants. 2010. Revised Final Groundwater Vulnerability Study Santa Clara County, California; Todd Engineers. 2013. Draft Technical Memorandum 1 Hydrogeologic Conceptual Model for Llagas Subbasin Salt and Nutrient Management Plan.
[10] See footnote 2
[11] Kilburn C. 1972. Ground-Water Hydrology of the Hollister and San Juan Valleys San Benito County, California, 1913-68. U.S. Geological Survey Open-File Report 73-144.

feet below land surface and consists of interbedded clay, sand, and gravel[12]. Unit 2 overlies Unit 1 and is composed of interbedded thin clay and thick sand beds. The Undifferentiated Unit overlaps Units 1 and 2.

The primary water bearing deposits in the San Juan Bautista and Bolsa Subbasins are alluvium and the Upper Member of the Purisima Formation. The Holocene alluvium consists of permeable layers of gravel, sand, silt, and clay beds that can be up to 300 feet thick. The Purisima Formation is predominately gravel and sand with some interbedded siltstone[13]. The Purisima Formation depth ranges from land surface to a few thousand feet deep in some areas. Most water supply wells are completed between 100-500 feet below land surface[14].

2.1.2 **Groundwater Inflows and Outflows**

Recharge in the GHV Basin occurs primarily from infiltration of rivers and streams, precipitation, percolation of irrigation water, and subsurface flow from adjacent basins. The Llagas Subbasin receives recharge from both Uvas and Llagas Creeks, canals, and artificial recharge of imported and local water mainly at the Madrone Channel and Main Avenue Percolation Ponds. Subsurface inflow across the northern boundary also contributes to recharge. Pajaro River drainage and pumping wells are the principal groundwater discharge pathways. Most pumping wells used for domestic purposes are screened in the intermediate aquifer throughout the Subbasin. Pumping in municipal wells screened in either or both the lower intermediate and deep aquifers beneath the City of Morgan Hill contributes to the natural vertically-downward gradient from the intermediate aquifer to the deep aquifer in the northern portion of the subbasin. Infiltration of imported Central Valley Project (CVP) water to percolation ponds further accentuates the natural downward flow characteristic of groundwater basin recharge areas[15].

The San Juan Bautista Subbasin receives recharge from the San Benito River, which is controlled by Hernandez Reservoir outflows. In the last year, releases from Hernandez Reservoir were extremely low due to drought conditions[16]. The northeast part of the Hollister Subbasin receives recharge from Pacheco Creek, which is controlled by the North Fork Dam outflows.

---

[12] DWR. 2004. California's Groundwater Bulletin 118. Gilroy-Hollister Valley Groundwater Basin, Hollister Subbasin.
[13] ibid
[14] Analytical Environmental Services. 2006. Final Environmental Impact Report City of Hollister Domestic Wastewater System Improvements and San Benito County Water District Recycled Water Facility Project. Volume I & II Response to Comments and FEIR Text. Prepared for City of Hollister Engineering Department. SCH# 2006012149. Available at: http://reports.analyticalcorp.net/hollister/feir/
[15] see footnote 2
[16] Todd Engineers. 2013. Annual Groundwater Report for Water Year 2013. Prepared for San Benito County Water District.

2.2 Previous Groundwater Quality Studies and Data

Previous studies of groundwater quality in the GHV Basin demonstrate that concentrations of nitrate (expressed as NO_3) in groundwater vary spatially. Primary sources of data include public supply, domestic, and monitoring wells. Concentrations of nitrate (as NO_3) above the MCL of 45 mg/L and over 100 mg/L have been observed in all of the subbasins.

There are five primary programs that have sampled groundwater to assess groundwater nitrate concentrations in the GHV Basin as follows.

- Sampling of domestic and monitoring wells by the Santa Clara Valley Water District (SCVWD);
- Sampling of monitoring wells by the San Benito County Water District (SBCWD);
- Public water systems are required to systematically test their well water and the results are reported to California Department of Public Health;
- Groundwater Ambient Monitoring and Assessment (GAMA) study conducted by the California State Water Resources Control Board and USGS sampled public supply wells throughout the basin;
- Data submitted to the State Water Resources Control Board (SWRCB) in association with the Olin Site.

The SBCWD has a network of 26 monitoring wells to monitor groundwater conditions in the San Benito County portion of the GHV Basin with data available since 1997[17]. The SBCWD also has an extensive water quality database combining various sources of available data from 1,616 monitoring locations[18].

Todd Engineers assessed nitrate concentrations in San Benito County for SBCWD for seven delineated subbasins between 2010 and 2013[19]. These wells are part of SBCWD's monitoring well network. Of the seven subbasins, only one had average nitrate concentrations that exceeded the MCL; in the Hollister East subbasin the average concentration was 46 mg/L. In all other subbasins average nitrate concentrations were between 14 and 26 mg/L.

Statewide, domestic-supply water delivery systems with 15 or more connections (or serving more than 25 people for more than 60 days out of the year) are required to be tested annually. These data are stored in Geotracker, which is an online information system that provides access to groundwater quality information.

[17] ibid
[18] ibid
[19] ibid

Under the auspices of the GAMA Program, Parsons and others [20] analyzed groundwater nitrate data for public supply and irrigation wells throughout the GHV Basin. They identified two wells where nitrate concentrations were over the MCL. They used a non-parametric statistical analysis to examine the relationship between nitrate and potential explanatory factors, including land use, well construction, groundwater age, and geochemical conditions. They reported that elevated nitrate concentrations were generally associated with oxic geochemical conditions and with groundwater recharged from the modern age[21].

Recently, SCVWD[22] assessed nitrate concentrations in 231 domestic wells sampled in 2011 and 2013 in the Llagas Subbasin. In the northern half of the Llagas Subbasin, the average nitrate concentration was 29 mg/L and concentrations in 29% of the samples were above the MCL. In the southern confined area of the Llagas Subbasin, the average nitrate concentration was 58 mg/L and concentrations and 62% of the samples were above the MCL. In a separate report, SCVWD[23] sampled 21 wells in the Shallow Aquifer and 199 wells in the Principal Aquifer. The average nitrate concentration in the Shallow Aquifer was more than double the average nitrate concentration in the Principal Aquifer, 48 mg/L and 21.2 mg/L respectively. In 2012[24], the average nitrate concentrations for both aquifers were 40.5 and 24 mg/L, respectively.

Using data collected by SCVWD, Todd Engineers[25] contoured nitrate concentrations from monitoring and production wells for both the Shallow Aquifer and Principal Aquifer in the Llagas Subbasin. The Shallow Aquifer contains greater areas of nitrate concentrations which exceed the MCL compared to the Principal Aquifer. They also calculated nitrate concentration trends by well from 1998-2012. For the Shallow/Combined Aquifer most wells in the northern half of the Llagas Subbasin had either no trend or decreasing trends. Most wells in the southeastern half of the Llagas Subbasin showed increasing trends, whereas most wells in the southwestern half showed no to decreasing trends.

Olin Corporation, under the direction of California Regional Water Quality Control Board, Central Coast Region (Water Board), has been subject to Cleanup or Abatement Order (CAO) R3-2005-0014 of March 10, 2005[26]. This order directed Olin Corporation (Olin) to characterize the Llagas Subbasin by delineating and monitoring the lateral and vertical extent of perchlorate in groundwater. As part of the Olin groundwater investigation, groundwater samples from the Llagas Subbasin were analyzed most

---

[20] Parsons MC, Kulongoski JT, Belitz K. 2005. Status and Understanding of Groundwater Quality in the South Coast Interior Groundwater Basins, 2008: California GAMA Priority Basin Project. U.S. Geological Survey Scientific Investigations Report 2014 – 5023.
[21] Modern water recharged during or after 1952.
[22] Santa Clara Valley Water District (SCVWD) FY 2012 South County Water Quality Testing Report.
[23] Santa Clara Valley Water District (SCVWD) 2011 Groundwater Quality Annual Report.
[24] Santa Clara Valley Water District (SCVWD) Annual Groundwater Report for Calendar Year 2012.
[25] Todd Engineers. 2013. Draft Technical Memorandum 1 Hydrogeologic Conceptual Model for Llagas Subbasin Salt and Nutrient Management Plan
[26] Reports available online at ftp://swrcb2a.swrcb.ca.gov/pub/rwqcb3/Olin%20Perchlorate/

frequently for perchlorate, but other constituents were analyzed, including major cations and anions, and nitrate. Field measurements of pH, oxidation-reduction potential (ORP), temperature, electrical conductivity, and dissolved oxygen (DO) were also collected. Results indicate that limited denitrifying conditions appear to exist in specific portions of the subbasin. The nitrate data collected as part of the Olin characterization are incorporated into this evaluation.

3 METHODS AND DATA SOURCING

3.1 Sampling of CCGC Member Wells

Between October 2013 and August 2014, groundwater nitrate data were obtained from 459 domestic and domestic/irrigation wells and 26 irrigation wells on L&G properties in Monterey, Santa Cruz, San Benito, and Santa Clara Counties, which were sampled by HydroFocus, Inc. and Michael L. Johnson, LLC personnel. For MRP compliance any domestic source well falling on a CCGC parcel was sampled; however, this TM focuses only on the Gilroy-Hollister Groundwater Basin. **Tables 1 and 2** summarize the wells sampled under the CCGC. [27]

A total of 145 samples were collected under the CCGC characterization monitoring program in Gilroy-Hollister Valley. Nine samples were collected under the individual monitoring program, three samples were collected during the Fall 2013 monitoring event and six samples were collected during the Spring 2014 monitoring event. Six samples were collected because their original nitrate concentration was within 80% of the MCL. **Table 1 and 2** summarize the sample counts by groundwater subbasin.

[27] There were three remaining domestic wells located on L&G parcels in which new acreage was added to the CCGC after basin sampling had commenced. These wells were recently sampled and are not included in this TM.

Table 1. Wells Sampled Under the CCGC by Well Use

Groundwater Basin	Domestic and Domestic/Irrigation Wells	Irrigation Wells
Gilroy-Hollister Valley	141[a]	4
Llagas Subbasin	81	3
Hollister Subbasin	30	1
Bolsa Subbasin	6	--
San Juan Bautista Subbasin	24	--
Cholame Valley	1	--
Santa Ana Valley	1	--
Santa Clara Valley Santa Clara Subbasin	5	--
Santa Cruz Purisima Formation	5	--
Tres Pinos Valley	1	--
Outside groundwater basin boundary, but within northern counties area	10	2

a. One well was incorrectly sampled as it was not on a CCGC member parcel and although it was used in the nitrate contour map creation, the results were not used for the statistical analysis or reporting for samples collected on CCGC parcels.

Table 2. Wells Sampled by the CCGC

Groundwater Basin	Total Wells Sampled	Samples Collected				
		Characterization	Individual Monitoring Fall 2013	Individual Monitoring Spring 2014	Within 80% of the MCL Re-Sample	Additional Re-Sample
Gilroy-Hollister Valley	145	139	3	6	6	
Llagas Subbasin	84	81	3	3	6	
Hollister Subbasin	31	28		3		
Bolsa Subbasin	6	6				
San Juan Bautista Subbasin	24	24				
Cholame Valley	1	1				
Santa Ana Valley	1	1				
Santa Clara Valley Santa Clara Subbasin	5	5				
Santa Cruz Purisima Formation	5	5				
Tres Pinos Valley	1	1				
Outside groundwater basin boundary, but within northern counties area	12	8	3	4		
Total	170	160	15	16	12	0

Upon arrival at the well and using electronic sounders accurate to the nearest 0.01 feet, field personnel measured the depth to groundwater in the well (if there was access), relative to the top (the highest point) of the well casing. The measuring point location and depth to groundwater were recorded on the field sheet.

Field parameters (pH, water temperature, specific conductance, oxidation-reduction potential (ORP) and dissolved oxygen (DO)) were measured at each well using a Yellow Springs Instruments Multimeter. Meters were calibrated for all parameters at least two times per day, once in the morning prior to beginning sampling and once in the afternoon. At each well, field parameters were measured upon arrival. If the preliminarily measured field-parameter values were more than 20% outside of the range of calibration values, the meter was recalibrated. Meters were calibrated with standards close to or that bracketed the values for the well sample, and standards were maintained at temperatures (in water baths) close to the temperature of the well water. The meter was checked with zero DO solution at the first site of the day, and more frequently if needed. The pH probe was calibrated using buffers bracketing the preliminary sample result. Oxidation-reduction potential (ORP) was calibrated using Zobell solution[28]. Personnel recorded calibration data on field sheets. After calibration, tubing was connected to the well outlet and directed the well discharge to a flow-through chamber. As well water was pumped from the well, field parameters were recorded approximately every 3 minutes.

To the extent possible, purging of the well occurred prior to sample collection in order to remove stagnant water from within the well casing and ensure that a representative sample was obtained. Stabilization of the field parameters was used as an indication that the sample water was representative of groundwater. Stability was defined as ± 0.1 for pH, ± 3% for conductivity, ± 10 mV for ORP and ± 10% for DO for at least two consecutive readings. Sampling began as soon as possible after parameter stabilization.

Field personnel collected all samples using the dedicated pumps installed in the domestic wells. The sample was collected as close to the well head as possible. In most cases, the sample was collected through plastic tubing connected to a spigot at or near the well head. In rare cases, the sample was collected from an indoor or outdoor faucet. Well water flowed into a flow-through chamber and into a collection bucket for measuring volume of flow per unit time. Samples analyzed for dissolved constituents (including nitrate) were filtered in the field using 0.45-µm capsule filters certified to meet EPA standards for trace metal analysis. Sample bottles and sampling equipment were rinsed thoroughly three times with the water to be sampled prior to sample collection. Bottles pretreated with preservatives were not rinsed prior to sample collection. Samples collected for metals were preserved with nitric acid in the field. Test strips were used to verify that the pH was less than 2 in preserved samples.

Field personnel collected ten percent of the total samples for quality assurance and quality control (QA/QC) purposes (duplicate and field blank samples). Field duplicate samples were collected and processed in the field and analyzed to evaluate the heterogeneity of the matrices. The duplicate samples were submitted to the laboratory as semi-blind samples. Field blank samples were processed in the field identically as the other samples using deionized water as sample water. The blank samples were submitted to the laboratory as semi-blind samples.

All samples collected for the MRP constituents were placed immediately on ice and transported to Monterey Bay Analytical Services on the day of collection. Before leaving the field to deliver samples, sampling personnel checked the ice level to ensure the temperature of the ice chest would remain around 6° C, and added ice if necessary. Chain of Custody form(s) were completed for each sampling day.

---

[28] Nordstrom, D.K. 1977. Thermochemical redox equilibria of ZoBell's solution, Geochimica e Cosmochimica Acta, 41:1835-1841

3.2 Analytical Methods

3.2.1 Nitrate

Nitrate samples were analyzed by Monterey Bay Analytical Services using EPA Method 300.0.

3.2.2 Major Ions and Total Dissolved Solids

All major ions and total dissolved solids were analyzed by Monterey Bay Analytical Services. Calcium, magnesium, potassium, and sodium were analyzed by EPA Method 200.7. Chloride and sulfate were analyzed by EPA Method 300.0. Total dissolved solids were analyzed by EPA approved Standard Method 2540C.

3.3 Ancillary Sampling

At selected wells, samples were collected for supplemental data not required by the California Regional Water Quality Control Board Central Coast Region Order No. R3-2012-001 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (WDR). The CCGC submitted an Addendum to the Northern Counties Quality Assurance Project Plan (QAPP) which included the methods by which this data would be collected and analyzed (submitted November 15, 2013). As stated within the Addendum submittal, the QAPP did not need Regional Board approval since these data are not required. Within the Northern Counties, supplemental data were collected voluntarily by the CCGC according to methods outlined in the Addendum. The list of constituents analyzed for at selected wells is included in **Table 3**.

Table 3. Supplemental Constituents

Constituents	Function
N^{15} and O^{18} isotopes	Potential for denitrification
N^{15} and O^{18} isotopes; pharmaceuticals	Nitrogen source analysis
Tritium/He-4, chlorofluorocarbons	Age of water
Br, O^{18}, N^{15}, deuterium	Source of water

Note: Modified from Table 2 of CCGC Work Plan for Monterey, Santa Clara, Santa Cruz, and San Benito Counties, November 1, 2013.

The CCGC is not including these data with this report (**Appendix F**), but a summary of the methods used to collect and analyze the samples is included as requested by Regional Board staff. The following is a summary of the sampling methods employed to collect the supplemental data at selected wells after well purging and collection of the required constituents in the MRPs of the WDR.

3.3.1 Sampling Methods

Prior to collecting the tritium sample, sampling personnel removed any wristwatches. The unfiltered samples were collected by inserting the plastic tubing connected to the well connection into the tritium bottle. The tubing was inserted about 1/3 of the way into the bottle and was slowly removed as the bottle was filled.

Noble gases samples were collected in copper tubes. Prior to sample collection, copper tubes were placed on backing plates with two clamps, one on each end. Plastic tubing leading from the well hook up was attached to one tube end, and blank plastic tubing was attached to the other tube end. As water flowed through the tube, the line was inspected for any air bubbles. The copper tube was continuously tapped to ensure bubbles were not trapped inside. When there was certainty that no bubbles were present, the upper clamp was sealed followed by the lower clamp. Copper tubes were stored at room temperature and shipped to Lawrence Livermore National Laboratory under standard Chain of Custody procedures.

Chlorofluorocarbons (CFCs) were collected in laboratory provided glass bottles with aluminum foil lined caps. At each site, three samples were collected. Using Viton tubing leading into a bucket, three bottles and three caps were completely submerged in sample water. Each bottle was individually filled from the Viton tubing until it overflowed under water. Once submerged and filled, a cap was chosen, completely submerged, and tapped underwater to ensure no air bubbles were trapped. The Viton tubing was removed from the sample bottle and the cap was tightly screwed on under water. The bottle was removed and checked for any visible bubbles. If bubbles were present, the sampled process was repeated with a new cap. If no bubbles were present, electrical tape was used to secure the cap in a clockwise direction.

3.3.2 Analytical Methods

Water samples are chilled, heated, and chilled in cycles in which the headspace gases are pumped away. After five cycles, almost all the ^{3}He is removed. The sample then sits for 10 days, allowing the ^{3}He from tritium decay to accumulate. The gas is then analyzed using a mass spectrometer.

In the laboratory, samples are released from the copper tubes, tubes are heated, and then the water is frozen effectively trapping the dissolved gases in the headspace. Dissolved gases are measured by either mass spectrometer or a high-sensitivity capacitive manometer. The measured amounts of Ne, Ar, Kr, and Xe are used to determine the He present in the sample.

Selected groundwater samples were analyzed for CFC's using a purge-and-trap gas chromatography procedure with an electron capture detector (see http://water.usgs.gov/lab/chlorofluorocarbons/lab/analytical_procedures/) by the Tritium Laboratory at the University of Miami Rosenthiel of Marine and Atmospheric Science.

3.4 Other Sources of Nitrate Data

Using GeoTracker GAMA[29], all data were downloaded for the Gilroy-Hollister Valley area. The GeoTracker GAMA database includes data from the California Department of Public Health, GAMA – SWRCB data collection efforts and Regulated Sites. Data were also downloaded from the USGS National Water Information System[30] for wells in the Gilroy-Hollister Valley which contain samples analyzed for nitrate.

The Central Coast Regional Board provided two sets of nitrate data including data uploaded as part of the individual well sampling (eNOI) process by L&Gs enrolled in the Irrigated Lands Regulatory Program. SCVWD provided nitrate data from 194 wells, of which 182 are for domestic use in the Llagas Subbasin of the GHV. Nitrate data were also extracted from SBCWD's monitoring well network in the GHV. Finally, an Access database was downloaded from the Regional Water Quality Control Board ftp site[31] containing all data associated with the Olin cleanup site in the Llagas subarea of the GHV.

3.5 Mapping of Nitrate Concentrations in Groundwater

Nitrate mapping for this project was based on the theory of regionalized variables, or geostatistics, to create maps of estimated groundwater nitrate concentrations in the Gilroy-Hollister Valley. The theory of regionalized variables relies on the assumption that data collected in geographic areas is randomly distributed[32]. Kriging, the process of interpolation from measured values of some variable z measured at N locations relies on the determination of the spatial covariance or semivariogram of the variable at points x_i (**Appendix A**). The semivariance (γ) is defined as:

$$\gamma(h) = \frac{variance[z(x_i)-z(x_j)]}{2}$$

where:

h is the lag or average distance between data points and
z(x) is the groundwater nitrate concentration

The semivariogram was calculated to estimate the spatial covariance in the area of nitrate concentrations. Interpolation was done with kriging, which uses a linear combination of weighting

[29] http://geotracker.waterboards.ca.gov/gama/, accessed 2/6/2014
[30] http://waterdata.usgs.gov/nwis, accessed 4/4/2013
[31] ftp://swrcb2a.swrcb.ca.gov/pub/rwqcb3/Olin%20Perchlorate/, accessed 11/4/2014
[32] David, M. 1977. Geostatistical ore reserve. New York (NY): Elsevier Scientific
Journel, A.G. and Ch. J. Huijbregts. 1978. Mining Geostatistics. San Diego (CA): Academic Press Harcourt Brace & Company, Publishers.
Matheron, G. 1963. Principles of Geostatistics. Economic Geology 58: 1246-1266.

factors and measured values of $z(x_j)$ that minimize the estimation variance. For the Gilroy-Hollister Valley, subbasins were evaluated separately with regard to wells to include in the analysis, and then kriging was conducted on the Gilroy-Hollister Valley in two parts. Due to different well densities, the Llagas Subbasin was kriged separately from the rest of the basin. The results of the kriging for the two areas were then combined to show contours for the basin as a whole.

The objective of kriging for this study was to characterize the spatial distribution of the estimated nitrate concentrations in the Gilroy-Hollister Valley and provide a conservative estimate of where groundwater nitrate concentrations are likely to be above the MCL. Because of the high spatial variability and non-Gaussian nature of the distribution, the concentrations were transformed to logarithms of the concentrations and SURFER was used to calculate the semivariogram. Kriging was carried out using exact well locations (where available) and a grid of estimated values was generated. A 20-meter cell size was specified for development of maps showing the distribution of groundwater nitrate concentrations.

Indicator kriging[33] performed with Surfer to address uncertainty in estimated nitrate concentrations by developing a map that displays the probability that concentrations at a given location will exceed the MCL. For indicator kriging, the data are transformed into either zeroes or ones depending on whether they are above or below a specified threshold. The transformed data values are used as input to ordinary kriging and the indicator kriging prediction at a location is interpreted as the probability that the threshold is exceeded[34]. Indicator kriging does not provide any information on how far above or below the threshold the values might be, only the probability that they are above or below the threshold.

3.6 Mapping Assumptions

It was assumed that water quality data collected from 2000 to 2014 are representative of current conditions for the area. When drinking water supply wells are determined to contain nitrate concentrations above the MCL, use and sampling can be discontinued. Thus, a 14-year time period was used for data gathering in an attempt to capture wells where sampling may have been discontinued. Where there was more than one value for samples collected at different times from a well within this time frame, the maximum of all values was used.

---

[33] Indicator Kriging is an analysis that 1) transforms data into 0s and 1s based on a value being below or above a threshold, and 2) interpolates values using kriging at unknown locations with resulting values being between 0 and 1. The results can be interpreted as probabilities of concentrations at unsampled locations being above the chosen threshold. For example, when transforming the measured data, if the threshold chosen is 45 mg/L, a measured concentration of 10 mg/L at a particular location would be classified as 0, and a concentration of 70 mg/L at another location would be classified as 1. After indicator kriging is performed, if the calculated value is, for example, 0.73 at an unsampled location, there is a 73% probability that if this location was sampled the concentration would be at least 45 mg/L. Additional information can be found at the following link: http://help.arcgis.com/en/arcgisdesktop/10.0/help/index.html#00310000004n000000

[34] Konstantin Krivoruchko. 2011. Spatial Statistical Data Analysis for GIS Users, ESRI Press, 928 pp.

Data from supply wells downloaded from GeoTracker have obfuscated coordinates[35], which creates a dataset where multiple wells may plot at the same location. There are several limitations of the obfuscated and clustered data from GeoTracker. The obfuscated well locations are not accurate. Moreover, clustered data limited the ability to fully map areas where there is likely impairment of groundwater quality due to high nitrate. To provide a conservative map of where groundwater is likely over the MCL, the maximum of all concentrations was used at each of these "coincident" points for map creation. There were 242 coincident points in the Gilroy-Hollister Valley.

Analytical data downloaded from GeoTracker are reported as either nitrate or nitrate as nitrogen. It was generally assumed that this designation is correct. Analytical data with non-detect values were re-assigned concentrations of half the detection limit for averaging and mapping. Where the detection limit was known, half that value was assigned. Where the detection limit was unknown, a detection limit of 1 mg/L was assumed. Some of the analytical data downloaded from GeoTracker had a "<" qualifier, but a large nitrate concentration, e.g., < 32 mg/L. These data were excluded from averaging due to the large uncertainty in the actual concentration relative to the MCL. Excluded data are provided in **Appendix B**.

Consistent with the discussion in the Hydrogeologic Context section and the objectives of characterizing the domestic water supply and shallow groundwater and reasonably delineating areas where concentrations are likely to be over the MCL, it was assumed that the shallow aquifer used for domestic drinking water supply generally extends to a maximum depth of 420 feet throughout the Gilroy-Hollister Valley. Therefore, any wells with known depths greater than 420 feet were removed from the dataset for mapping, with a few exceptions. The exceptions include the wells listed in **Table 4**.

[35] These locations are accurate to within 1 square mile of the actual location.

Table 4. List of Wells Deeper than 420 feet included in the Nitrate Mapping Analysis

Well Name	Subbasin	Use	Well Depth	Source
AW1315_THKRCDI	Llagas	Dom/Irrig	430	Field Visit
AW1229_FUKAGAD	Llagas	Dom/Irrig	430	Field Visit
USGS_370700121370001	Llagas	Irrigation	484	USGS; GAMA
010S003E01M003	Llagas	Public Supply	430	RWQCB
009S003E36F020	Llagas	Public Supply	440	RWQCB
4310004-002	Llagas	Public Supply	470	GAMA; City of Gilroy
4310004-008	Llagas	Public Supply	470	GAMA; City of Gilroy; USGS; RWQCB
AW0789_SABFRO	Hollister	Domestic	440	Field Visit
AW0733_WJBJRDI	Hollister	Dom/Irrig	486	USGS; GAMA
USGS_365150121221801	Hollister	Irrigation	500	USGS; GAMA
USGS_364604121181501	San Juan Bautista	Irrigation	460	USGS; GAMA
USGS_365000121230001	San Juan Bautista	Unknown	450	USGS; GAMA

For mapping purposes, irrigation wells and domestic/irrigation wells[36] with unknown depths were included in the analysis. It is recognized that that there are may be some irrigation and irrigation/domestic wells that have a portion of their screen intervals below 420 feet. However, review of available well depth data for domestic and public supply wells (**Tables 5 and 6**) combined with assessment of nitrate concentrations by well type (**Table 7**) indicates most domestic/irrigation and irrigation wells are likely screened primarily within the upper 420 feet. It was also assumed that wells with unknown depths having uses of Observation or Unknown were less than 420 feet deep.

For creation of maps where CCGC domestic well locations are shown, locations were obfuscated as follows. For each pair of well location coordinates, the location coordinate was altered using a random-number generation algorithm in Microsoft Excel. The coordinates were randomly altered in both the east-west and north-south directions to place the well location somewhere within 0.5 miles of the actual location. This resulted in plotting of the well location within a 1-square mile block centered over the actual well location. In some cases the obfuscated well location plotted outside of the L&G parcel.

3.7 Well Construction Information

In an attempt to learn about domestic well construction, available well completion reports from DWR were obtained for the Gilroy-Hollister Groundwater Basin. From these reports, over 3,200 reports that designated wells as domestic use were identified and well construction information was extracted from the logs. Of these, 3,027 reports provided well depth information and 2,925 reports provided bottom of

[36] These are wells that were originally installed as irrigation wells and then converted to use for domestic supply.

screen information for the GHV. The data for well depth are described in more detail in the following section.

4 RESULTS AND DISCUSSION

Figure 1 shows the locations of wells and sources of data used in the analysis of the distribution of estimated groundwater nitrate concentrations in the GHV Basin. Data sources included GAMA, Lawrence Livermore National Laboratory, SCVWD, SBCWD, USGS, the Central Coast Regional Water Quality Control Board, samples submitted to the SWRCB in associated to the Olin Site, and samples collected under the auspices of the CCGC groundwater program. One thousand one hundred and five (1,105) wells were used for mapping the distribution of nitrate concentrations. In the GHV Basin, there are 17,166 acres of member parcels. Member parcels are present throughout most of the Llagas Subbasin. However, the density of member parcels is lower in the Hollister Subbasin, and very few wells are located in the Bolsa and San Juan Bautista Subbasins (**Figure 3**)[37].

4.1 Well Construction

The results of the analysis of well-completion information contained in DWR well completion reports show that the majority (95%) of the domestic wells within the Llagas Subbasin are completed within 420 feet of land surface. This includes primarily the shallow, intermediate and deep aquifers shown in **Figure 2**. Similarly, the majority (91%) of the domestic wells within the Hollister Subbasin are completed within 420 feet of land surface. The large majority (86%) of the domestic wells within the northern half of the San Juan Bautista Subbasin are completed within 420 feet of land surface. This study focused on wells that were designated shallower than these depths. Domestic well total depth and depth to screen bottom statistics by subbasin are summarized in **Table 5**.

[37] The locations of CCGC member wells were obfuscated to protect member privacy. The locations of CCGC member wells shown on Figure 3 were randomly adjusted up to 0.5 miles in both the east-west and north-south directions. The wells are plotted within a 1 mi^2 block centered over the actual well location. Therefore, the wells may not be shown on the member parcels on which they are actually located.

Table 5. Summary Statistics for Domestic Depth and Screen Bottom Reported on Well Completion Reports by Subarea

Well Depth (ft)	Llagas Area	Bolsa Area	Hollister Area	San Juan Bautista Area[1]
Average	223	266	264	254
Median	203	260	240	230
Minimum	22	68	60	36
Maximum	1,000	670	760	800
Number of wells	2,606	55	244	220
Screen Bottom (ft)				
Average	216	258	254	241
Median	200	250	222	220
Minimum	16	60	60	18
Maximum	980	670	740	792
Number of wells	2,525	53	232	217
Percentage of wells depths within 420 feet of land surface	95%	92%	92%	88%

1. Only the northern half of the San Juan Bautista Subbasin is included, which covers the majority of the available nitrate concentrations.

4.1.1 Llagas Subbasin

In the Llagas Subbasin, the average depth to the bottom of the well screens from all domestic well completion reports where this information was available is 216 feet. One-hundred and fifteen (115) well completion reports (5%) reported that the bottom of the well screen was greater than 420 feet. For any domestic well, there is 95% likelihood that the well screens intercept water from less than 420 feet. The average well depth was 223 feet. One-hundred and forty two (142) well completion reports (5%) reported that the bottom of the well was greater than 420 feet.

4.1.2 Bolsa Subbasin

In the Bolsa Subbasin, the average depth to the bottom of the well screens from all domestic well completion reports where this information was available is 258 feet. Four well completion reports (8%) reported that the bottom of the well screen was greater than 420 feet. For any domestic well therefore, there is 92% likelihood that the well screens intercept water from less than 420 feet. The average well depth was 266 feet. Four well completion reports (7%) reported that the bottom of the well was greater than 420 feet.

4.1.3 Hollister Subbasin

In the Hollister Subbasin, the average depth to the bottom of the well screens from all domestic well completion reports where this information was available is 254 feet. Nineteen well completion reports (8%) reported that the bottom of the well screen was greater than 420 feet. For any domestic well, there is therefore 92% likelihood that the well screens intercept water from less than 420 feet. The average well depth was 264 feet. Twenty-two well completion reports (9%) reported that the bottom of the well was greater than 420 feet.

4.1.4 San Juan Bautista Subbasin

Most wells within the San Juan Bautista Subbasin are located within the northern half of the subbasin. Therefore, the depth analysis is limited to this area. The average depth for the bottom of the well screens for domestic wells is 241 feet. Twenty-six well completion reports (12%) reported the bottom of the well screen was greater than 420 feet. For any domestic well, there is therefore 88% likelihood that the well screens intercept water from less than 420 feet. The average well depth was 254 feet. Thirty-two well completion reports (15%) reported that the bottom of the well was greater than 420 feet.

Figure 4 shows the distribution of available domestic well logs by section and average domestic well depths. **Figure 4a** shows that the average domestic well depth in the Llagas Subbasin ranges from 35 to 378 feet. **Figure 4b** shows that the average domestic well depth in the Bolsa Subbasin ranges from 100 to 540 feet. The average domestic well depth in the Hollister Subbasin ranges from 84 to 540 feet and in the San Juan Bautista Subbasin ranges from 31 to 500 feet.

For the 145 wells sampled on Coalition L&Gs' properties in the GHV Basin, it was possible to match 76 of these wells to well completion reports or well construction information received from L&Gs. Well depths and screened interval data were also obtained for some non-CCGC wells used in the analysis. In total, well depth information was obtained for 587 wells. **Figure 5** shows the distribution of well depths[38]. Well depths vary substantially from 19 to 949 feet. Most wells (93%) were shallower than 420

[38] The locations of CCGC member wells were obfuscated to protect member privacy. The locations of CCGC member wells shown on Figure 5 were randomly adjusted up to 0.5 miles in both the east-west and north-south directions. The wells are plotted within a 1 mi^2 block centered over the actual well location.

feet. Where well depth and screened interval information was available, wells deeper than 420 feet were generally excluded, except as noted in **Table 4**. Based on the well log from Kilburn[39] discussed in the Hydrogeologic Context section, 420 feet was selected as a bottom depth. Most domestic wells in each subbasin were confirmed to be above this depth based on the well completion report summary statistics shown in **Table 5**. **Appendix B** contains information about the excluded wells.

Figure 6 shows the distribution of average public supply well depths by section for the GHV Basin. These well depths were extracted from available DWR well completion reports with the designation of either Public Supply or Municipal well.

Well depth statistics in **Table 6** shows that the average depth from public supply wells is generally shallower than 420 feet. Seventy percent of the wells were completed within 420 feet. However, relatively few well logs in the DWR database (74) are classified as Public Supply compared with the extensive public supply wells designated in GeoTracker GAMA. In the GHV Basin, 403 wells downloaded from GeoTracker are listed as CDPH supply wells and have nitrate data collected since the year 2000. Therefore, at least 329 wells in the CDPH database may be classified as other sources, probably domestic, on the DWR well completion reports. As discussed above, most domestic well depths are shallower than 420 feet. The CDPH well dataset includes any public water system that supplies water to either 15 service connections or 25 people at least 60 days of the year. These wells could be anything from a well serving a campground, a rural school or an agricultural facility to sources that serve a large community[40]. Incorporating the CDPH supply well data into the dataset may introduce some deeper water sources. However, assuming that most of the CDPH wells, as the DWR well completion reports indicate, were classified as domestic when installed, it is likely that most of the CDPH wells are completed within 420 feet.

[39] Kilburn C. 1972. Ground-Water Hydrology of the Hollister and San Juan Valleys San Benito County, California, 1913-68. U.S. Geological Survey Open-File Report 73-144.

[40] Personal communication with Jan Sweigert, District Engineer of SWRCB Division of Drinking Water, 12/5/2014.

Table 6. Summary Statistics for Public Supply Wells - Well Depth and Screen Bottom Reported on DWR Well Completion Reports

	Well Depth (ft)	Screen Bottom (ft)
Average	357	347
Median	325	310
Minimum	74	90
Maximum	860	860
Number of wells	74	69

Nitrate concentration statistics by well type and subbasin are summarized in **Table 7**. These data were used to help evaluate domestic/irrigation and irrigation wells for inclusion in nitrate mapping. These data indicate that domestic/irrigation and irrigation well depths are likely similar to domestic wells based on their similar average nitrate concentrations. Therefore, domestic/irrigation and irrigation wells were included in the nitrate mapping analysis, except where they had known depths in excess of 420 feet.

Table 7. Average Nitrate Concentrations by Subbasin and Well Type

Gilroy-Hollister	Count	Nitrate Concentration mg/L NO3-NO3			
		Min	Max	Average	Median
Bolsa	41	0.5	297	43	26
Domestic	12	0.5	297	69	38
Irrigation	18	1.0	77	19	9
Observation	6	5.0	80	34	27
Public Supply	3	6.0	200	100	93
Unknown	2	5	98	51	51
Hollister	139	0.4	225	27	9
Dom/Irrig	10	0.5	43	15	12
Domestic	38	0.4	214	36	10
Irrigation	24	1.0	189	28	7
Observation	29	0.5	225	21	5
Public Supply	30	0.5	110	26	16
Unknown	8	6.0	54	26	24
Llagas	983	0.1	270	36	30
Dom/Irrig	31	3.0	204	38	32
Domestic	331	0.1	240	41	36
Extraction	4	21.0	49	33	31
Irrigation	93	0.9	270	50	35
Observation	352	0.1	240	29	27
Public Supply	138	0.5	163	33	30
Unknown	34	2.0	125	32	25
San Juan Bautista	205	0.1	513	27	13
Dom/Irrig	11	0.5	110	19	11
Domestic	25	0.5	128	29	14
Irrigation	29	0.1	126	26	10
Observation	80	0.1	513	23	7
Public Supply	48	0.5	176	37	22
Unknown	12	0.1	109	18	9
Grand Total	1,368	0.1	513	34	26

4.2 Distribution of Groundwater Nitrate Concentrations

Results from 1,105 wells were used to map the distribution of estimated groundwater nitrate (as NO_3) concentrations in shallow groundwater. The wells included in the nitrate mapping analysis and definition of shallow groundwater (generally, depths of less than 420 feet) are described in previous sections of this TM. For wells with multiple sample dates from 2000 to 2014, the maximum nitrate concentrations for each well were used in the analysis.

Summary statistics for nitrate concentrations are shown in **Table 8**. The mean concentration for the whole valley was 36 mg/L as NO_3. The median was 30 mg/L as NO_3. Values ranged from less than the detection limit of 0.05 mg/L to 513 mg/L. A total of 285 wells (26%) had maximum concentrations over the MCL of 45 mg/L. In the four subbasins, the mean nitrate concentration ranged from a low of 27 mg/L in the San Juan Bautista Subbasin to 44 mg/L in the Bolsa Subbasin. The percent of wells with maximum nitrate concentrations exceeding the MCL ranged from 16% in the San Juan Bautista Subbasin to 32% in the Bolsa Subbasin.

Table 8. Summary Statistics for Maximum Groundwater Nitrate Concentrations

	Entire Gilroy-Hollister Valley	Llagas Subbasin	Bolsa Subbasin	Hollister Subbasin	San Juan Bautista Subbasin
Mean (mg/L)	36	39	44	29	27
Median (mg/L)	30	30	25.8	9.3	13
Minimum (mg/L)	0.05	0.05	1.00	0.44	0.06
Maximum (mg/L)	513	270	297	225	513
Number of wells	1105	785	38	115	167
Number of wells (percentage) with concentrations over the MCL	285 (26%)	227 (29%)	12 (32%)	19 (17%)	27 (16%)
Total Area Mapped (acres)	157,478	55,898	20,906	32,653	48,022
Percent Area above MCL[a]	15%	27%	9%	5%	11%

a) Calculated based on kriged area: the Llagas, Hollister, Bolsa, and the northern half of San Juan Bautista Subbasins.

Table 9 shows the summary statistics for wells sampled on CCGC parcels. The mean concentration from domestic wells was 36.5 mg/L and the median was 21.0 mg/L. Average concentrations ranged from less than the detection limit to 204 mg/L. See **Appendix B** for all well exclusions. The QA/QC results for groundwater sampling conducted by CCGC are provided in **Appendix C**, well information and results are presented in **Appendix D**, and the Exceedance Notification follow-up report is in **Appendix E**.

Table 9. Summary Statistics for Groundwater Nitrate Concentrations Sampled under the CCGC

	Domestic and Domestic/Irrigation	Irrigation
Mean (mg/L)	36.5	77.8
Median (mg/L)	21	83
Standard Deviation	43.7	36.3
Minimum (mg/L)	0.5	22
Maximum (mg/L)	204	123
Number of wells	141	4
Number of wells (percentage) with concentrations over the MCL	34 (24.2%)	3 (74%)

a. One well was incorrectly sampled as it was not on a CCGC member parcel and although it was used in the nitrate contour map creation, the results were not used for the statistical analysis or reporting for samples collected on CCGC parcels.

One hundred and forty one (141) domestic supply wells were sampled by the CCGC in the GHV Basin. From the 3,027 DWR well completion reports with well depth information in the GHV, 2,925 have well depths less than 420 feet. These data indicate that the CCGC sampled about 5% of domestic wells for which DWR well completion reports exist in the GHV Basin. A total of 114 known domestic wells were used in the analysis which would indicate a representation of 4% of domestic wells for which DWR well completion reports exist in the GHV. Most of the domestic well logs obtained are located in the Llagas Subbasin.

It is unknown how many of the wells described in the DWR well completion reports remain in operation. Even though wells were removed based on well decommissioning reports found when processing and analyzing the DWR well completion reports, there are likely wells that are no longer used or have been abandoned for which DWR does not have documentation. **Figure 7** shows the known domestic well locations based on the wells sampled by the CCGC and data obtained from other sources and sections with DWR domestic well completion reports. **Figure 7** indicates that the domestic well data used for this report adequately represents the areas where, based on DWR well completion reports and land use data, domestic wells have been installed in agricultural areas. The Bolsa Subbasin contains farmland; however, there are very limited CCGC member parcels in most of the subbasin. The only known domestic wells in this subbasin occur in the south near Hollister.

Boxplots (**Figure 8**) show the range and median of groundwater nitrate concentrations for the four subbasins. In the Bolsa Subbasin, groundwater nitrate concentrations are generally below the MCL, but there are some wells with concentrations that exceed the MCL ranging to over 100 mg/L. Similarly in the Hollister and Llagas Subbasins, the majority of the concentrations were below the MCL but a substantial number of wells had concentrations exceeding the MCL, ranging into several hundreds of mg/L. In the San Juan Bautista Subbasin, almost all concentrations were below the MCL, with a few outliers exceeding the MCL.

Figures 9a to 9c show boxplots of nitrate concentrations by depth for the Llagas, Hollister, and San Juan Bautista Subbasins. The Bolsa Subbasin is not included as there were only two known well depths (270 and 740 feet) for wells with nitrate concentrations. These wells had nitrate concentrations of 87 and 0.5 mg/L, respectively. The data in **Figure 9** do not show any distinct trends in nitrate concentrations with depth. In the Llagas Subbasin, median concentrations are between 20 and 40 mg/L for depths between 51 and 500 feet, with medians of less than 20 mg/L for wells less than 50 feet deep and greater than 500 feet deep. In the Hollister Subbasin, median concentrations are less than 25 mg/L for all depth intervals, although the highest median occurs in the 451 to 500 foot depth interval. However, the high median nitrate concentration in the 451-500 foot depth interval for the Hollister Subbasin may not be representative of the entire subbasin area, as that interval only includes two data points. In the San Juan Bautista Subbasin, median concentrations were less than 15 mg/L for all depth intervals.

Results from 1,105 wells were used to determine the areal distribution of estimated groundwater nitrate (as NO_3) concentrations. Mapping was limited to the areas with the most nitrate data available, including the Llagas, Hollister, Bolsa, and the northern half of San Juan Bautista Subbasins. **Figure 10** shows the areal distribution of estimated groundwater nitrate concentrations based on kriging results in the GHV Basin[41], which provides an estimate of nitrate levels at unsampled locations. It should be noted that the nitrate concentration contours are only an estimate and are based on nearby measured values. Mapping of estimated nitrate concentrations was limited to areas within 1.5 miles of the data points.

Mapped groundwater nitrate concentrations in the Llagas Subbasin are generally less than one-half of the MCL near the basin boundary. Nitrate concentrations are generally greater than the MCL along the valley axis. Twenty-seven percent of the Llagas Subbasin is mapped as having concentrations greater than the MCL. In the Hollister Subbasin, mapped groundwater nitrate concentrations are generally less than one-half of the MCL. Exceptions include the southwest corner of the subbasin near Hollister. Five percent of the Hollister Subbasin is mapped as having concentrations greater than the MCL. In the San Juan Bautista Subbasin, mapped groundwater nitrate concentrations were mostly limited to the northern half of the subbasin. Eleven percent of this area is mapped as over the MCL, however there is large spatial variance between high nitrate concentrations sample points in this area. Nine percent of the Bolsa Subbasin is mapped as having concentrations greater than the MCL.

---

[41] The locations of CCGC member wells were obfuscated to protect member privacy. The locations of CCGC member wells shown on Figure 10 were randomly adjusted up to 0.5 miles in both the east-west and north-south directions. The wells are plotted within a 1 mi^2 block centered over the actual well location. The actual locations were used when kriging the nitrate concentration surface.

The density of wells included in the nitrate mapping analysis varies by subbasin. Well density in the Llagas Subbasin was 1 well per 71 acres (9 wells per square mile). In the Bolsa Subbasin, the spatial density of wells was 1 well per 550 acres (1.2 wells per square mile). In the Hollister Subbasin, the spatial density of wells was 1 well per 284 acres (2.3 wells per square mile). In the San Juan Bautista Subbasin, the density was 1 well per 288 acres (2.2 wells per square mile).

Figure 11 shows the locations of CCGC member parcels overlain on the mapped areas of varying concentration ranges shown in **Figure 10**. Member parcels overlay all concentration ranges. Member parcels are present throughout most of the southern Llagas Subbasin with limited parcels in the northern Llagas Subbasin. However, the density of member parcels is lower in the Hollister Subbasin, and sparse in the Bolsa and San Juan Bautista Subbasins. The highest concentration of member parcels in the San Juan Bautista Subbasin is in the northern half.

Figure 12 shows the probability of exceeding a 45 mg/L nitrate concentration based on indicator kriging results. For indicator kriging, the data were transformed into either zeroes or ones depending on whether they are above or below a specified threshold. The transformed data values are used as input to ordinary kriging and the indicator kriging prediction at a location is interpreted as the probability that the threshold is exceeded. The probability map provides an analysis to address the uncertainty of nitrate concentrations at unsampled locations by providing a probability of exceeding the MCL. In areas where nearby wells have measured concentrations above the nitrate MCL, higher probabilities of exceeding the MCL are calculated at unsampled locations. Conversely, in areas where nearby wells have measured concentrations below the MCL, lower probabilities of exceeding the MCL are calculated at unsampled locations.

Figure 12 shows that in the central part of the Llagas Subbasin and the area spanning from western San Juan Bautista Subbasin to the City of Hollister have a greater than 60% probability of exceeding the MCL (45 mg/L). The estimated probability for the rest of the GHV Basin is generally less than 40%.

Appendix A presents kriging methods and parameter values used for the analysis, and the related kriging statistics.

4.3 Factors Affecting the Distribution of Nitrate Concentrations

Data related to major ions, nitrate, field parameters, percent sand in soil, and hydrogeology were used to understand factors and processes affecting groundwater nitrate concentrations.

4.3.1 <u>Major Ions and Piper Diagrams</u>

Major-ion data (calcium, magnesium, sodium, potassium, sulfate, chloride, bicarbonate) and Piper diagrams[42] were used to interpret geochemistry. Piper diagrams provide a graphic way of viewing the relative concentrations of major ions in groundwater (calcium, magnesium, sodium, potassium, chloride, sulfate, bicarbonate and carbonate). Groundwater chemical characteristics displayed on a Piper diagram are shown in **Figure 13**.

Boyle and others[43] hypothesized that variation in major-ion chemistry in Salinas Valley groundwater result from geochemical processes occurring along groundwater flow paths. Specifically, relatively high concentrations of calcium and magnesium are associated with more recently recharged water. Calcium and magnesium can move from groundwater to clays and displace sodium which tends to increase in concentration as groundwater moves along its flow path. Additionally, groundwater tends to continuously dissolve carbonate minerals found naturally in geological materials as it travels through the subsurface which results in higher concentrations of bicarbonate in older waters. Lee[44] also demonstrated this geochemical evolution in the southeastern United States.

Figures 14 to 17 show the Piper diagrams for the samples collected by the CCGC in the Gilroy-Hollister Valley for the four subbasins. Points representing groundwater samples collected in the Llagas Subbasin (**Figure 14**) may indicate a general chemical shift from calcium-magnesium/chloride-sulfate waters to sodium/potassium bicarbonate waters. Similar geochemically evolutionary patterns are less evident in the major-ion data for the Bolsa, Hollister and San Juan Bautista Subbasins (**Figures 15-17**). Available well depths are posted on the Piper diagrams **(Figures 14- 17)**; however, there is no apparent relation of water type to well depth.

4.3.2 <u>Nitrate Concentrations and Oxidation-Reduction Potential and Dissolved Oxygen Concentrations</u>

Figure 18 indicates an oxidation-reduction potential (ORP) influence on nitrate concentrations and speciation. Higher nitrate concentrations were generally associated with less reducing conditions over about 75 mV. The line delineating an ORP value of 75 mV indicates the theoretical redox potential below which nitrate is denitrified[45]. Where ORP values below 75 mV were measured, nitrate

---

[42] Hem, Hem JD. (1985). Study and Interpretation of the Chemical Characteristics of Natural Water. Third Edition. U.S. Geological Survey Water-Supply Paper 2254

[43] Boyle, Dylan, King, Aaron, Kourakos, Giorgos, Lockhart, Katherine, Mayzelle, Megan, Fogg, Graham E. and Harter, Thomas. 2012. Addressing Nitrate in California's Drinking Water With a Focus on Tulare Lake Basin and Salinas Valley Groundwater Report for the State Water Resources Control Board Report to the Legislature, Technical Report 4

[44] Lee, R.W. 1985. Geochemistry of Groundwater in Cretaceous Sediments of the Southeastern Coastal Plain of Eastern Mississippi and Western Alabama, Water Resources Research, 21, 1451 - 1556

[45] **Stumm W. and Morgan, J.J. 1981. *Aquatic Chemistry*, John Wiley and Sons, New York**

concentrations were generally lower than where ORP values were above 75 mV. The majority of the samples with ORP values below 75 mV were collected in wells in the Hollister Subbasin (**Figure 19**). Dissolved oxygen concentrations varied from 0.01 to 12.9 mg/L. There was no apparent relation between dissolved oxygen and nitrate concentrations.

4.3.3 Relation of Nitrate Concentrations to Spatially Variable Soil Texture

ArcGIS Spatial Analyst was used to map the mean nitrate values for areas with different percent sand values for the four subbasins. Higher average nitrate concentrations are associated with percent sand values between 0 to 50% in the Llagas Subbasin (**Figure 20**). These less sandy soils are present on the eastern side and center of the subbasin. In the Llagas Subbasin, soil percent sand decreases from north to south and west to east. In the Bolsa, Hollister Area, and San Juan Bautista subbasins, nitrate concentrations that exceed the MCL occur in all percent sand values with limited spatial trends (**Figure 20**). Overall, there is no discernable relationship between nitrate concentrations and soil texture in the Gilroy-Hollister Valley Basin.

5 SUMMARY AND CONCLUSIONS

This section provides a summary of the primary study objectives, findings, and data gaps. The summary includes the conclusions derived from the collection, analysis, and mapping of groundwater nitrate concentration data for wells that represent the domestic supply aquifers in the Gilroy-Hollister Valley Groundwater Basin.

5.1 Study Objectives

- Characterize shallow groundwater aquifers with focus on domestic drinking water supply.
- Prepare estimated nitrate concentration maps of the Gilroy-Hollister Valley covering areas with sufficient data.
- Identify data gaps and study limitations.

5.2 General Findings

- Based on the processing and analysis of several thousand DWR well completion reports, the large majority of domestic wells (95%) in the GHV Basin are screened within 420 feet of land surface.
- Well depth information was obtained for 587 of the wells used for mapping. Most wells (93%) were shallower than 420 feet. Where well depth and screened interval information were available, wells deeper than 420 feet were excluded with a few exceptions.
- Well completion reports were obtained for 74 public supply wells which is a relatively small portion of the public supply wells in GeoTracker GAMA. The average depth for these well completion reports was 357 feet.

- Results from 1,105 wells were used to characterize the distribution of groundwater nitrate (as NO_3) concentrations in the GHV Basin. For wells with multiple sample dates from 2000 to 2014, the maximum nitrate concentrations were used for each well.
- The mean concentration was 36 mg/L. The median was 30 mg/L. Concentrations ranged from less than the detection limit of 0.05 mg/L to 513 mg/L. A total of 285 wells (26%) had average concentrations over the MCL of 45 mg/L.
- One-hundred and forty-one domestic and domestic/irrigation wells were sampled on CCGC parcels. The numbers of wells within each subbasin are:
    - Llagas - 81
    - Hollister - 30
    - Bolsa - 6
    - San Juan Bautista - 24
- Within the four subbasins, the percentage of wells exceeding the MCL varied from 16% in the San Juan Bautista Subbasin to 32% in the Bolsa Subbasin.
- Within the part of the GHV Basin where nitrate concentrations were estimated, 15% of the area was mapped as having nitrate concentrations over the MCL.
- Within the four subbasins, the percentages of the area where estimated nitrate concentrations are greater than the MCL are: 5% in the Hollister Subbasin, 11% in the San Juan Batista Subbasin, 9% in the Bolsa Subbasin, and 27% in the Llagas Subbasin.
- Groundwater nitrate concentrations did not show distinct trends with depth.
    - In the Llagas Subbasin, median nitrate concentrations were between 20 and 40 mg/L for depths of 50 to 500 feet.
    - In the Hollister Subbasin, median nitrate concentrations were less than 25 mg/L for all depth intervals.
    - In the San Juan Bautista Subbasin, median nitrate concentrations were less than 15 mg/L for all depth intervals.
- Mapped groundwater nitrate concentrations in the Llagas Subbasin are generally less than one-half of the MCL near the basin boundary. Nitrate concentrations are generally greater than the MCL along the valley axis. Twenty-seven percent of the Llagas Subbasin is mapped as having concentrations greater than the MCL. In the Hollister Subbasin, mapped groundwater nitrate concentrations are generally less than one-half of the MCL. Exceptions include the southwest corner of the area, near Hollister. Five percent of the Hollister Subbasin is mapped as having concentrations greater than the MCL.
- In the San Juan Bautista Subbasin, mapped groundwater nitrate concentrations were limited to the northern half of the Subbasin where the most nitrate data are available. Eleven percent of this area is mapped as over the MCL. Nine percent of the Bolsa Subbasin is mapped as having concentrations greater than the MCL.
- Uncertainty was addressed using indicator kriging to develop a map of the probability of exceeding the nitrate MCL throughout Gilroy-Hollister Valley. The results generally indicate that the central part of the Llagas Subbasin and the area spanning from western San Juan Bautista Subbasin to the City of Hollister have a greater than 60% probability of exceeding the MCL (45 mg/L). The estimated probability for the rest of the GHV Basin is generally less than 40%.
- Lower nitrate concentrations in CCGC samples were generally associated with chemically reducing conditions with oxidation-reduction potential values less than 75 mV. The line

delineating an ORP value of 75 mV indicates the theoretical redox potential below which nitrate is denitrified. The majority of the samples with oxidation-reduction potential values below 75 mV were collected in wells in the Hollister and San Juan Bautista Subbasins.
- Well density in the four subbasins varied from 1.9 to 9 wells per square mile.
- Major-ion data (calcium, magnesium, sodium, potassium, sulfate, chloride, bicarbonate) were summarized using Piper diagrams.
- Points representing groundwater samples collected Llagas Subbasin may indicate a general chemical shift from calcium-magnesium/chloride-sulfate waters to sodium/potassium bicarbonate waters; such a chemical shift is less evident in the other subbasins.
- There were no distinct trends for nitrate concentrations versus percent sand in soils.

Based on review of nitrate data and various factors as described above, there are likely several factors that influence nitrate concentrations in any given area.

5.3 Data Gaps

- There are several areas where additional data will be beneficial for the characterization of groundwater quality. These include areas where there are large data gaps such as the northern and western portions of the Bolsa Subbasin, the northwestern portion of the Hollister Subbasin, and the southern portion of the San Juan Bautista Subbasin, and smaller areas along the fringes of each subbasin.
- Future inclusion of new data collected by the USGS, SCVWD, SBCWD, and other sources will improve the characterization of groundwater quality for human consumption.

FIGURES

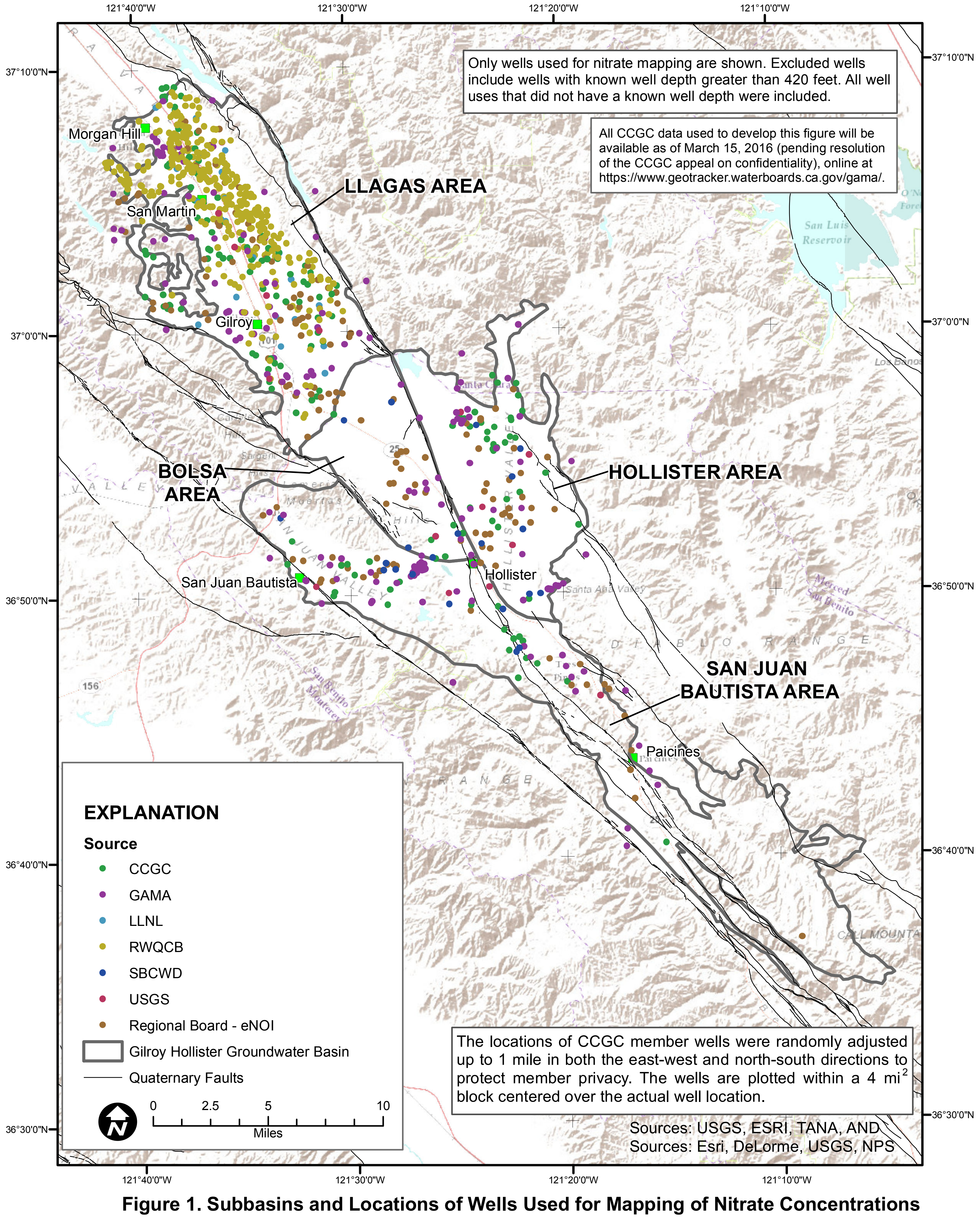


Figure 1. Subbasins and Locations of Wells Used for Mapping of Nitrate Concentrations

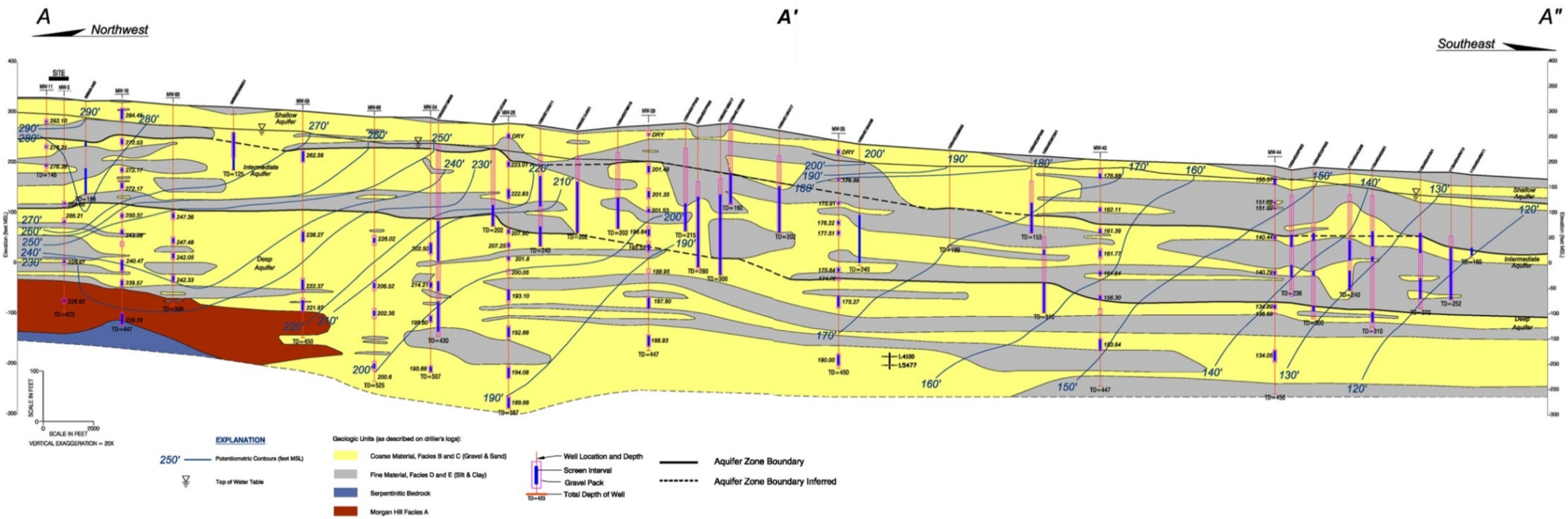


Figure 2. Geologic Cross-Section of the Llagas Subbasin

Note: Modified from Olin Corporation's Llagas Subbasin Characterization 2008.

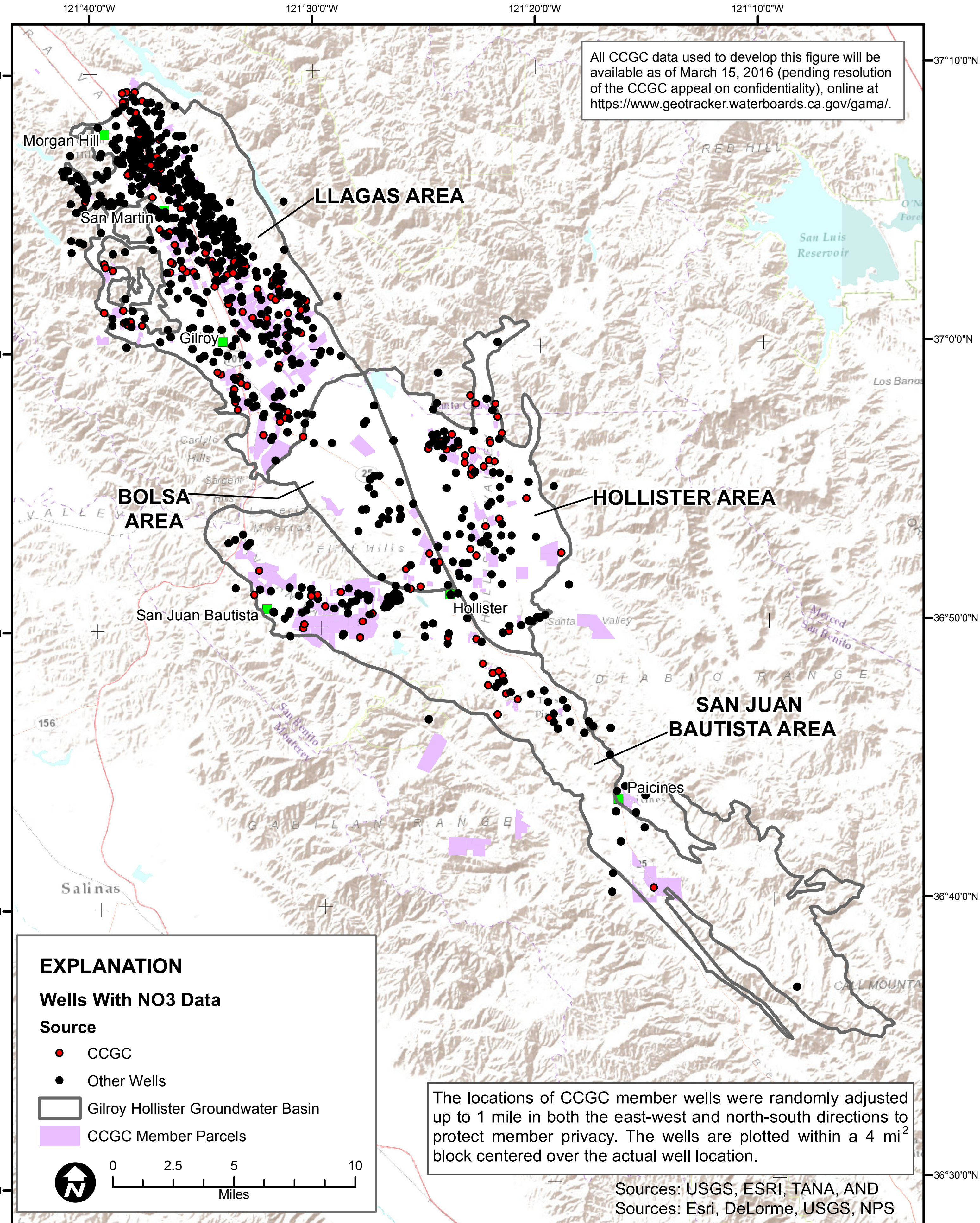


Figure 3. Locations of CCGC Member Parcels and Wells Used for Analysis

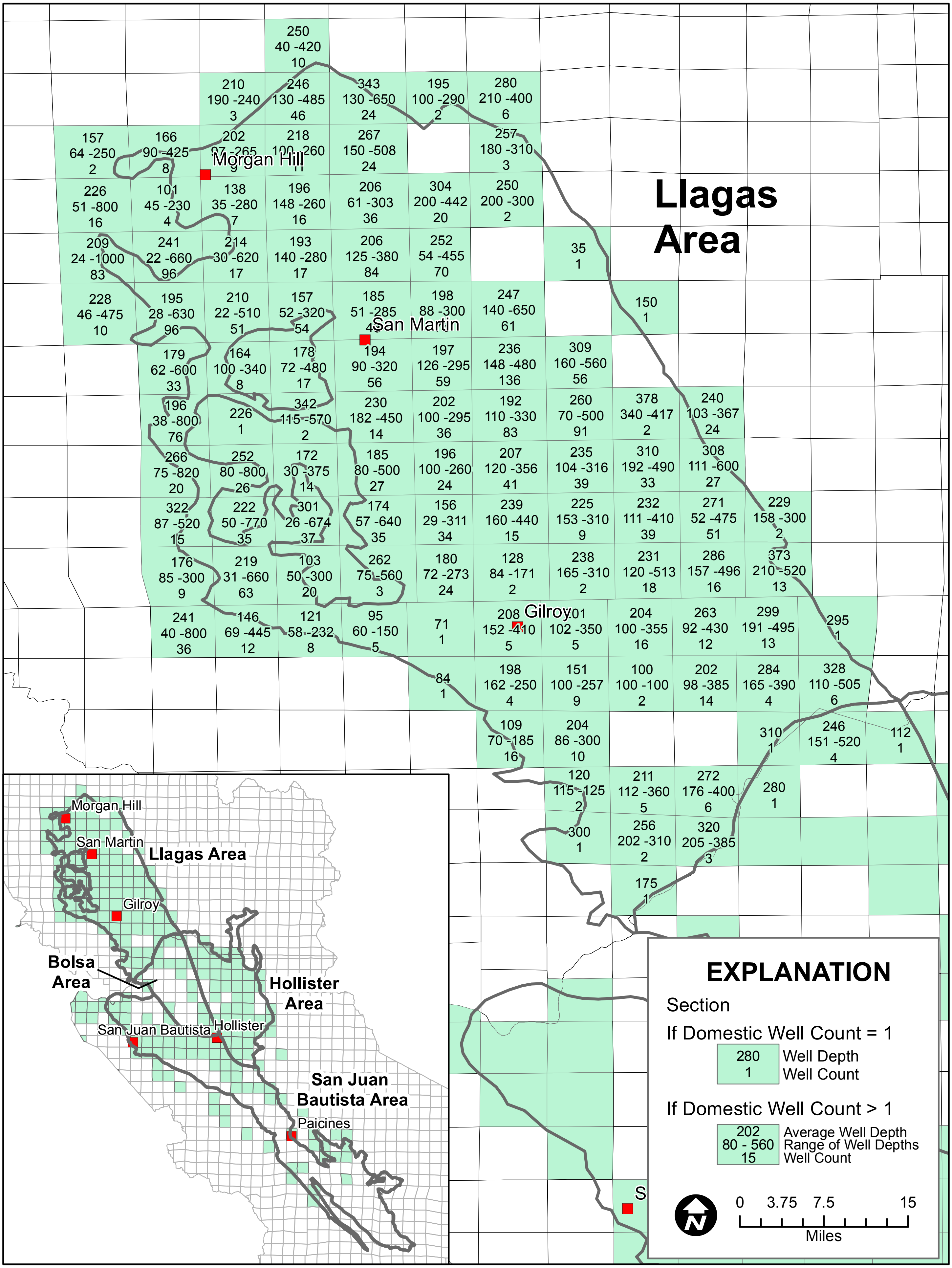


Figure 4a. Average and Range of Domestic Well Depths by Township in Llagas Subbasin

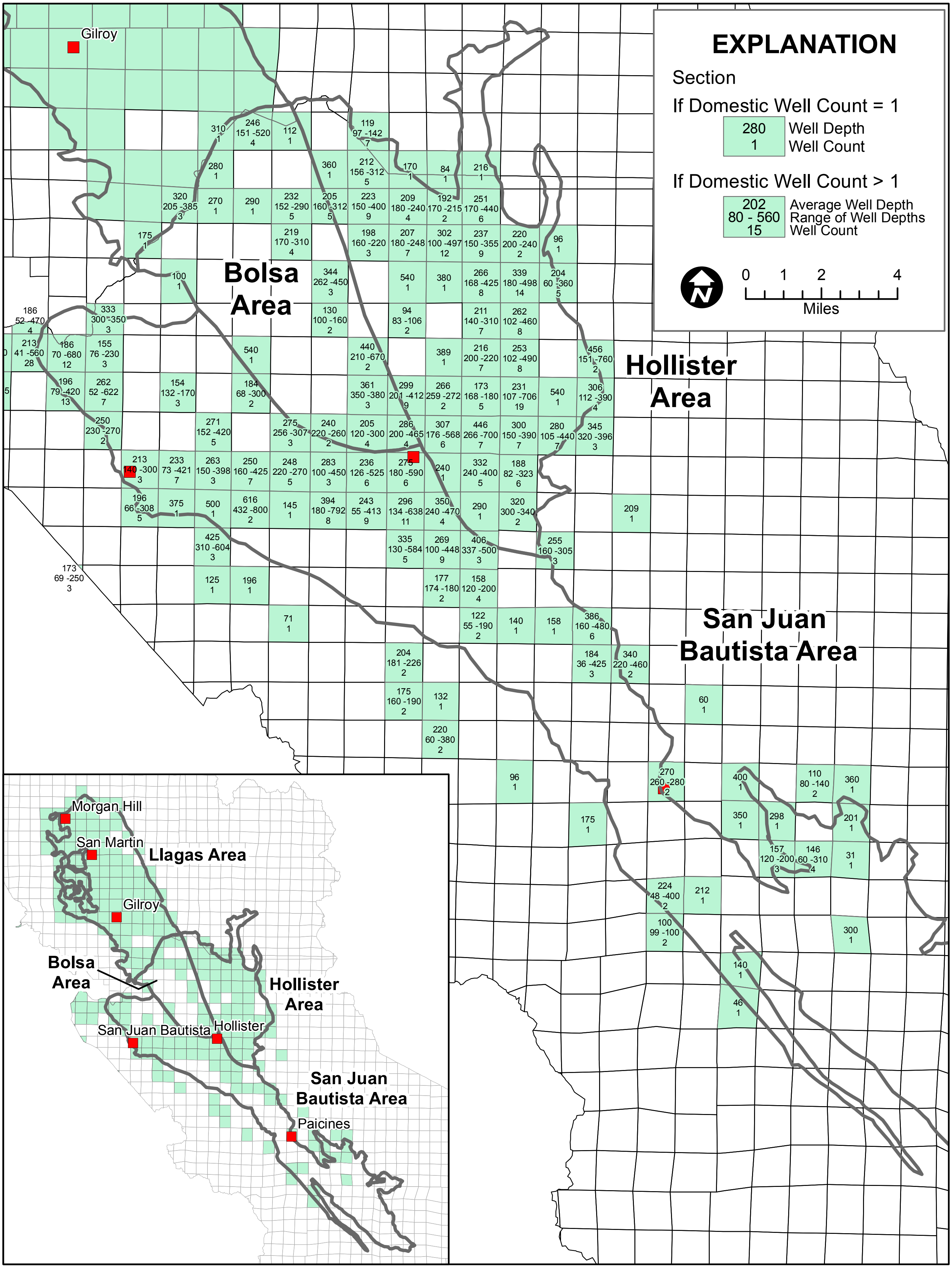


Figure 4b. Well Depths by Section, Other Basins

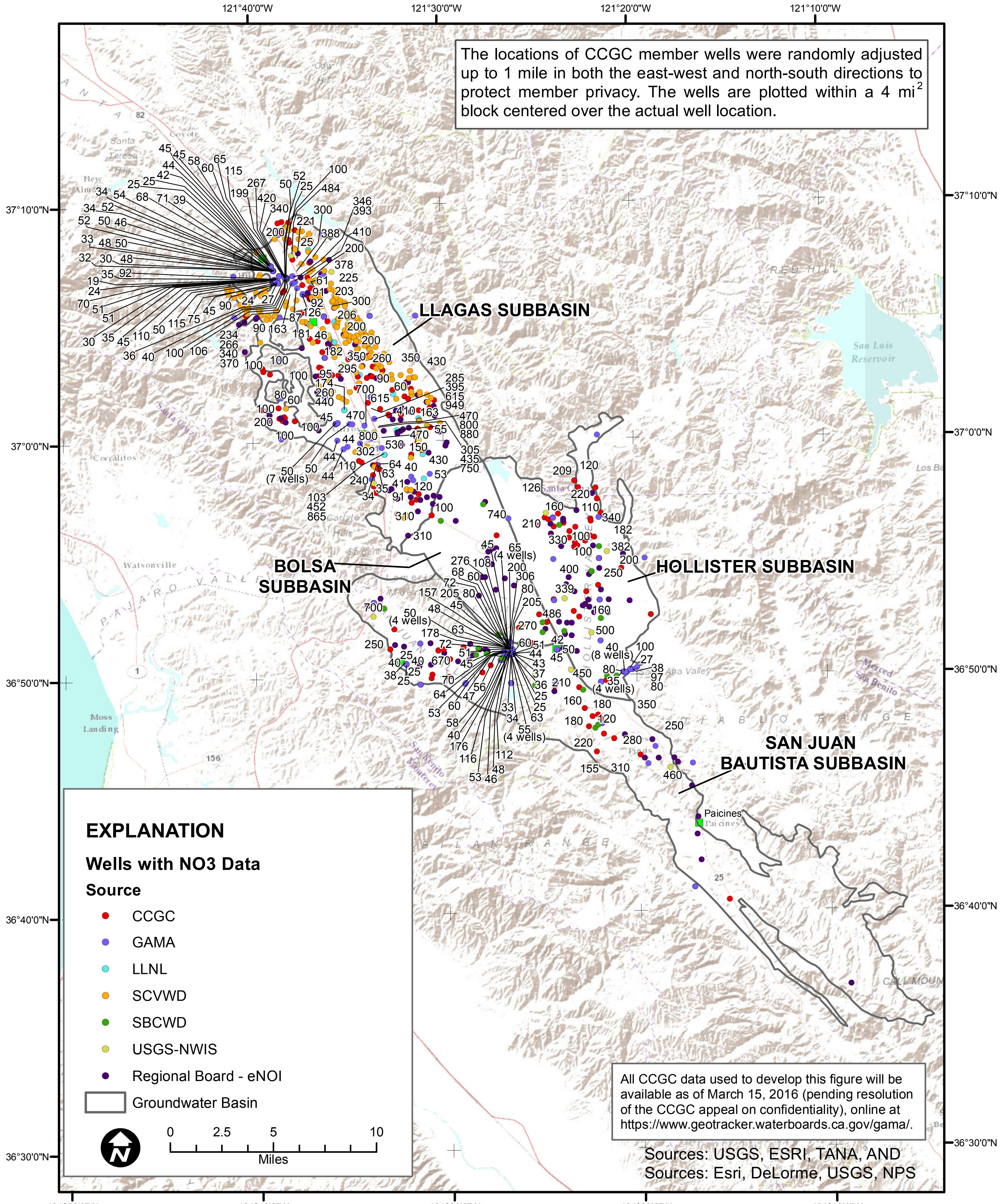


Figure 5. Distribution of Known Well Depths

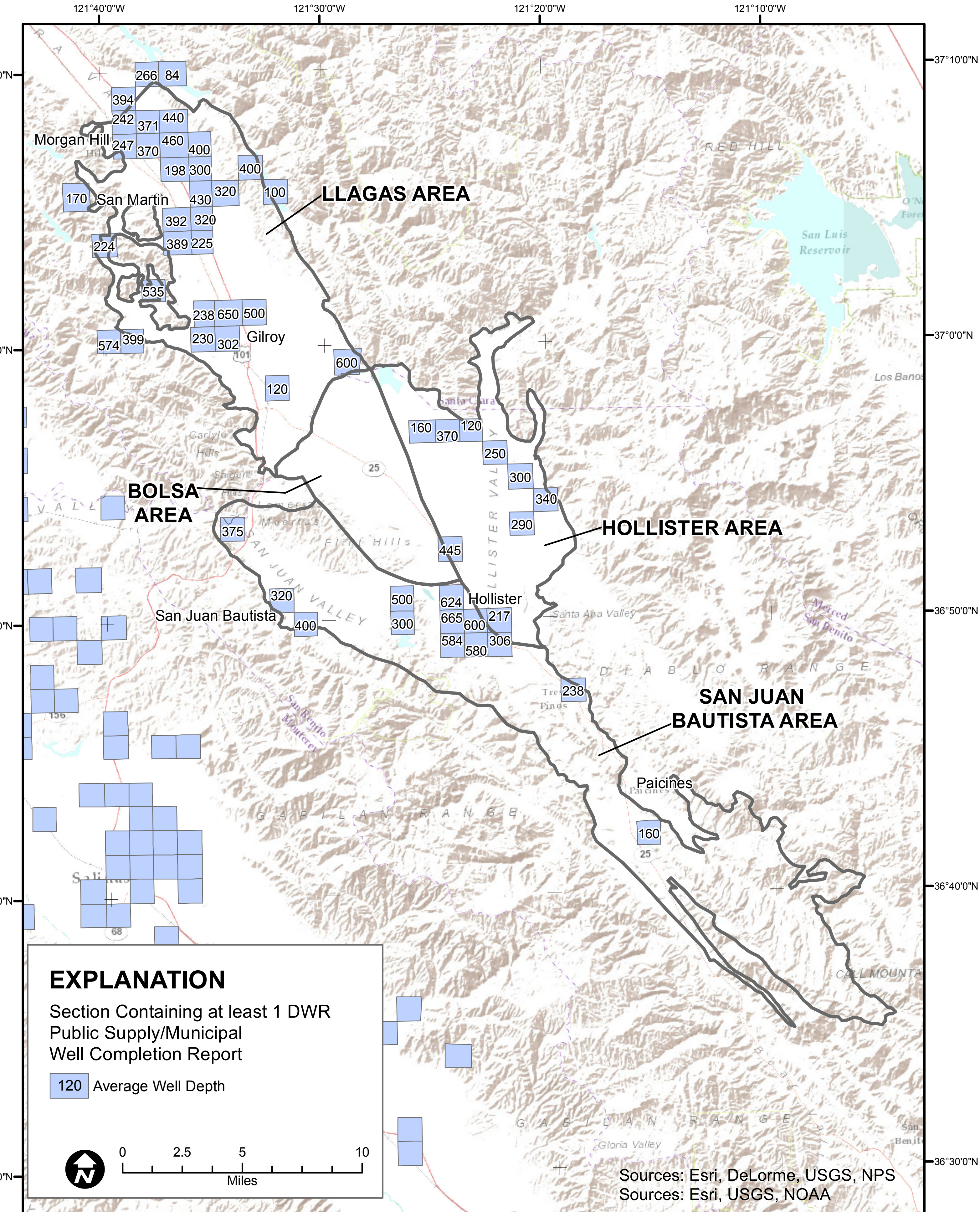


Figure 6. Average Public Supply Well Depth by Section

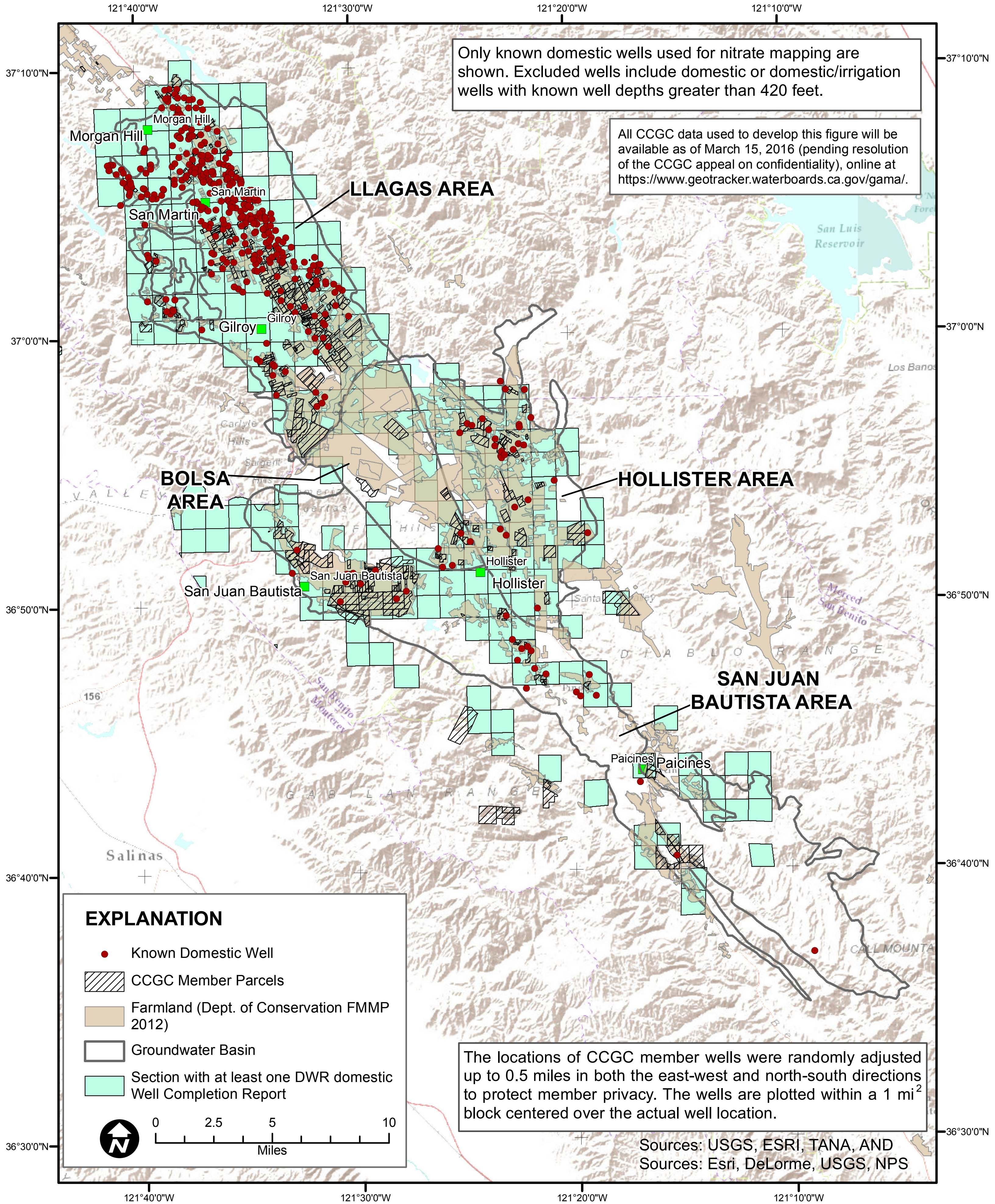


Figure 7. Known Domestic Wells Sampled by CCGC

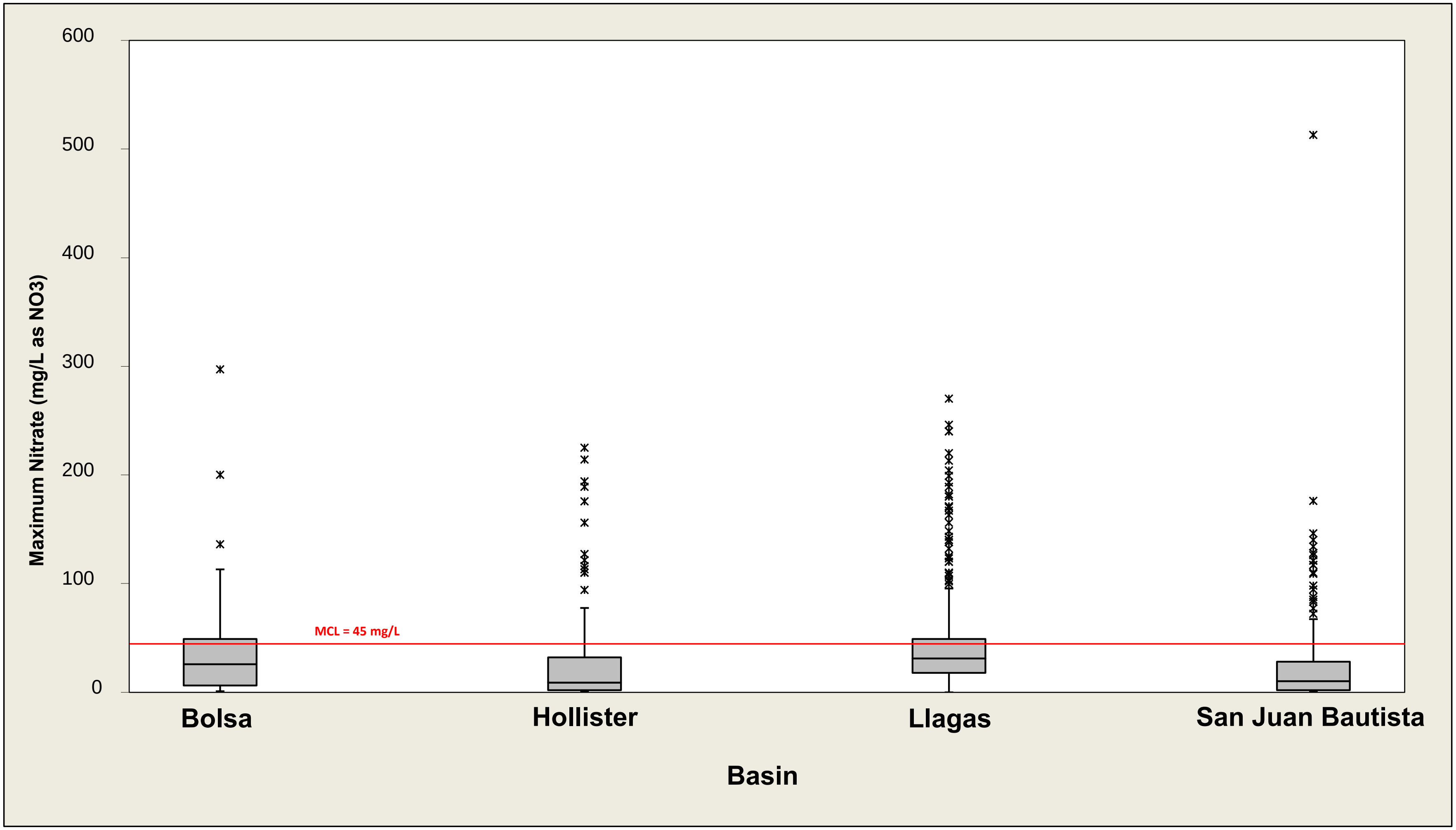


Figure 8. Boxplots Showing Medians and Ranges for Maximum Nitrate Concentrations for the Four Subbasins

Note: The grey rectangle represents the inner quartile range of the data. The horizontal line in the rectangle represents the median. Vertical lines represent 90% of the data. Asterisks represent values beyond 90% of the data.

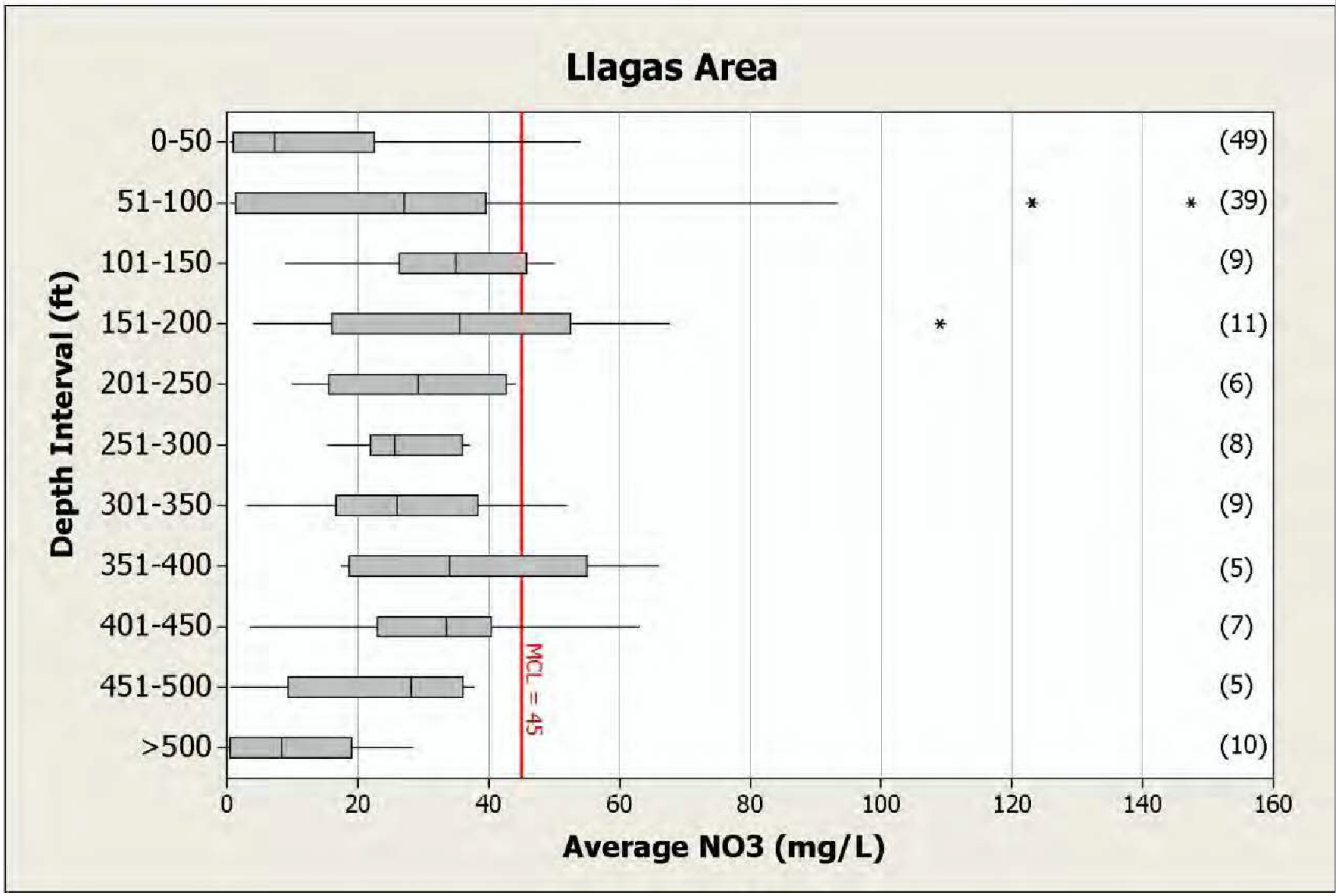


Figure 9a. Boxplots Showing Medians and Ranges of Average Nitrate Concentrations for the Llagas Subbasin by Depth

Note: The grey rectangle represents the inner quartile range of the data. The vertical line in the rectangle represents the median. Horizontal lines represent the range of 90% of the data. Asterisks represent concentrations beyond the range of 90% of the data. The numbers in parentheses provide the well count.

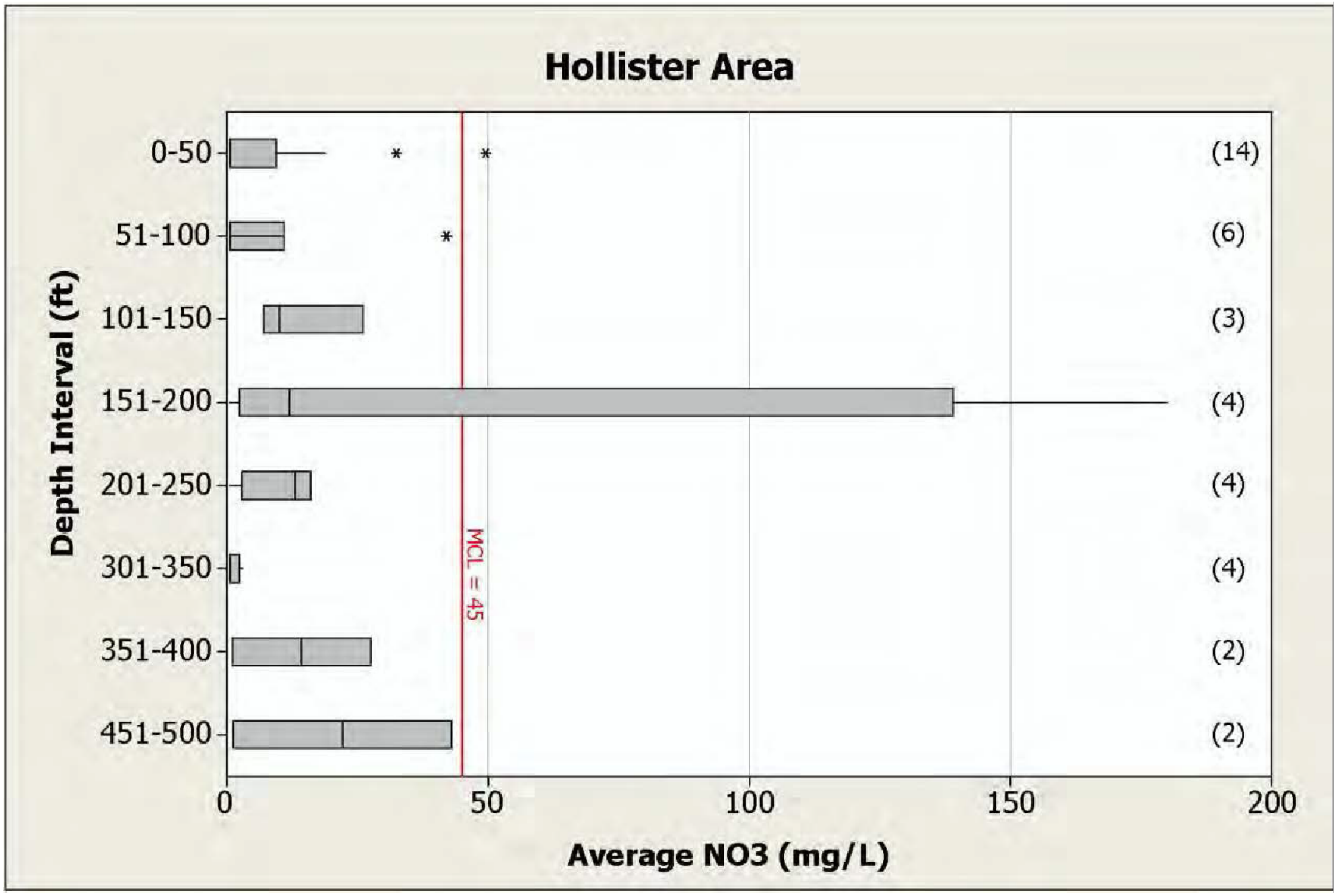


Figure 9b. Boxplots Showing Medians and Ranges of Average Nitrate Concentrations for the Hollister Subbasin by Depth

Note: The grey rectangle represents the inner quartile range of the data. The horizontal line in the rectangle represents the median. Vertical lines represent 90% of the data. Asterisks represent values beyond 90% of the data.

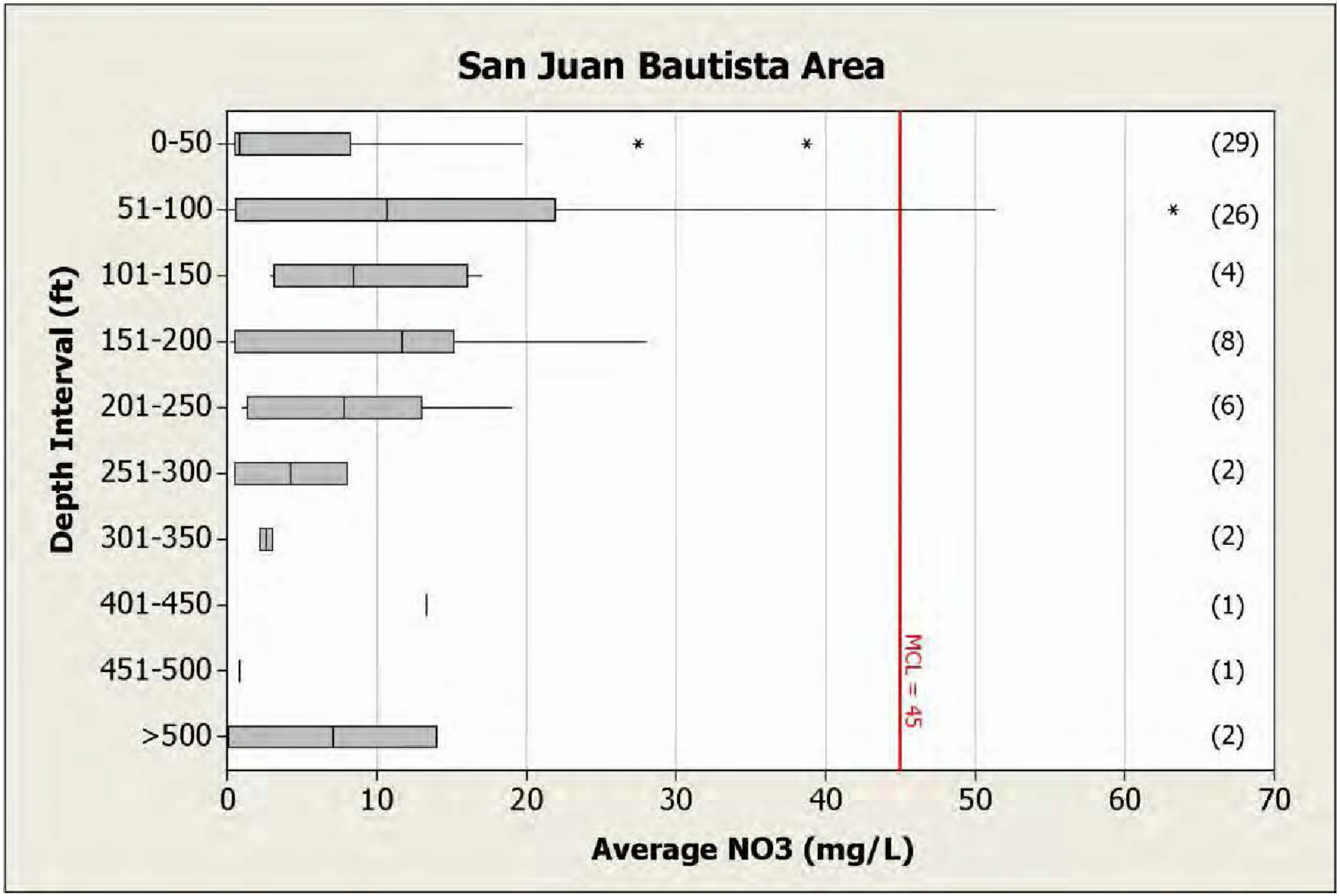


Figure 9c. Boxplots Showing Medians and Ranges of Average Nitrate Concentrations for the San Juan Bautista Subbasin by Depth

Note: The grey rectangle represents the inner quartile range of the data. The vertical line in the rectangle represents the median. Horizontal lines represent the range of 90% of the data. Asterisks represent concentrations beyond the range of 90% of the data. The numbers in parentheses provide the well count.

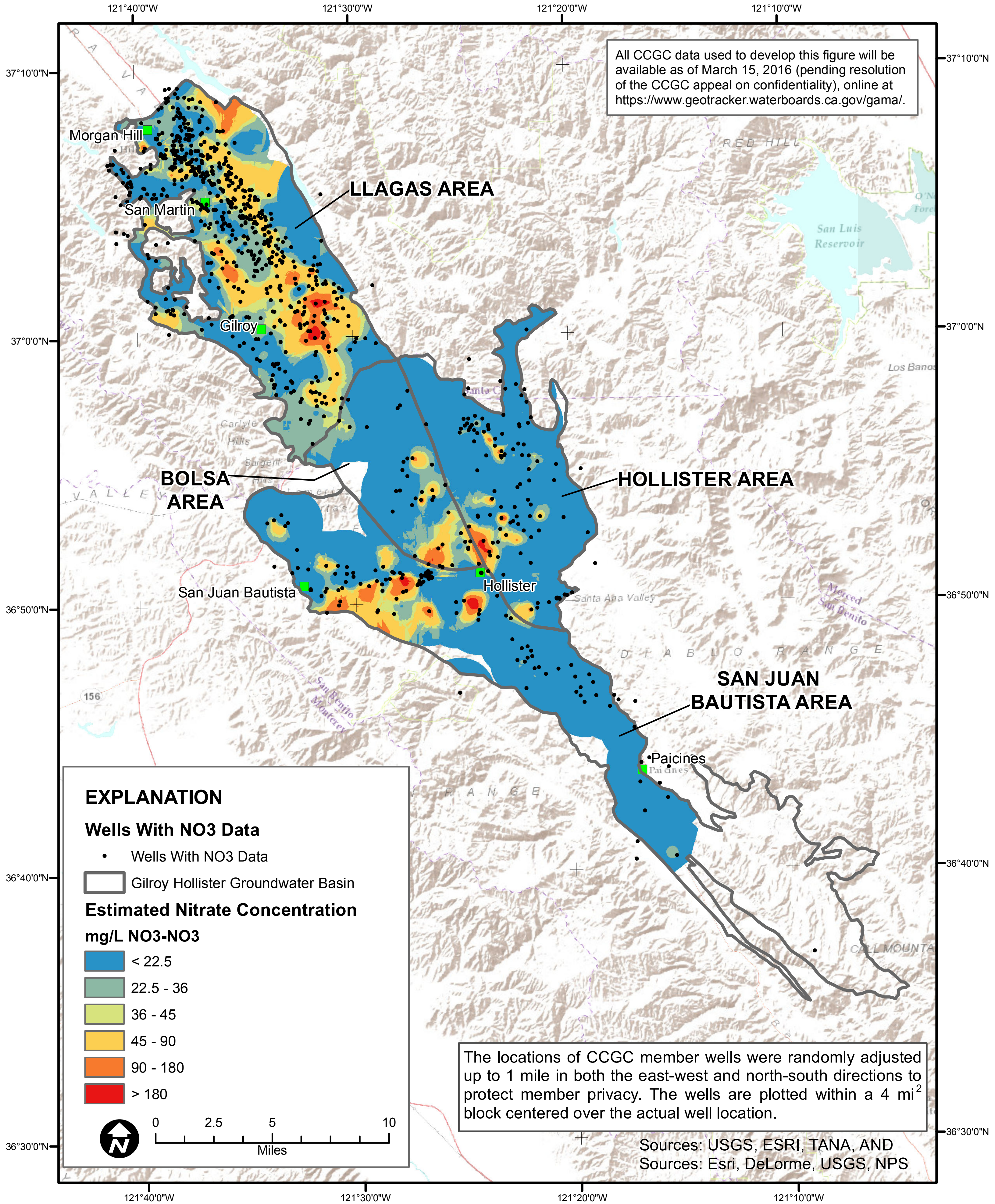


Figure 10. Kriged Nitrate Concentrations in Gilroy Hollister Valley

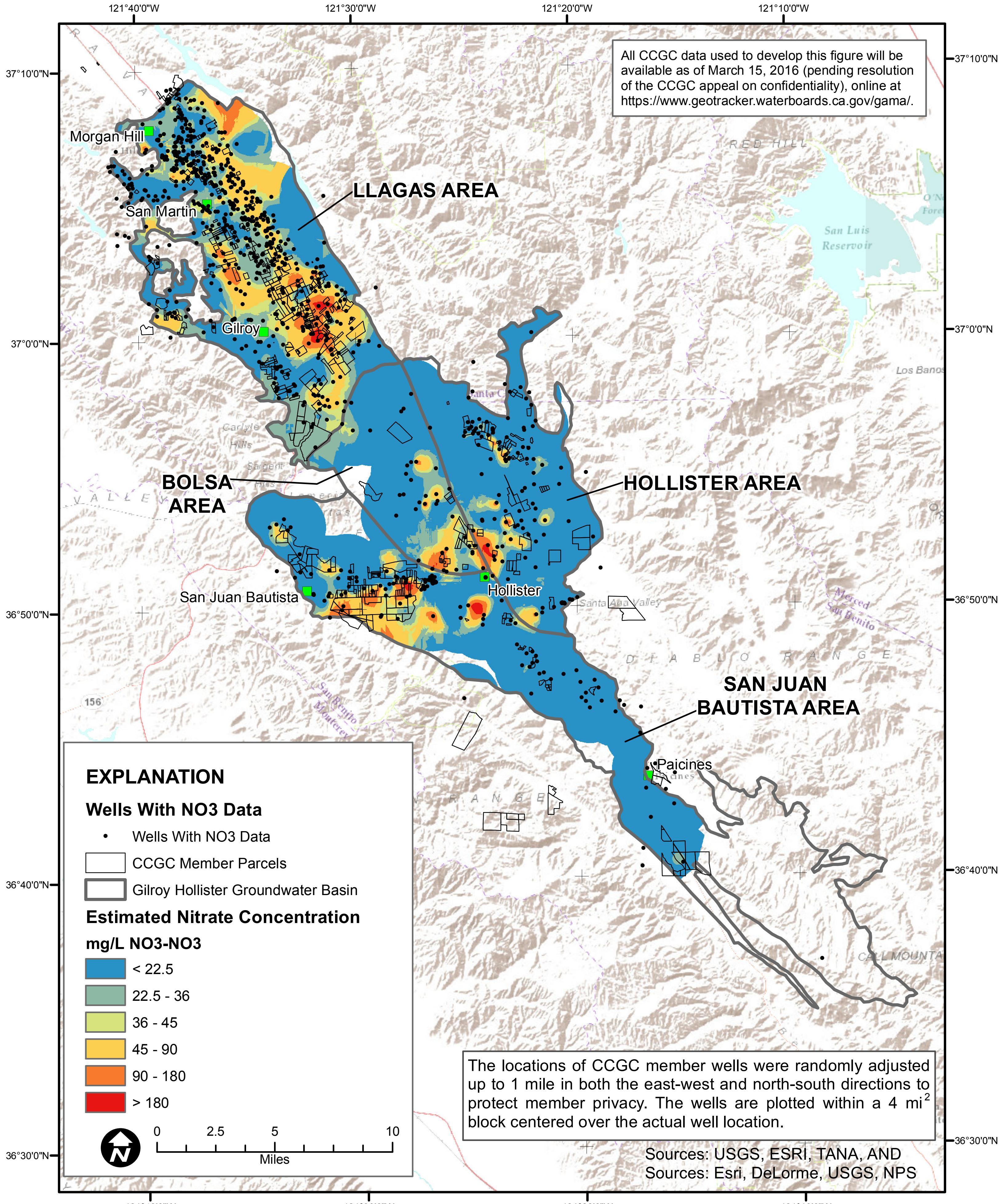


Figure 11. Kriged Nitrate Concentrations and CCGC Member Parcels

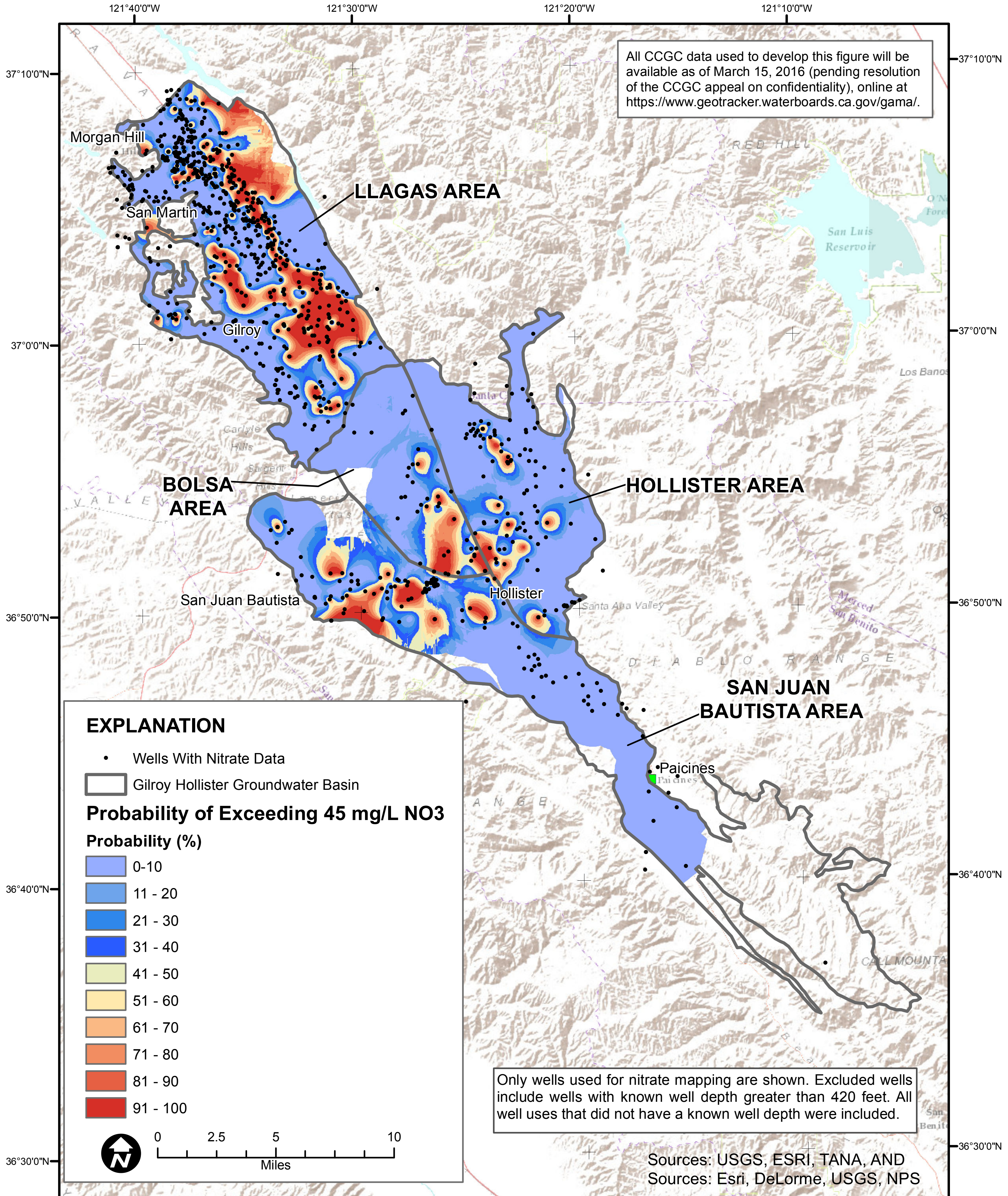


Figure 12. Distribution of Estimated Probability of Exceeding Nitrate (as NO3) Concentrations of 45 mgL in Groundwater

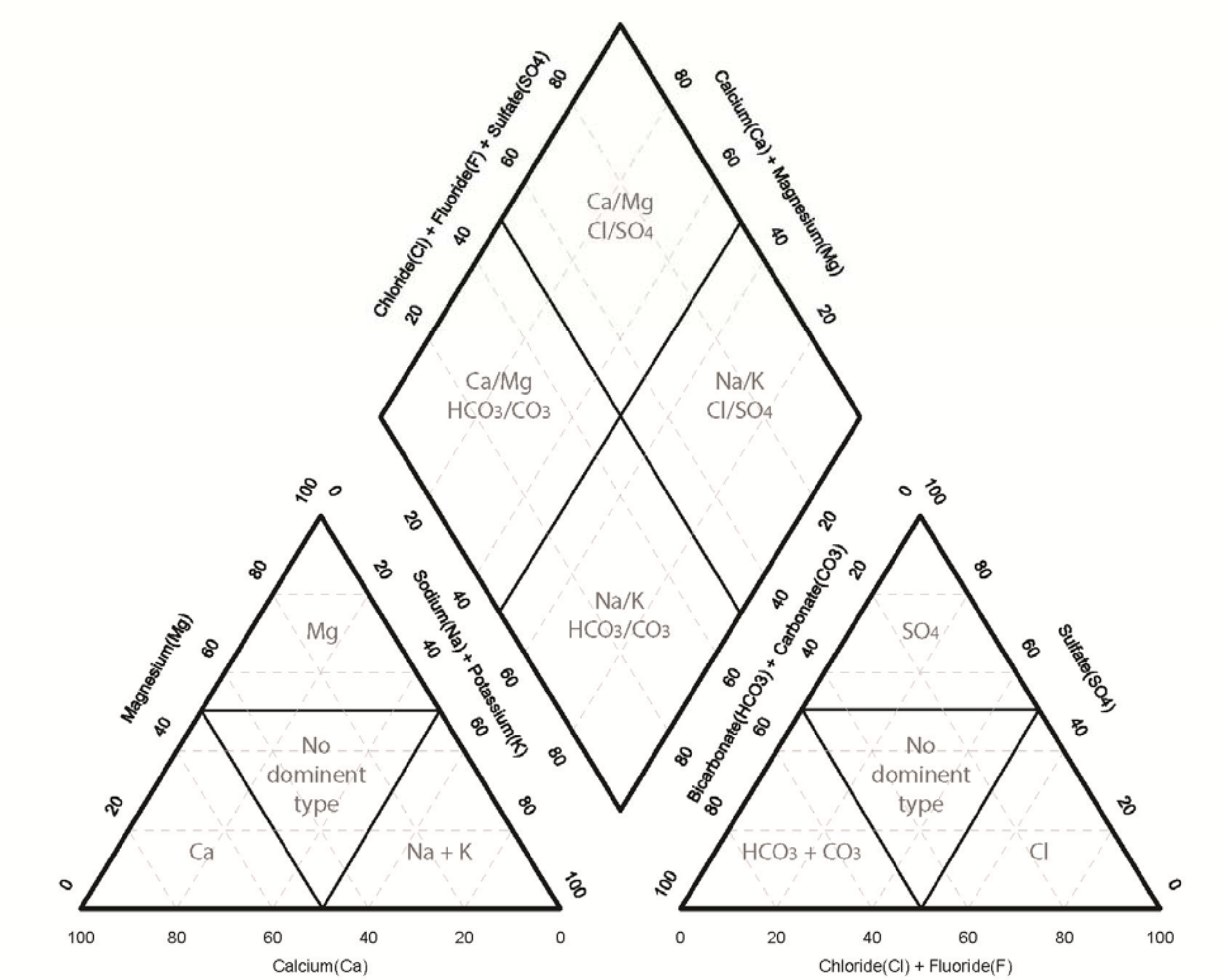


Figure 10. Chemical Characteristics and Areas of Ionic Dominance Represented by the Piper Diagram

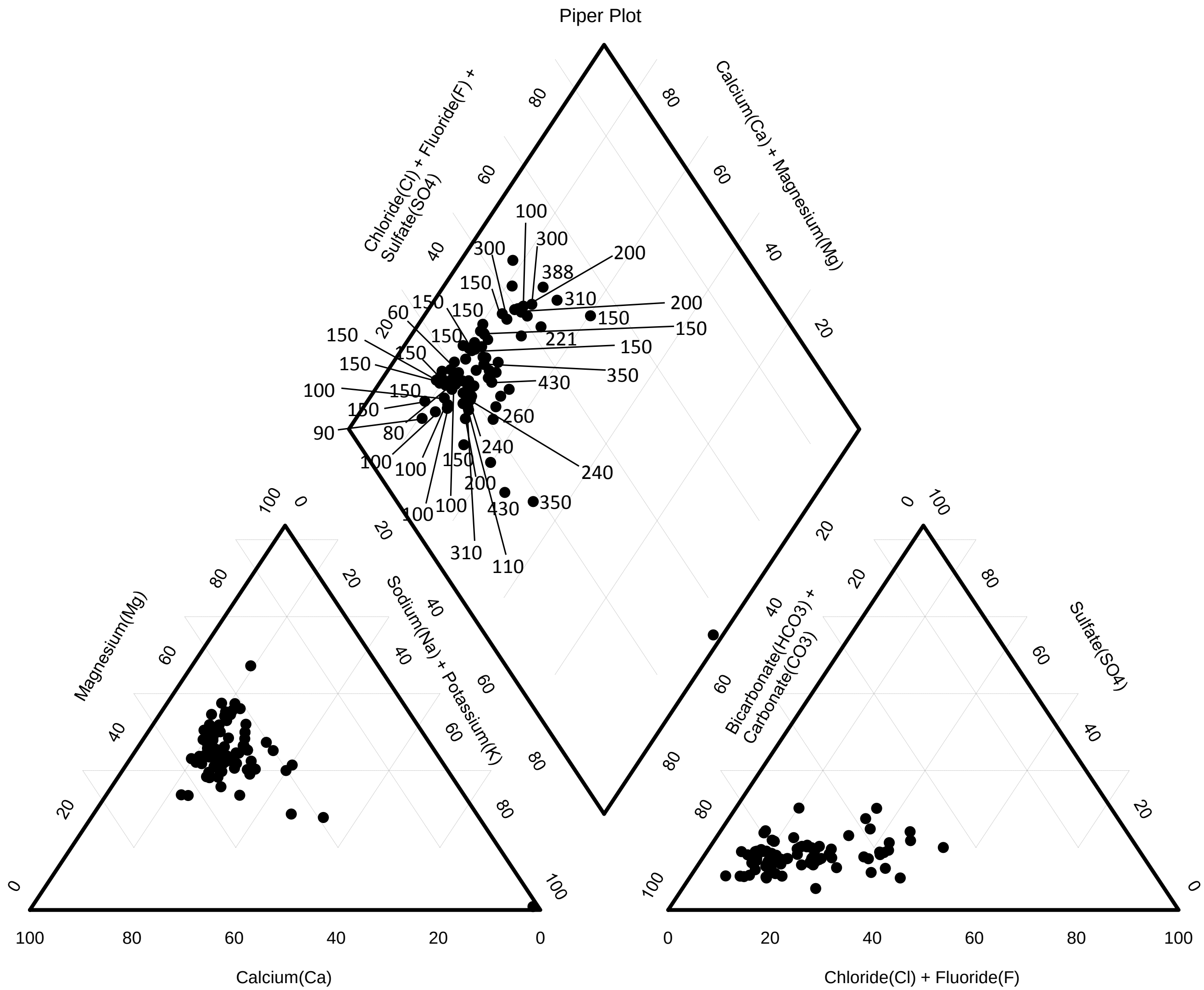


Figure 14. Piper Plot for GHV Wells Sampled by the CCGC for the Llagas Subbasin

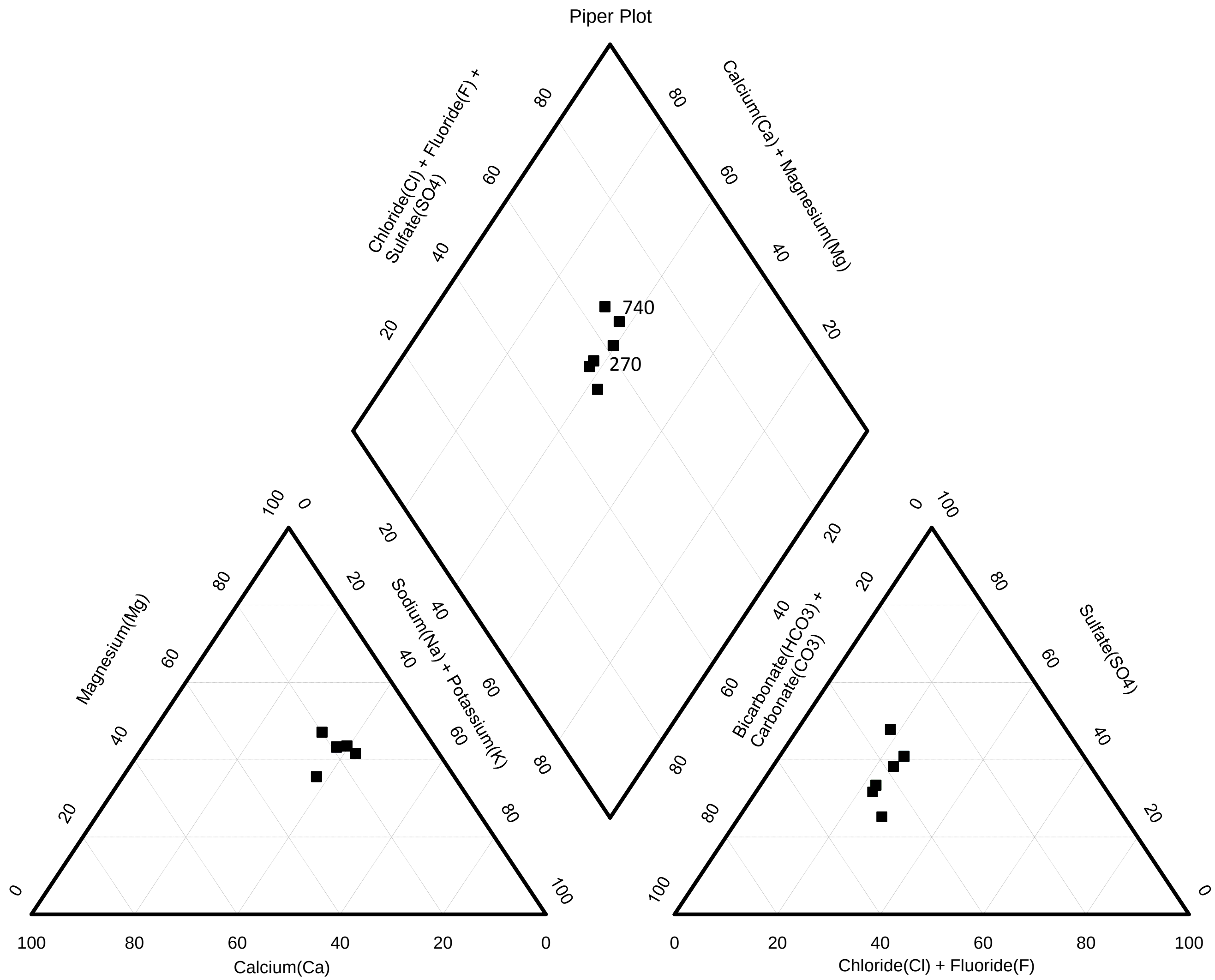


Figure 15. Piper Plot for GHV Wells Sampled by the CCGC for the Bolsa Subbasin

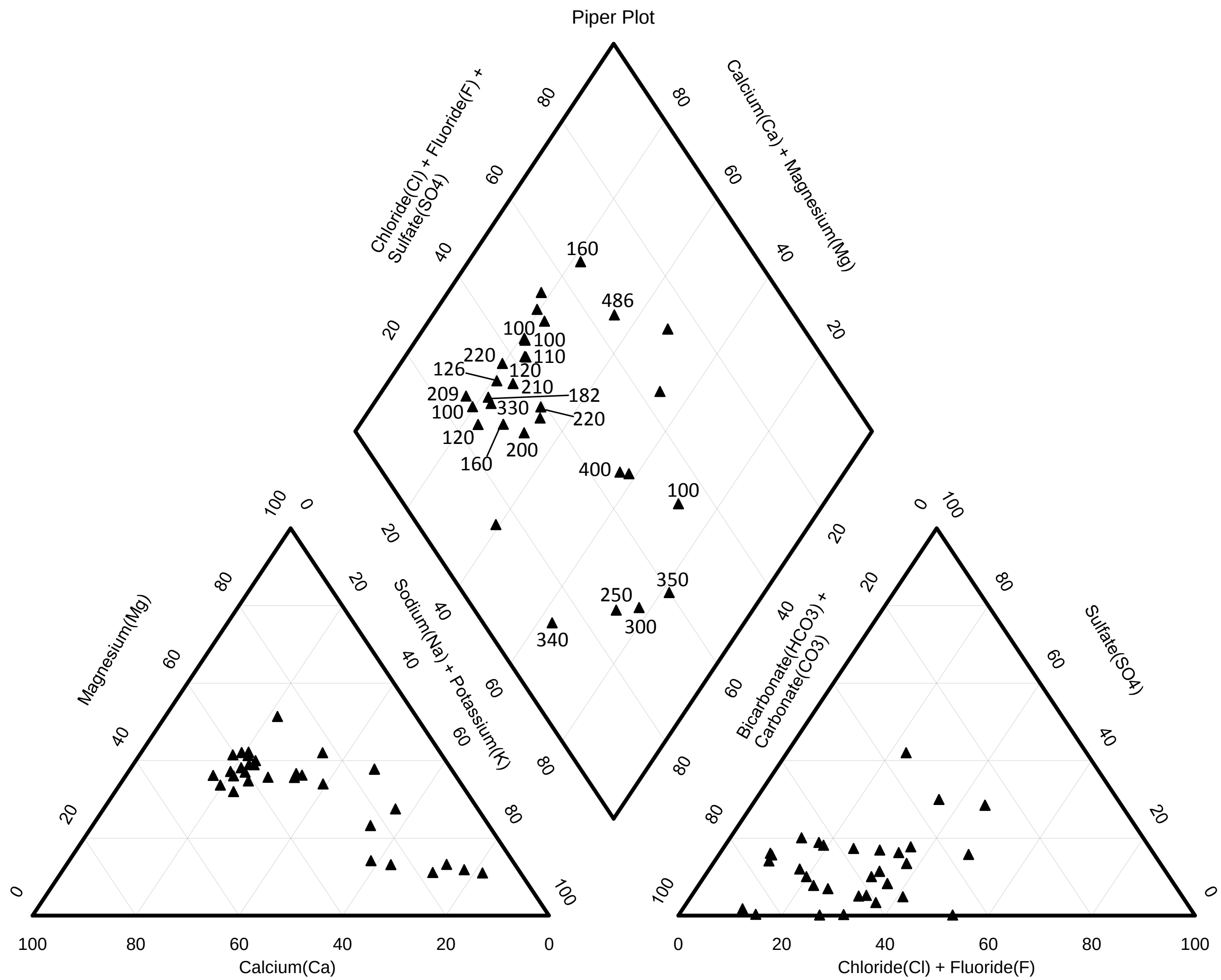


Figure 16. Piper Plot for GHV Wells Sampled by the CCGC for the Hollister Subbasin

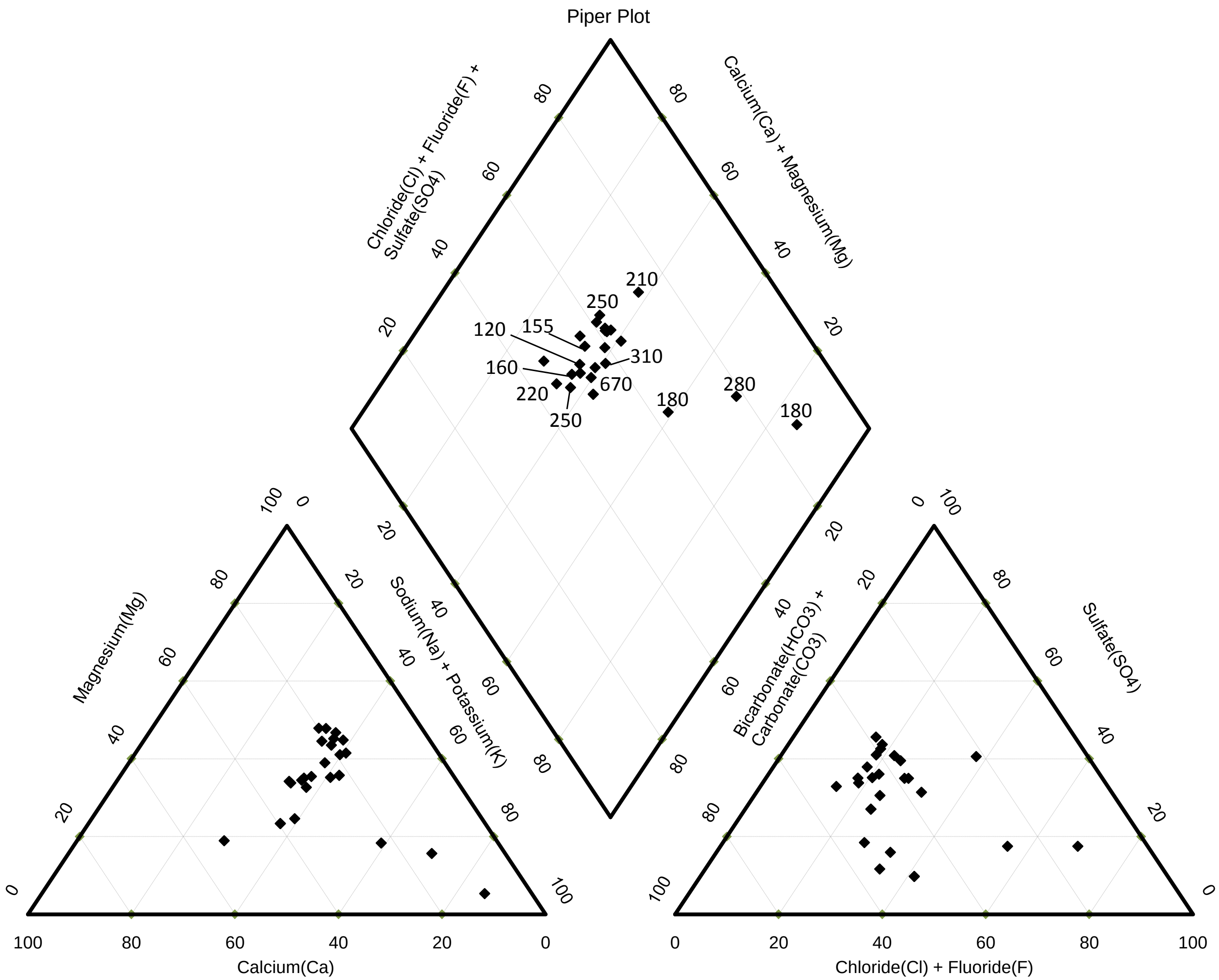


Figure 17. Piper Plot for GHV Wells Sampled by the CCGC for the San Juan Bautista Subbasin

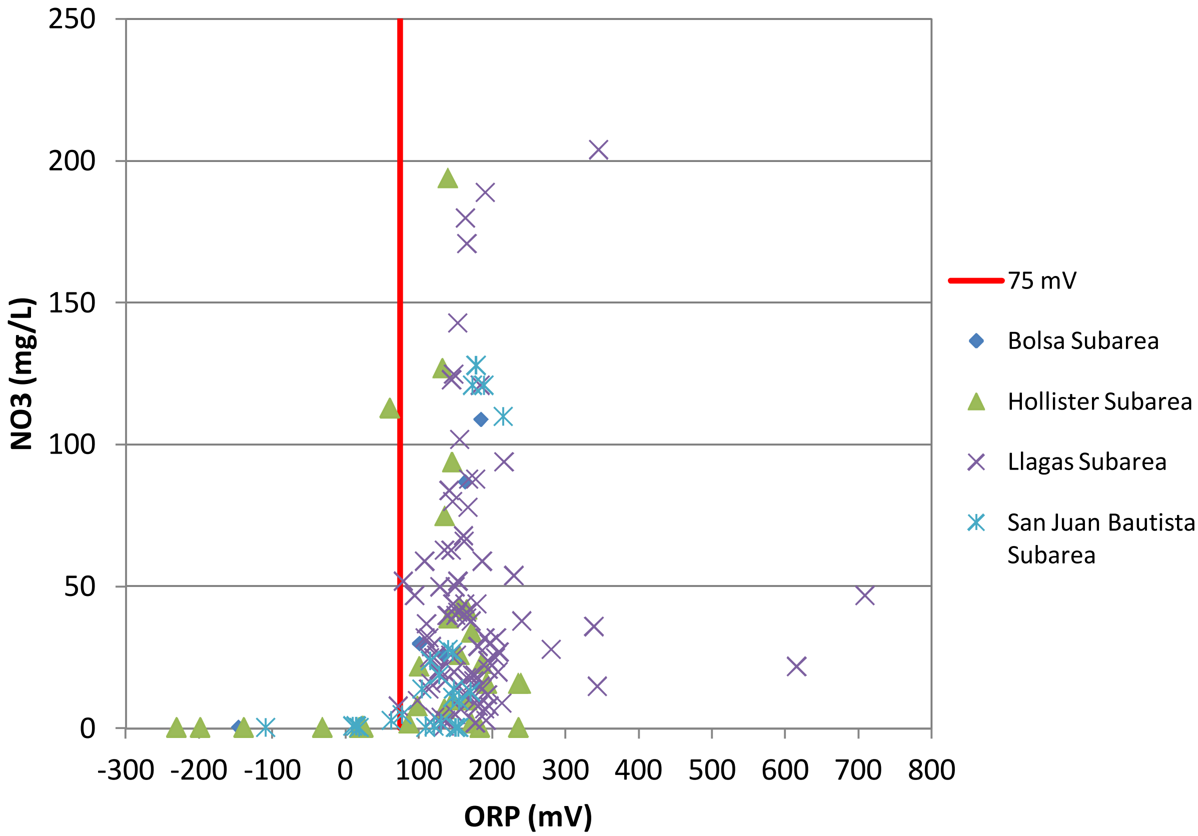


Figure 18. Relation of Groundwater Nitrate Concentrations to Oxidation-Reduction Potential for CCGC Samples

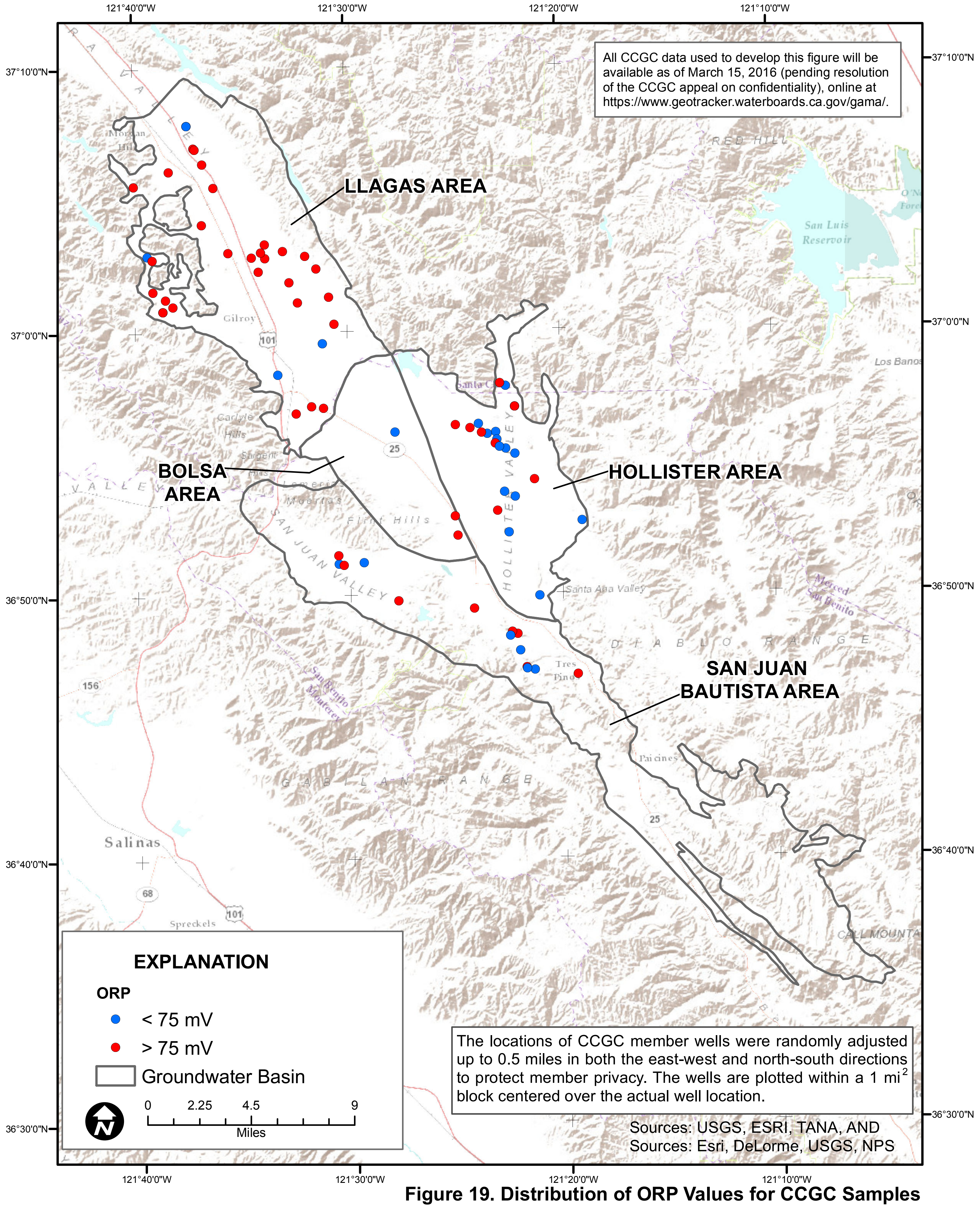


Figure 19. Distribution of ORP Values for CCGC Samples

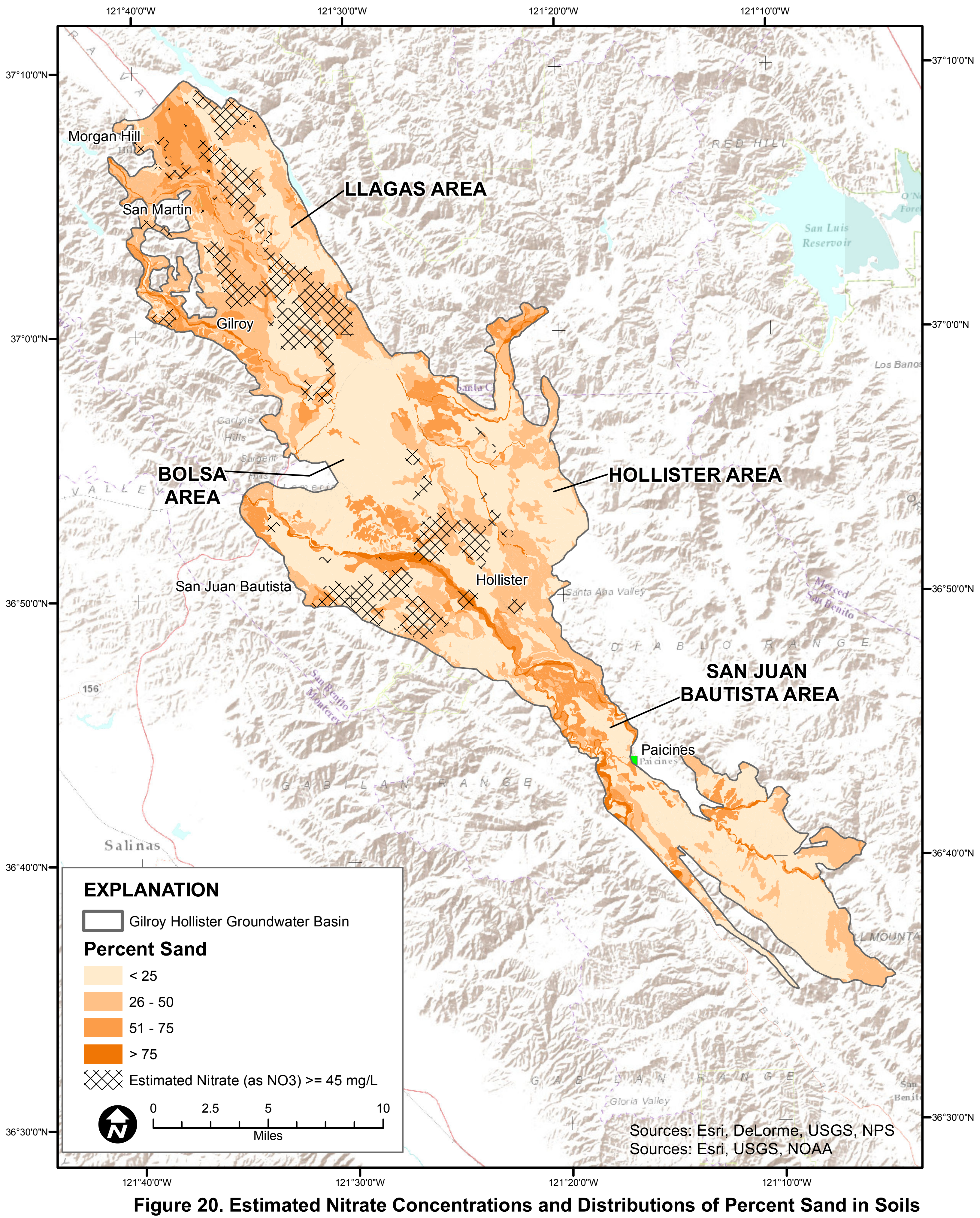


Figure 20. Estimated Nitrate Concentrations and Distributions of Percent Sand in Soils

APPENDICES

APPENDIX A

KRIGING AND DEVELOPMENT OF VARIOGRAM MODELS

Kriging was used to produce contours of estimated nitrate concentrations for the Gilroy-Hollister Valley Groundwater Basin. Kriging is a method that estimates values at unknown locations, and utilizes a variogram model that is modeled off the available data and describes the spatial variance of data as a function of distance from known data points. For more background on kriging, see Journal and Huijbregts (1978). Kriging was performed using Surfer® 12 (Golden Software, LLC).

The nitrate data for the Gilroy-Hollister Valley was split to two groups. The first one that contains all wells from Llagas Subbasin and the other one contains the wells from the Bolsa, Hollister, and San Juan Bautista Subbasins. The histograms of nitrate data for the Gilroy Hollister Valley (**Figure A-1**) do not following a normal distribution. Kriging can be problematic with distributions that are highly skewed, and transformations are often used to transform data into a distribution that is closer to a normal distribution (Journal and Huijbregts, 1978). By taking the natural log of nitrate data, the resulting histogram (**Figure A-2**) is closer to a normal distribution. Statistics of the transformed data are summarized in **Table A-1**.

Table A-1: Statistics of Natural Log of Nitrate Data

Basin	No. of data	Min	Max	Mean	Variance	Range
GH (all but Llagas wells)	353	-2.781	6.200	2.277	3.219	9.020
GH (Llagas wells)	795	-2.996	5.6	3.174	1.484	8.594

A spherical variogram model was used for both groups of data in Gilroy-Hollister Valley (**Figures A-3 and A-4)** to fit to the nitrate data by adjusting the parameters. A summary of both variogram characteristics is provided in **Table A-2**. The domain was discretized to achieve 20 meter grid cells.

Table A-2: Variogram Model Characteristics

Basin	Model Type	Scale	Range (m)	Search Radius (m)	Grid size (rows x column)	X Spacing (m)	Y Spacing (m)
GH (all but Llagas wells)	Spherical	3.457	2000	5000	2441 x 2188	20	20
GH (Llagas wells)	Spherical	1.5	4000	3000	1516 x 1547	20	20

The kriging output is analyzed graphically with related statistics. The first evaluation is based on an observed versus estimated plot. The estimated nitrate concentrations at the observation locations are compared to the observed values, and this is illustrated as a scatter plot showing the results by subbasin (Bolsa, Hollister, San Juan Bautista, and Llagas) (**Figure A-5**). The data points are compared to a line with slope of 1:1, which is the line that data points ideally fall on when estimated values equal observed values exactly. The majority of subbasins fit very well to the 1:1 line except for Llagas Subbasin. **Figure A-6** shows a scatter plot similar to **Figure A-5**, but is shown in two categories: CCGC sampled wells and data from other sources. The CCGC well data provides a good fit. The overall correlation coefficient, R, is calculated to be 0.962 and this indicates that the trends in the estimated values very closely match those of observations. The R for the CCGC data category is equal to 0.997, and the R for the data from others category is equal to 0.956. The correlation coefficient is defined to be the covariance between the measured and estimated nitrate normalized by multiplication of standard deviations of both measured and estimated nitrate data using:

$$R = \frac{\sum_i^{nw}(z_i - m_z)(z'_i - m_{z'})}{\sqrt{\sum_i^{nw}(z_i - m_z)^2}\sqrt{\sum_i^{nw}(z'_i - m_{z'})^2}}$$

Where:

z_i is the observed (measured) value of nitrate [mg/l];

z'_i is the estimated (kriged) value of nitrate [mg/l];

m_z is the mean of observed concentration values [mg/l];

$m_{z'}$ is the mean of estimated concentration values [mg/l];

nw is number of observations and that is equal to number of wells [mg/l];

A plot of residuals verses estimated values is shown on **Figure A-7**. The residual quantity is defined to be the difference between estimated and observed nitrate concentration at measured locations, which can be positive or negative values. The residuals are scattered around zero. This plot shows larger residuals in Llagas sub-basin. This is likely due to clustering in the data and large variations of observed nitrate concentration within small distances. **Figure A-8** shows a plot similar to **Figure A-7** but the scatter is categorized based on two data sources, CCGC sampled wells and data from other sources. The other data sources exhibit larger residuals compared with CCGC data.

It is also useful to normalize the residuals by associated observation value, and plot the histogram that provides relative error as a percentage (**Figure A-9**). In general, around 69% of Gilroy Hollister's basin data was honored with +/- 5 % relative error. However, 80 % of the CCGC wells are honored within +/- 5 % relative error and 67 % of the other wells are honored within +/- 5 % relative error.

References

Journel, A.G., and Huijbregts, C. (1978), Mining Geostatistics, Academic Press, 600 pp.

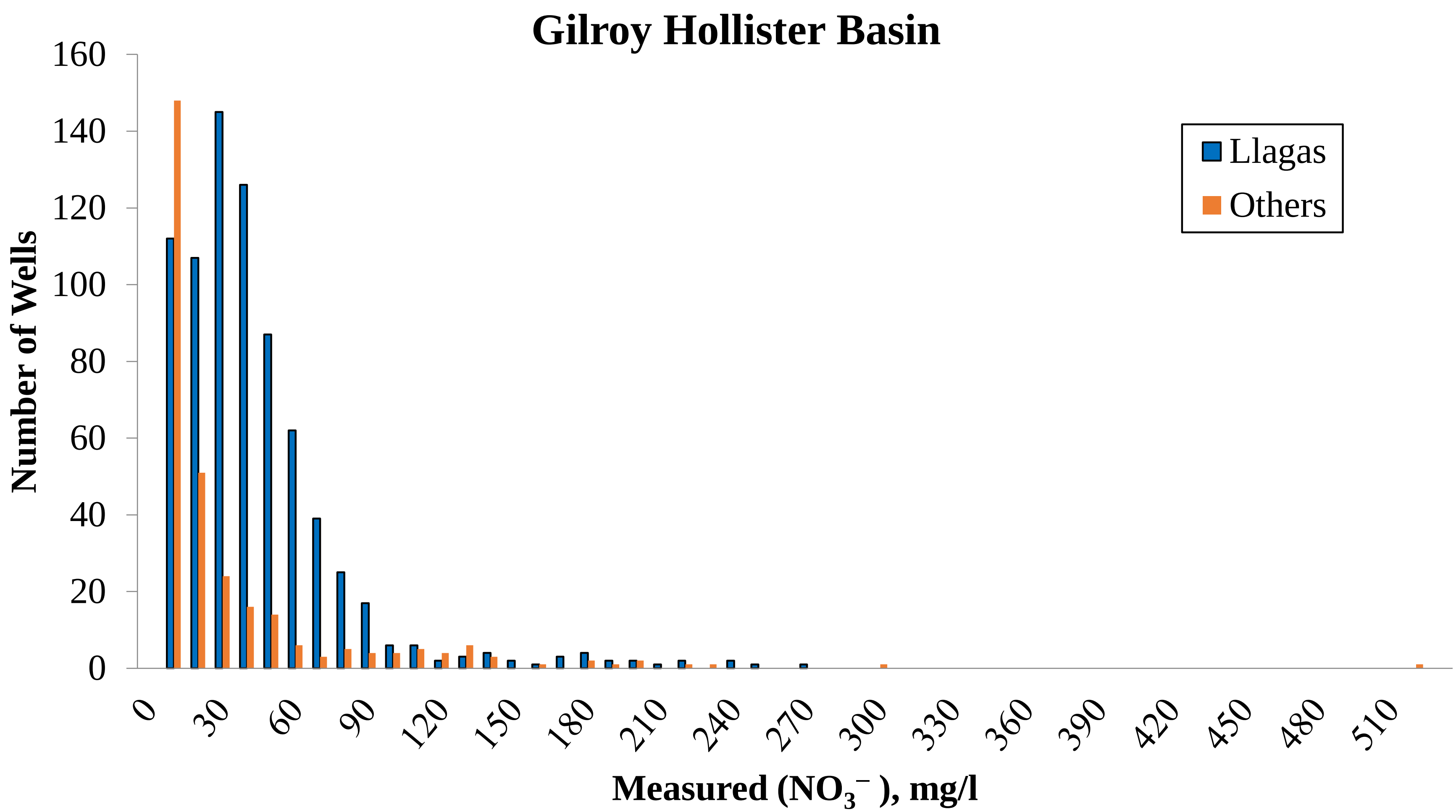


Figure A-1: Histogram of the nitrate data

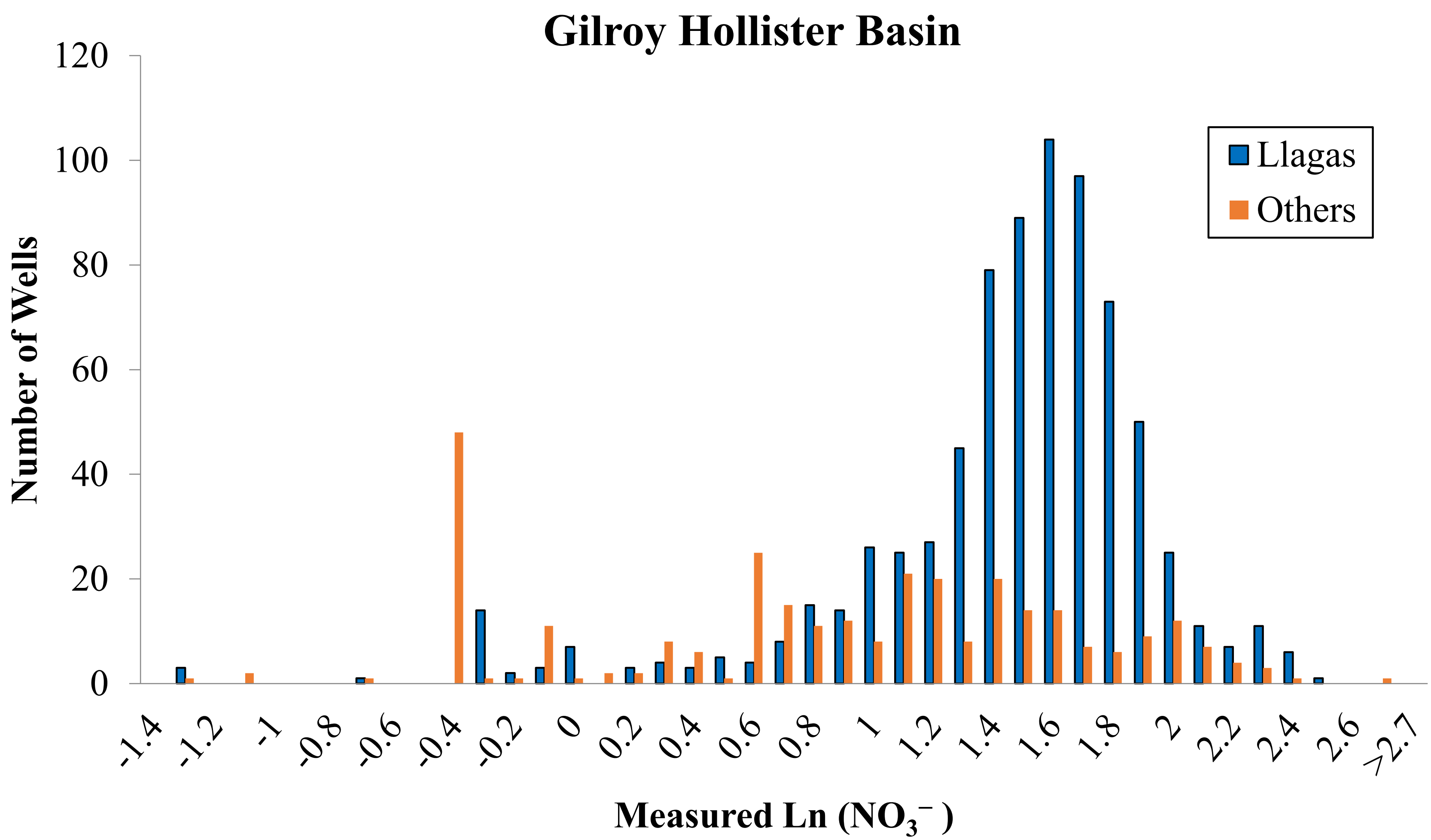


Figure A-2: Histogram of the natural log of nitrate data

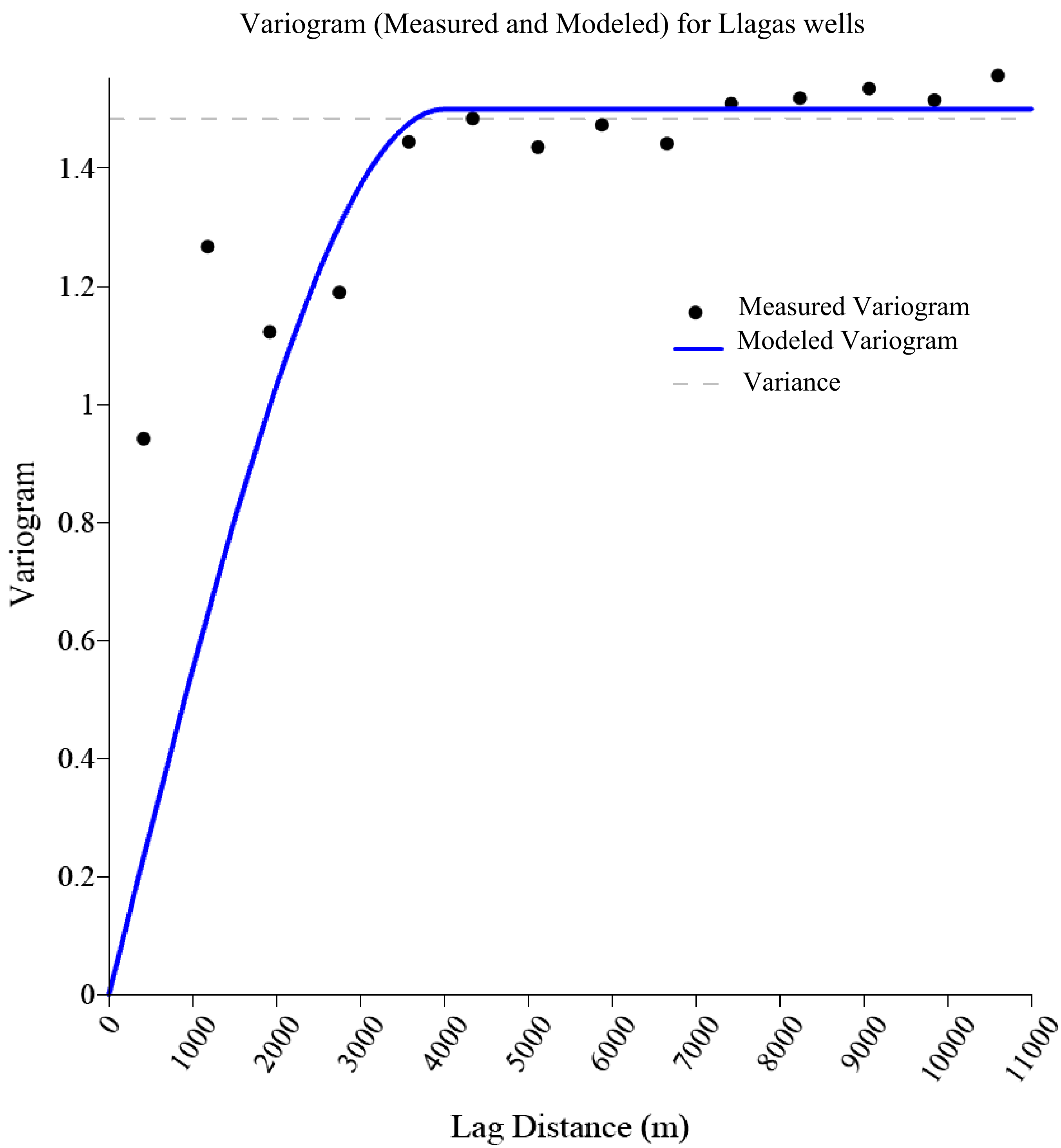


Figure A-3: Variogram and its fit based on natural log of nitrate data for Llagas wells

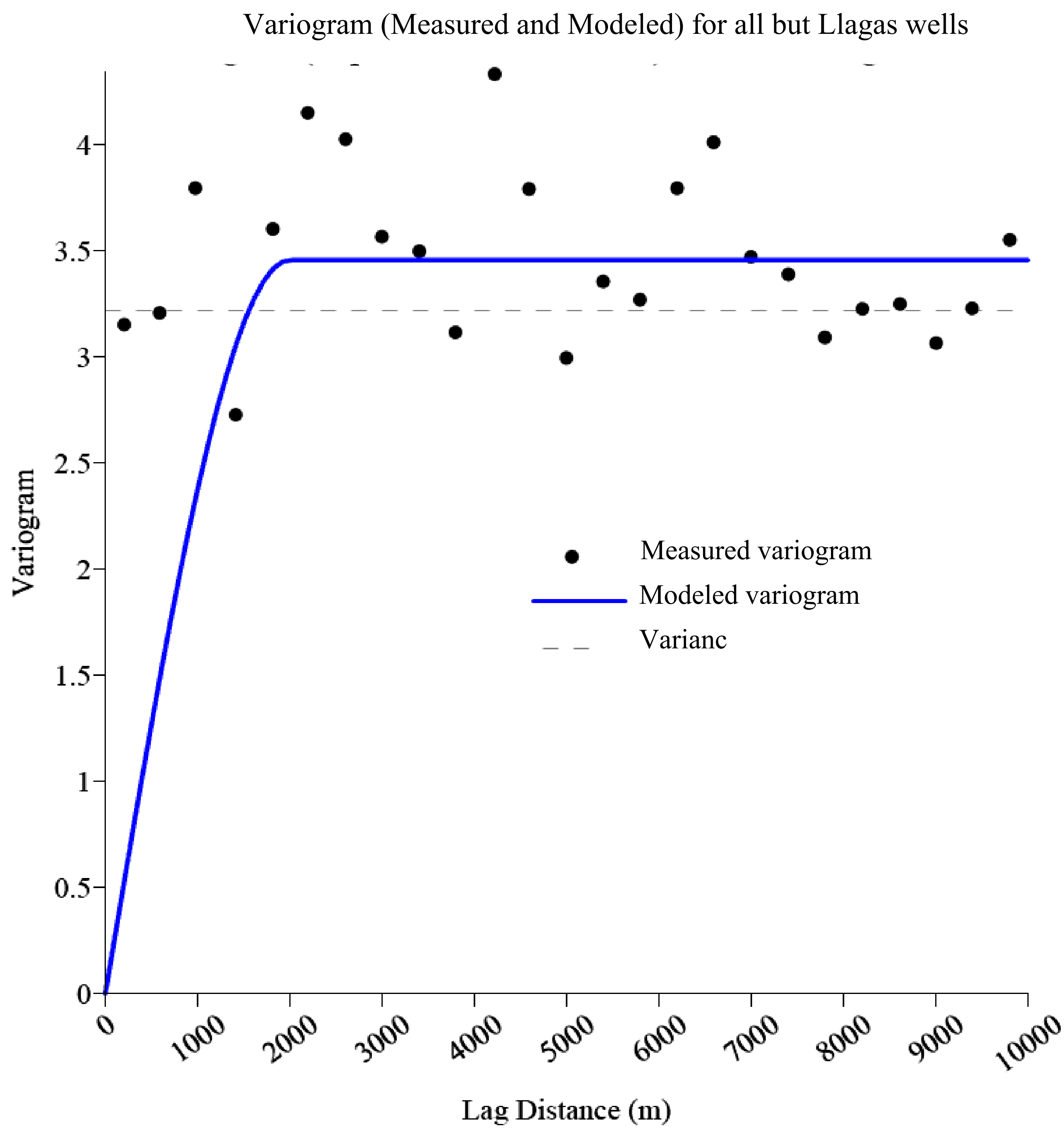


Figure A-4: Variogram and its fit based on natural log of nitrate data for all but Llagas wells

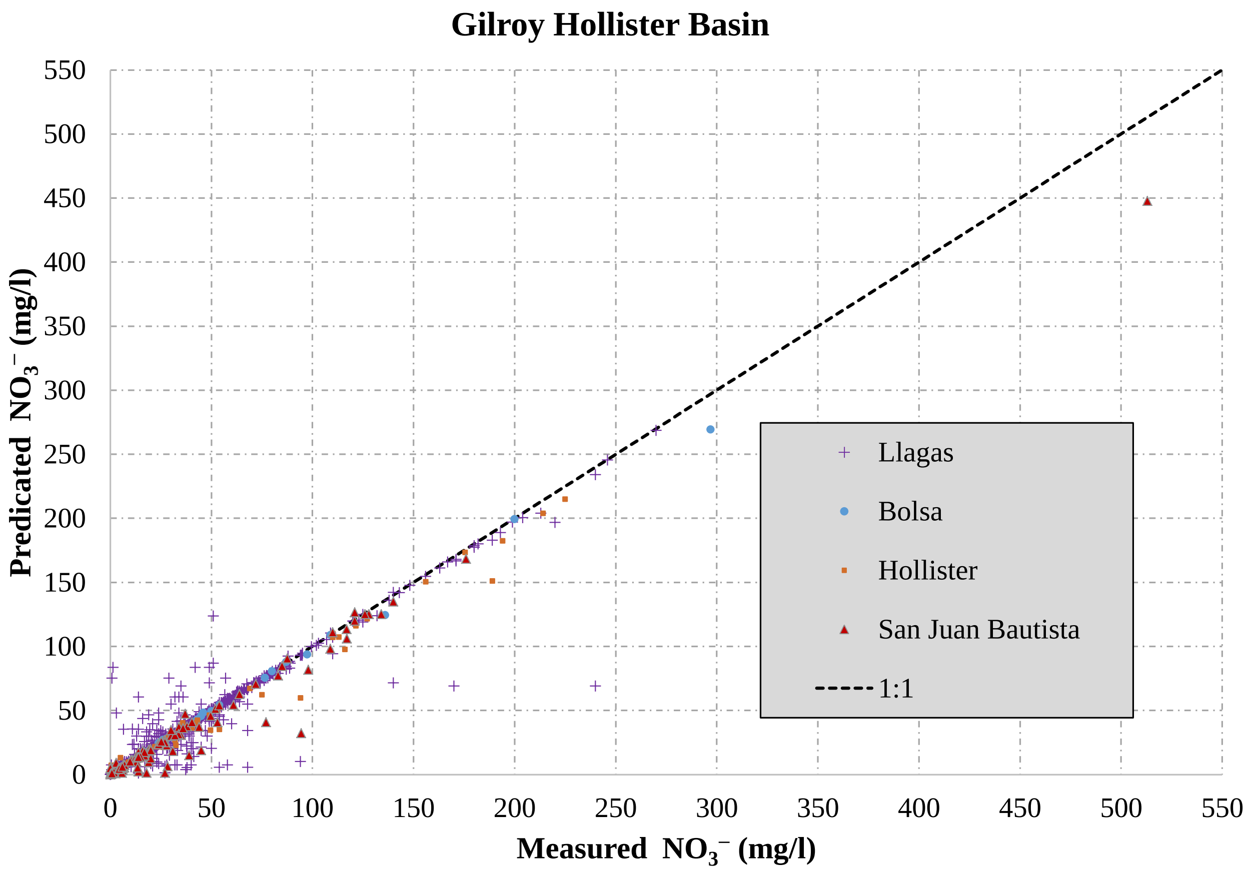


Figure A-5: Scatter plot of measured and estimated nitrate categorized based on subbasins data

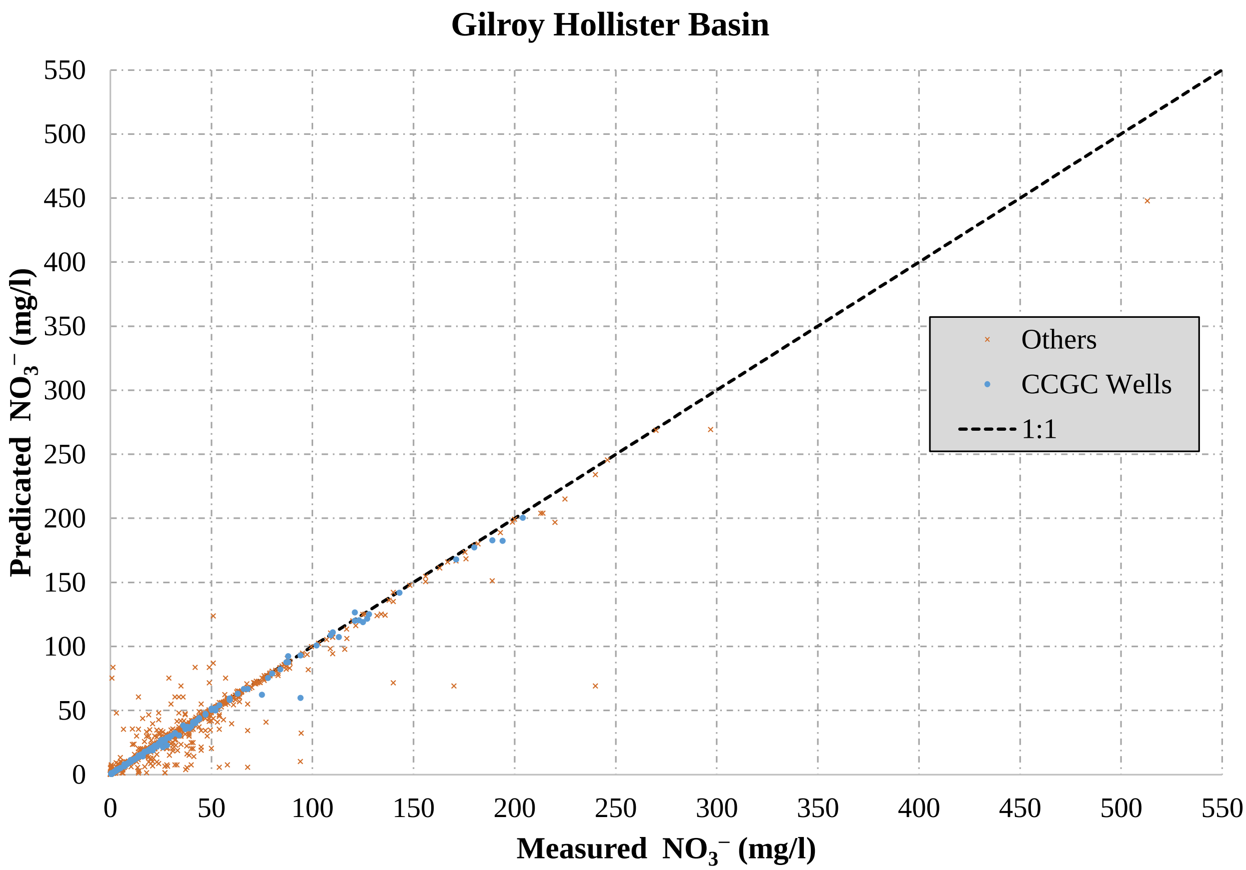


Figure A-6: Scatter plot of measured and estimated nitrate categorized based on data sources

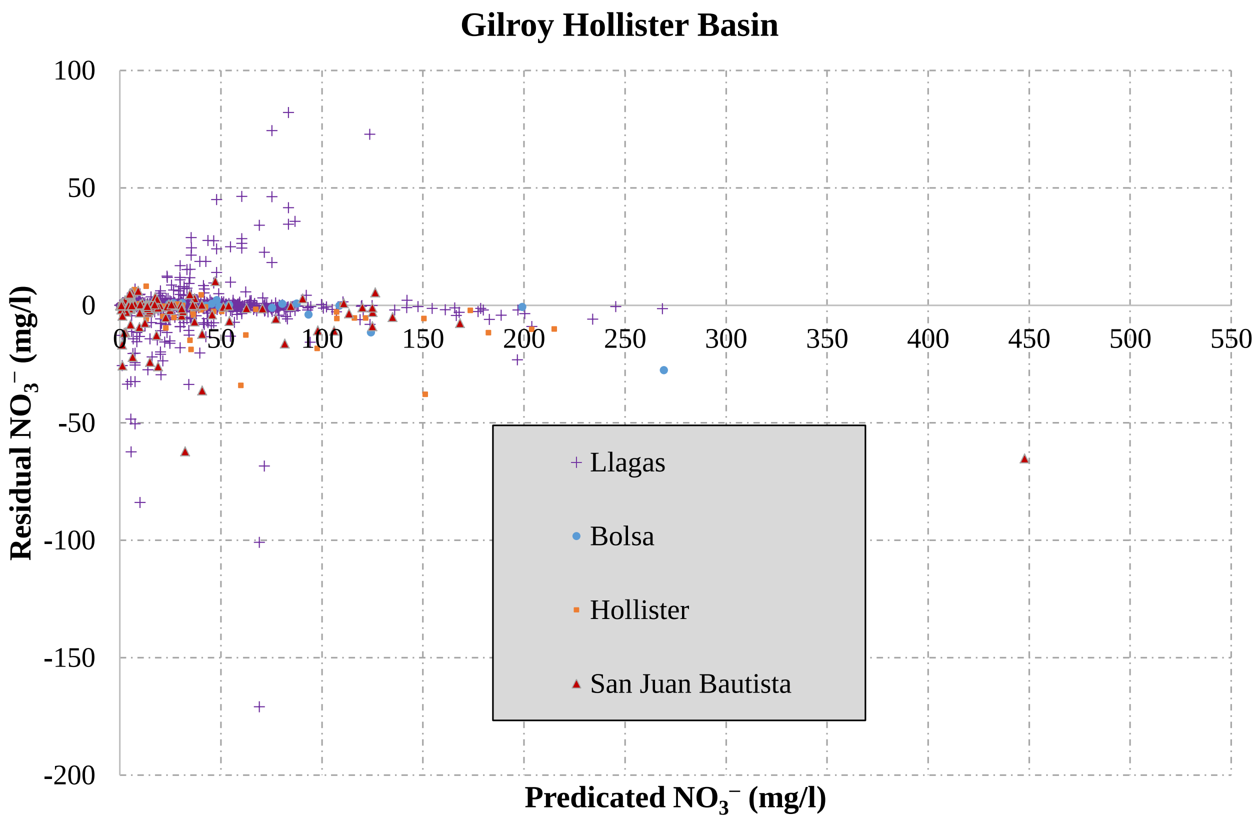


Figure A-7: Residual versus estimated nitrate based on subbasins data

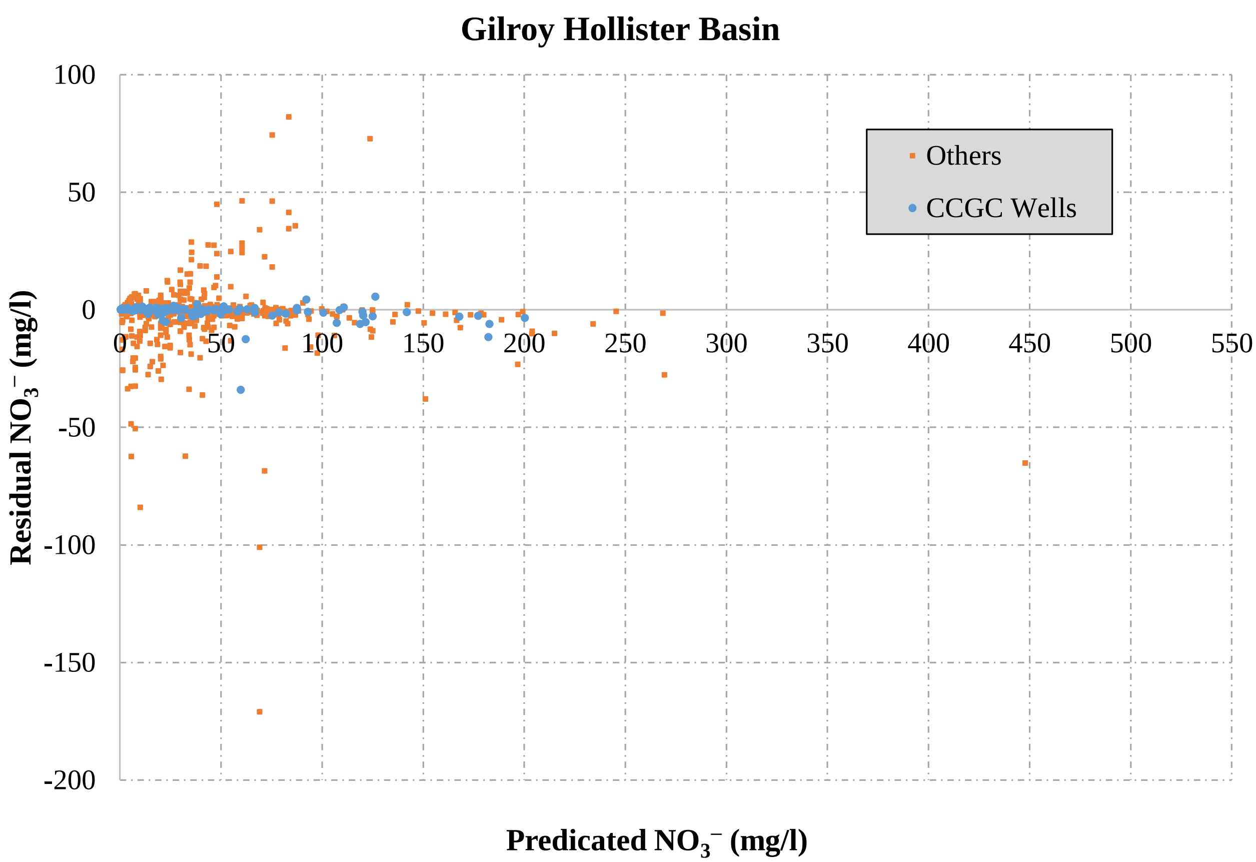


Figure A-8: Residual versus estimated nitrate based on data sources

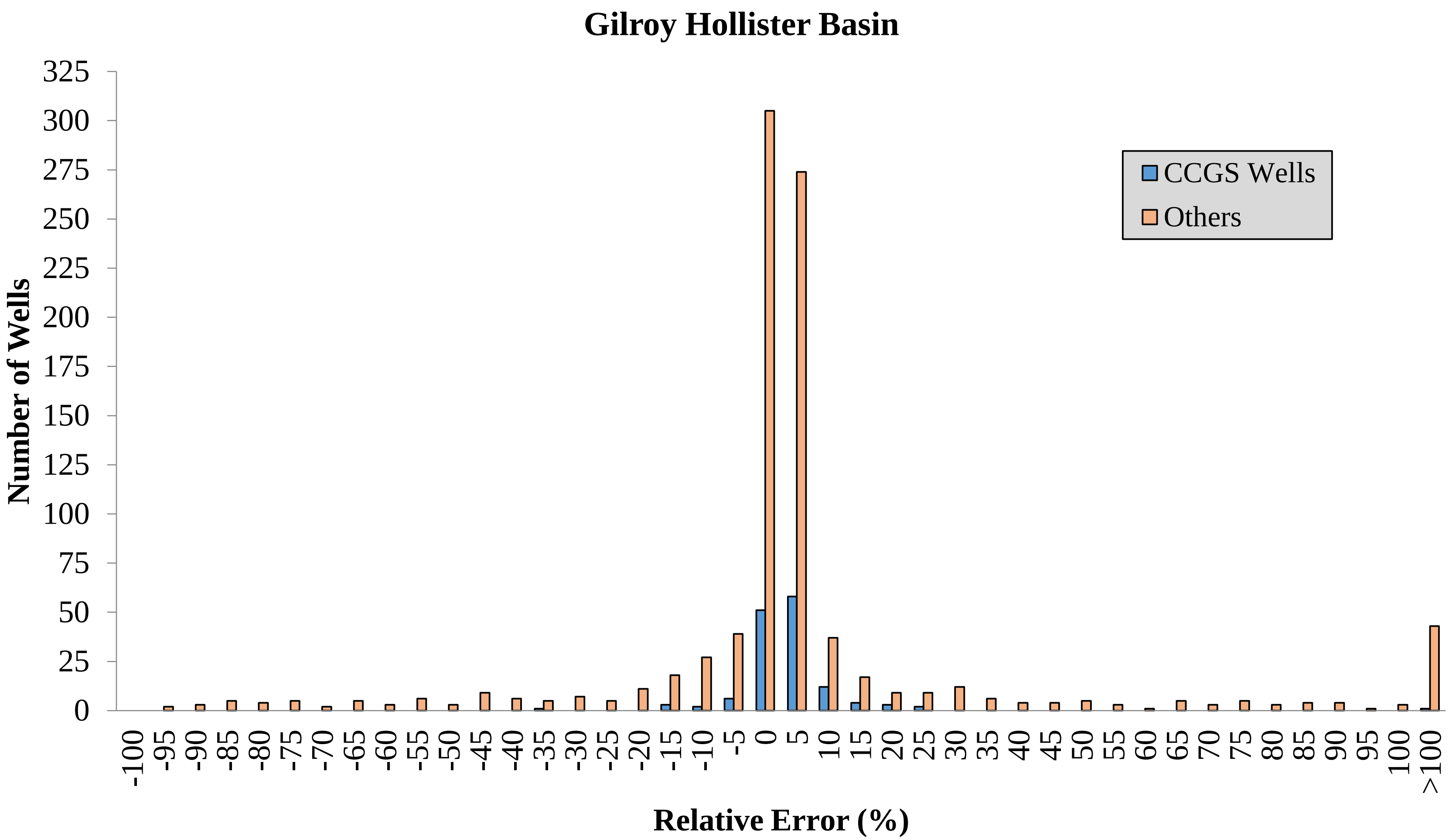


Figure A-9: Relative error histogram categorized based on data sources

APPENDIX B

WELLS EXCLUDED FROM NITRATE MAPPING

A total of 29 wells were excluded from the kriging dataset for estimation of nitrate concentrations in the Gilroy-Hollister Groundwater Basin for the following reason. It was assumed that the shallow aquifer extends to 420 feet deep, and therefore excluded 29 wells with known well depths greater than 420 feet. There are 12 wells included in the kriging analysis that have well depths greater than 420 feet because they were thought to be mostly screened within the upper 420 foot portion of the aquifer system. **Figure B-1** shows the excluded well locations and **Table B-2** lists the wells excluded.

Summary statistics for nitrate concentrations from excluded wells are shown in **Table B-1**. The mean concentration was 14.3 mg/L and the median was 7.5 mg/L. Values ranged from 0.09 mg/L to 60.7 mg/L. One well (3.4 %) had a maximum concentration over the MCL of 45 mg/L.

Table B-1: Summary Statistics for Maximum Groundwater Nitrate Concentrations from Excluded Wells

Statistics	Excluded Wells
Mean (mg/L)	14.26
Median (mg/L)	7.50
Standard Deviation (mg/L)	16.74
Minimum (mg/L)	0.09
Maximum (mg/L)	60.70
Number of Wells	29.00
Number of Wells (percent) with concentrations over the MCL	1 (3.4%)

Table B-2: Excluded Wells

Well Name	Average NO3 (mg/L)	Maximum NO3 (mg/L)	Well Depth (ft)	Use	Source	Reason For Exclusion
MW-29-428	10.675	12	428	Observation	RWQCB	Well Depth > 420
PZ-03-427	19.4275	26	432	Observation	RWQCB	Well Depth > 420
MW-70-433	1.35	1.4	433	Observation	RWQCB	Well Depth > 420
MW-67-433	1	1	433	Observation	RWQCB	Well Depth > 420
MW-56-433	9.5	9.5	433	Observation	RWQCB	Well Depth > 420
MW-35-433	1.425	1.7	433	Observation	RWQCB	Well Depth > 420
MW-16-434	3.642857143	4.3	434	Observation	RWQCB	Well Depth > 420
011S004E05C005	21.42142857	37	435	Observation	LLNL; RWQCB	Well Depth > 420
010S003E36H002	35.3	60.7	440	Observation	LLNL	Well Depth > 420
011S004E08K007	0.5	0.5	452	Observation	LLNL	Well Depth > 420
MW-21-470	0.125	0.125	470	Observation	RWQCB	Well Depth > 420
MW-67-485	0.125	0.125	485	Observation	RWQCB	Well Depth > 420
MW-68-485	0.125	0.125	485	Observation	RWQCB	Well Depth > 420
MW-66-495	0.125	0.125	495	Observation	RWQCB	Well Depth > 420

MW-26-495	6.35	7.5	495	Observation	RWQCB	Well Depth > 420
MW-54-500	7.01	13	500	Observation	RWQCB	Well Depth > 420
4310004-006	19.31868 583	30	530	Public Supply	GAMA; City of Gilroy	Well Depth > 420
MW-26-555	0.125	0.125	555	Observation	RWQCB	Well Depth > 420
USGS_3701001213 30001	5.308333 333	22	615	Unknown	USGS-NWIS; GAMA; LLNL; RWQCB	Well Depth > 420
AW0699_FERRYM1	14	14	670	Domestic	Field Visit	Well Depth > 420
4310004-001	28.41388 833	35	700	Public Supply	GAMA; City of Gilroy	Well Depth > 420
USGS_3652001213 30001	0.0885	0.0885	700	Irrigation	USGS-NWIS; GAMA	Well Depth > 420
AW1541_SDSSHOD	0.5	0.5	740	Domestic	Field Visit	Well Depth > 420
011S004E05C004	17.75	35	750	Observation	LLNL; RWQCB	Well Depth > 420
4310004-009	17.0454	33	800	Public Supply	GAMA; City of Gilroy; USGS; RWQCB	Well Depth > 420
010S004E31K006	34.66666 667	41	830	Extraction	RWQCB	Well Depth > 420
011S004E08K006	0.1	0.1	865	Observation	LLNL	Well Depth > 420
011S004E05C003	0.3125	0.5	880	Observation	LLNL; RWQCB	Well Depth > 420
010S004E32E007	5.425	27	949	Observation	LLNL;	Well Depth >

					RWQCB	420

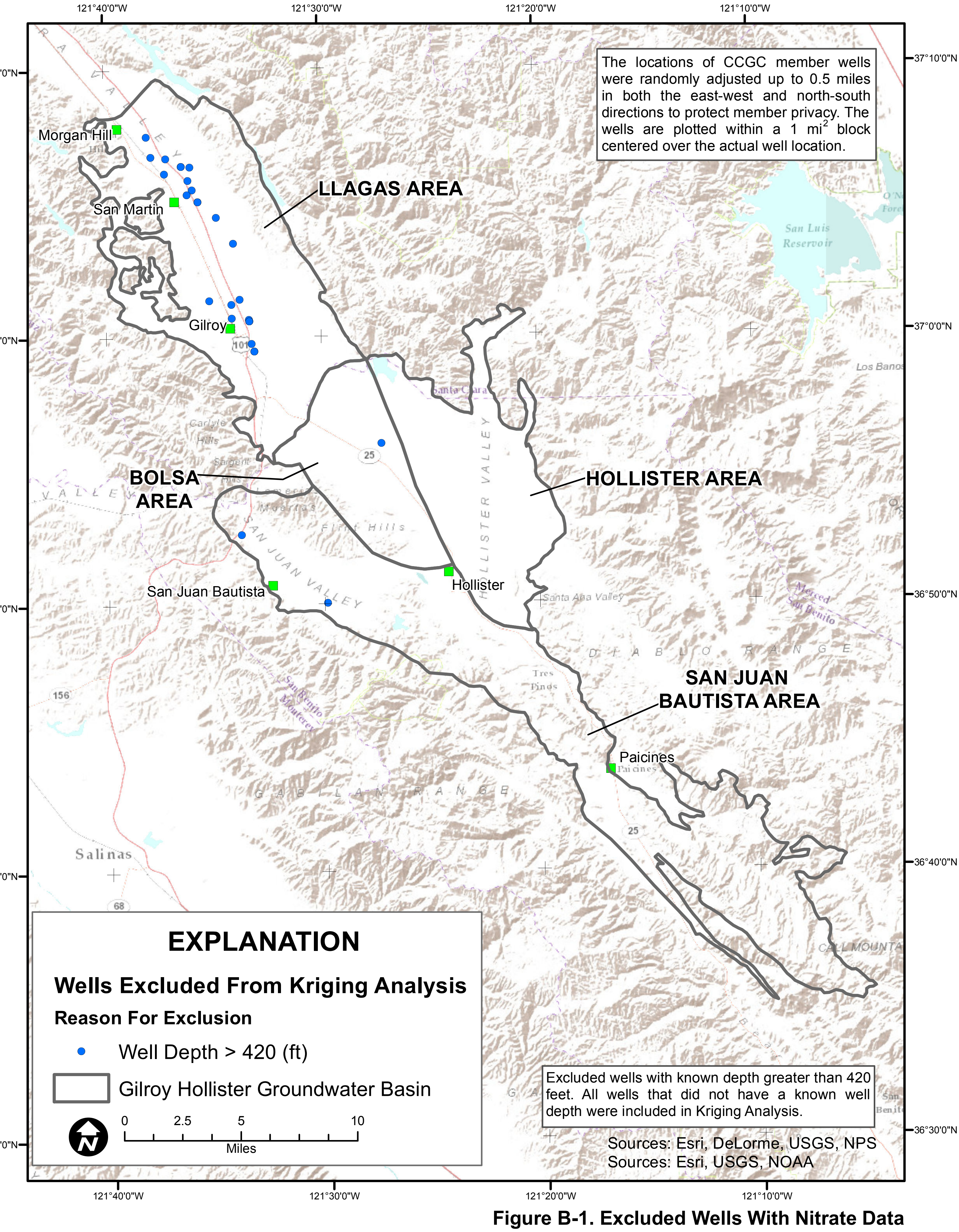


Figure B-1. Excluded Wells With Nitrate Data

Appendix C – Quality Assurance and Control Assessment

Gilroy-Hollister Groundwater Basin

Field Blanks

Field blanks detect possible constituent sources contributed from sampling methods and equipment. Examples include, but are not limited to, improperly cleaned sampling equipment, persistent airborne constituents in the sampling environment, and constituent sources in the sample containers. Ten field blanks were collected.

Calcium, hardness, nitrate, nitrate as N, nitrate + nitrite as N, nitrite as N, and sulfate were detected in the field blanks. Detected concentrations were less than or equal to the PQL in four samples and above the PQL in two samples. NO_3 as N and NO_3+NO2 as N were detected at concentrations of 0.2 and 0.3 mg/L, respectively, which are both above the PQL of 0.1 mg/L. Calcium was detected in two samples at a concentration of 2 mg/L which is above the PQL of 1 mg/L.The table below summarizes detected values of nitrate species in the field blanks.

Table C7. Concentrations of NO_3, NO_3 as N, NO_3+NO_2 as N, and NO_2 as N in the field blanks.

Sample ID	Date	NO3 (mg/L)	NO3 as N (mg/L)	NO3+NO2 as N (mg/L)	NO2 as N (mg/L)	Ca (mg/L)	SO4 (mg/L)
	PQL	*1*	*0.1*	*0.1*	*0.1*	*1*	*1*
CCGC_0208	3/24/2014	ND	ND	0.1	0.1	ND	ND
CCGC_0255	3/25/2014	ND	ND	0.1	0.1	ND	ND
CCGC_0306	3/26/2014	ND	ND	0.1	0.1	ND	ND
CCGC_0233	3/27/2014	ND	ND	0.1	0.1	ND	ND
CCGC_0243	3/28/2014	ND	ND	ND	ND	ND	ND
Burnett_D	7/15/2014	ND	ND	ND	ND	ND	ND
CCGC_0414	8/7/2014	ND	ND	ND	ND	ND	ND
CCGC_0425	8/8/2014	ND	ND	ND	ND	ND	ND
CCGC_0463	8/26/2014	ND	ND	ND	ND	2	1
CCGC_0464	8/26/2014	1	0.2	0.3	ND	2	1

Field Duplicates

Duplicates monitor matrix consistency or heterogeneity. Ten field duplicates were collected. All duplicate sample results (100 percent) agreed, had differences within 10-percent, or had differences within the PQL (Practical Quantitation Limit) of the constituents analyzed. The following table lists the sample duplicates and the percent differences for nitrate species. The difference in NO3 as N concentrations for the CCGC_0233 sample and duplicate exceeds 10-percent, but has a difference within the PQL of 0.1 mg/L. All other constituent concentration differences were less than 10-percent.

Table C8. Sample and duplicate NO_3, NO_3 as N, NO_3+NO_2 as N, and NO_2 as N concentrations and percent differences.

Sample ID	Date	NO_3 (mg/L)	NO_3 as N (mg/L)	NO_3+NO_2 as N (mg/L)	NO_2 as N (mg/L)
CCGC_0208	3/24/2014	21	4.7	5	0.3
CCGC_0208	3/24/2014	21	4.7	4.9	0.3
Percent Difference		**0.0%**	**0.0%**	**2.0%**	**0.0%**
CCGC_0255	3/25/2014	44	10	10.5	0.5
CCGC_0255	3/25/2014	44	10	10.5	0.5
Percent Difference		**0.0%**	**0.0%**	**0.0%**	**0.0%**
CCGC_0306	3/26/2014	180	40.6	40.9	0.3
CCGC_0306	3/26/2014	180	40.7	41	0.3
Percent Difference		**0.0%**	**0.2%**	**0.2%**	**0.0%**
CCGC_0233	3/27/2014	2	0.5	0.9	0.5
CCGC_0233	3/27/2014	2	0.4	0.9	0.5
Percent Difference		**0.0%**	**22.2%**	**0.0%**	**0.0%**
CCGC_0243	3/28/2014	13	3	3.2	0.3
CCGC_0243	3/28/2014	13	3	3.2	0.3
Percent Difference		**0.0%**	**0.0%**	**0.0%**	**0.0%**
Burnett_D	7/15/2014	23	5.2	5.5	0.3
Burnett_D	7/15/2014	23	5.2	5.5	0.3
Percent Difference		**0.0%**	**0.0%**	**0.0%**	**0.0%**
CCGC_0414	8/7/2014	16	3.6	3.9	0.3
CCGC_0414	8/7/2014	16	3.5	3.8	0.3
Percent Difference		**0.0%**	**2.8%**	**2.6%**	**0.0%**
CCGC_0425	8/8/2014	10	2.3	2.6	0.4
CCGC_0425	8/8/2014	10	2.3	2.6	0.4
Percent Difference		**0.0%**	**0.0%**	**0.0%**	**0.0%**
CCGC_0463	8/26/2014	42	9.6	10.1	0.5
CCGC_0463	8/26/2014	42	9.6	10.1	0.5
Percent Difference		**0.0%**	**0.0%**	**0.0%**	**0.0%**
CCGC_0464	8/26/2014	34	7.6	8.1	0.5
CCGC_0464	8/26/2014	34	7.8	8.2	0.5
Percent Difference		**0.0%**	**2.6%**	**1.2%**	**0.0%**

Anion-Cation Charge Balance

Anion-cation charge balance was calculated using concentrations of the major anions and cations in milliequivalents per liter (meq/L). The difference between the two sums was calculated as a percentage:

$$\frac{Anions - Cations}{Anions + Cations} \times 100$$

We use +/- 5 percent as a guide for an acceptable percent difference. The cation/anion balance difference exceeded 5 percent for 20 of 164 samples (12 %). The results are summarized in the following table.

Table C3. Sum cations and anions and cation/anion balance.

Field Point	Date	Sum Cations (meq/L)	Sum Anions (meq/L)	Anion/Cation balance (% difference)	Use	Basin
Ranch2_Dom	1/22/2014	6.35	6.32	0.2%	D	Llagas
Ranch2_Irr	1/22/2014	4.99	5.04	-0.5%	I	Llagas
Claire_D/I	1/22/2014	5.98	6.24	-2.1%	D/I	Llagas
CCGC_0286	3/24/2014	8.91	8.33	3.4%	D	Llagas
CCGC_0212	3/24/2014	5.55	5.24	2.9%	D/I	Llagas
CCGC_0287	3/24/2014	8.45	7.97	2.9%	D	Llagas
CCGC_0210	3/24/2014	5.95	5.89	0.6%	D/I	Llagas
CCGC_0211	3/24/2014	6.22	5.90	2.7%	D	Llagas
CCGC_0288	3/24/2014	10.83	10.44	1.8%	D	Llagas
CCGC_0252	3/24/2014	6.73	6.36	2.8%	D/I	Llagas
CCGC_0253	3/24/2014	5.65	5.39	2.4%	D/I	Llagas
CCGC_0254	3/24/2014	9.44	8.86	3.2%	D/I	Llagas
CCGC_0251	3/24/2014	7.95	7.50	2.9%	D/I	Llagas
CCGC_0249	3/24/2014	5.86	5.42	3.9%	D	Llagas
CCGC_0248	3/24/2014	6.91	6.61	2.2%	D	Llagas
CCGC_0214	3/24/2014	5.51	5.22	2.7%	D	Llagas
CCGC_0215	3/24/2014	5.47	5.12	3.3%	D/I	Llagas
CCGC_0292	3/24/2014	5.03	4.67	3.6%	D	Llagas
CCGC_0209	3/24/2014	6.20	6.04	1.3%	D/I	Llagas
CCGC_0208	3/24/2014	7.01	6.71	2.2%	D	Llagas
CCGC_0208	3/24/2014	7.06	6.67	2.8%	D	Llagas
CCGC_0294	3/24/2014	7.49	7.06	3.0%	D	Llagas
CCGC_0213	3/24/2014	4.87	4.51	3.9%	D	Llagas
CCGC_0296	3/24/2014	6.69	6.27	3.3%	D	Llagas
CCGC_0297	3/24/2014	7.36	7.01	2.4%	D	Llagas
CCGC_0222	3/25/2014	7.82	6.89	**6.3%**	D	Llagas
CCGC_0223	3/25/2014	7.14	6.51	4.6%	D	Llagas
CCGC_0218	3/25/2014	7.09	6.40	**5.1%**	D	Llagas
CCGC_0221	3/25/2014	7.38	6.61	**5.5%**	D	Llagas
CCGC_0219	3/25/2014	7.05	6.52	3.9%	D	Llagas
CCGC_0224	3/25/2014	7.91	7.23	4.5%	D	Llagas
CCGC_0220	3/25/2014	7.01	6.31	**5.3%**	D	Llagas
CCGC_0308	3/25/2014	26.13	23.80	4.7%	D	San Juan Bautista
CCGC_0307	3/25/2014	41.03	36.57	**5.8%**	D	Bolsa
CCGC_0309	3/25/2014	19.24	17.01	**6.1%**	D	San Juan Bautista
CCGC_0256	3/25/2014	5.02	4.52	**5.2%**	D	Llagas
CCGC_0260	3/25/2014	9.77	9.00	4.1%	D	Llagas
CCGC_0257	3/25/2014	5.01	4.56	4.7%	D	Llagas
CCGC_0258	3/25/2014	5.10	4.43	**7.1%**	D/I	Llagas
CCGC_0259	3/25/2014	6.51	6.02	3.9%	D	Llagas
CCGC_0261	3/25/2014	12.19	11.31	3.8%	D/I	Llagas
CCGC_0264	3/25/2014	8.72	8.06	4.0%	D/I	Llagas
CCGC_0290	3/25/2014	6.51	5.98	4.3%	D	Llagas
CCGC_0289	3/25/2014	5.86	5.23	**5.6%**	D	Llagas
CCGC_0295	3/25/2014	5.40	5.08	3.1%	D	Llagas

Field Point	Date	Sum Cations (meq/L)	Sum Anions (meq/L)	Anion/Cation balance (% difference)	Use	Basin
CCGC_0291	3/25/2014	7.62	7.04	3.9%	D	Llagas
CCGC_0293	3/25/2014	5.99	5.45	4.8%	D	Llagas
CCGC_0255	3/25/2014	7.57	7.02	3.8%	D/I	Llagas
CCGC_0255	3/25/2014	7.67	7.04	4.3%	D/I	Llagas
CCGC_0262	3/25/2014	3.86	3.46	**5.5%**	D	Llagas
CCGC_0263	3/25/2014	9.80	9.09	3.8%	D/I	Llagas
CCGC_0298	3/25/2014	4.51	4.10	4.7%	D	Llagas
CCGC_0267	3/26/2014	7.37	6.92	3.1%	D	Hollister
CCGC_0318	3/26/2014	12.51	11.85	2.7%	D/I	Llagas
CCGC_0227	3/26/2014	6.21	5.78	3.6%	D/I	Llagas
CCGC_0229	3/26/2014	5.85	5.40	4.0%	D/I	Llagas
CCGC_0226	3/26/2014	6.02	5.36	**5.8%**	D/I	Llagas
CCGC_0228	3/26/2014	10.19	9.52	3.4%	D	Llagas
CCGC_0232	3/26/2014	5.92	5.35	**5.0%**	D	Llagas
CCGC_0231	3/26/2014	6.00	5.46	4.7%	D	Llagas
CCGC_0304	3/26/2014	6.99	6.53	3.4%	D	Llagas
CCGC_0266	3/26/2014	8.66	8.27	2.3%	D	Hollister
CCGC_0272	3/26/2014	14.88	14.05	2.9%	D/I	Hollister
CCGC_0271	3/26/2014	6.84	6.49	2.6%	D	Hollister
CCGC_0273	3/26/2014	7.62	7.24	2.6%	D	Hollister
CCGC_0265	3/26/2014	9.28	8.85	2.4%	D	Hollister
CCGC_0303	3/26/2014	6.67	6.04	4.9%	D	Llagas
CCGC_0302	3/26/2014	8.04	7.53	3.3%	D	Llagas
CCGC_0305	3/26/2014	11.97	11.26	3.0%	D	Llagas
CCGC_0306	3/26/2014	19.53	17.83	4.6%	D	Llagas
CCGC_0306	3/26/2014	19.76	18.41	3.5%	D	Llagas
CCGC_0270	3/26/2014	8.62	8.24	2.3%	D/I	Hollister
CCGC_0269	3/26/2014	6.23	5.84	3.3%	D/I	Hollister
CCGC_0314	3/26/2014	11.05	10.23	3.9%	D	Llagas
CCGC_0301	3/26/2014	7.08	6.48	4.5%	D	Llagas
CCGC_0225	3/26/2014	8.77	7.94	5.0%	D	Llagas
CCGC_0268	3/26/2014	13.26	12.80	1.8%	D	Hollister
CCGC_0319	3/27/2014	9.94	9.65	1.5%	D	Llagas
CCGC_0278	3/27/2014	16.09	15.35	2.4%	D	San Juan Bautista
CCGC_0280	3/27/2014	22.15	21.43	1.7%	D/I	San Juan Bautista
CCGC_0277	3/27/2014	17.64	17.34	0.9%	D/I	San Juan Bautista
CCGC_0274	3/27/2014	7.61	7.33	1.9%	D/I	Hollister
CCGC_0233	3/27/2014	4.30	4.04	3.2%	D	Llagas
CCGC_0233	3/27/2014	4.30	4.03	3.3%	D	Llagas
CCGC_0247	3/27/2014	14.77	13.85	3.2%	D/I	San Juan Bautista
CCGC_0246	3/27/2014	18.61	16.91	4.8%	D/I	San Juan Bautista
CCGC_0245	3/27/2014	13.36	13.06	1.1%	D/I	San Juan Bautista
CCGC_0317	3/27/2014	6.53	6.08	3.5%	D	Hollister
CCGC_0311	3/27/2014	33.39	30.27	4.9%	D	San Juan Bautista
CCGC_0310	3/27/2014	41.34	38.74	3.2%	D	San Juan Bautista
CCGC_0312	3/27/2014	36.83	33.70	4.4%	D	San Juan Bautista
CCGC_0315	3/27/2014	9.03	8.18	4.9%	D/I	Llagas
CCGC_0275	3/27/2014	15.71	15.03	2.2%	D	San Juan Bautista
CCGC_0276	3/27/2014	14.29	13.91	1.3%	D/I	San Juan Bautista
CCGC_0320	3/27/2014	6.43	6.40	0.3%	D	Llagas
CCGC_0238	3/27/2014	14.04	13.85	0.7%	D/I	Llagas

Field Point	Date	Sum Cations (meq/L)	Sum Anions (meq/L)	Anion/Cation balance (% difference)	Use	Basin
CCGC_0237	3/27/2014	5.19	5.03	1.6%	D/I	Llagas
CCGC_0240	3/27/2014	10.56	9.98	2.8%	D	Llagas
CCGC_0321	3/27/2014	6.80	7.88	**-7.4%**	D	Llagas
CCGC_0235	3/27/2014	6.47	5.58	**7.4%**	D/I	Llagas
CCGC_0322	3/27/2014	7.16	7.02	1.0%	D	Llagas
CCGC_0236	3/27/2014	6.71	6.64	0.5%	D	Llagas
CCGC_0283	3/28/2014	4.77	4.36	4.5%	D/I	Llagas
CCGC_0281	3/28/2014	34.57	30.52	**6.2%**	D	Bolsa
CCGC_0244	3/28/2014	15.59	14.44	3.8%	D/I	San Juan Bautista
CCGC_0243	3/28/2014	15.21	13.89	4.5%	D/I	San Juan Bautista
CCGC_0243	3/28/2014	15.09	13.85	4.3%	D/I	San Juan Bautista
CCGC_0242	3/28/2014	14.36	13.02	4.9%	D	San Juan Bautista
CCGC_0241	3/28/2014	19.84	17.55	**6.1%**	D/I	San Juan Bautista
CCGC_0282	3/28/2014	12.46	11.06	**6.0%**	D/I	Hollister
CCGC_0284	3/28/2014	7.53	6.95	4.0%	D/I	Llagas
CCGC_0285	3/28/2014	5.98	5.40	**5.1%**	D/I	Llagas
CCGC_0366	4/30/2014	19.42	19.23	0.5%	D	Bolsa
CCGC_0368	4/30/2014	32.55	32.32	0.4%	D	San Juan Bautista
CCGC_0369	4/30/2014	26.72	26.45	0.5%	D	San Juan Bautista
CCGC_0367	4/30/2014	22.77	22.73	0.1%	D	San Juan Bautista
Ranch2_Dom	7/14/2014	6.58	6.46	0.9%	D	Llagas
Ranch2_Irr	7/14/2014	5.41	5.33	0.7%	I	Llagas
Claire_D/I	7/14/2014	6.24	6.21	0.3%	D/I	Llagas
Burnett_D	7/15/2014	10.76	10.68	0.4%	D	Hollister
Burnett_D	7/15/2014	10.58	10.62	-0.2%	D	Hollister
Burnett_I	7/15/2014	10.77	10.63	0.7%	I	Hollister
8831FAIR	7/15/2014	5.66	5.67	-0.1%	D/I	Hollister
CCGC_0429	8/7/2014	5.79	5.61	1.6%	D/I	Llagas
CCGC_0417	8/7/2014	6.18	5.85	2.7%	D/I	Llagas
CCGC_0422	8/7/2014	7.08	6.56	3.8%	D	Llagas
CCGC_0414	8/7/2014	5.88	5.71	1.4%	D/I	Hollister
CCGC_0414	8/7/2014	5.93	5.54	3.4%	D/I	Hollister
CCGC_0415	8/7/2014	6.42	6.29	1.0%	D	Hollister
CCGC_0416	8/7/2014	5.12	4.95	1.7%	D	Hollister
CCGC_0408	8/7/2014	18.55	17.80	2.1%	D	San Juan Bautista
CCGC_0418	8/7/2014	12.47	12.02	1.8%	D/I	Hollister
CCGC_0421	8/7/2014	10.54	10.07	2.3%	D	Llagas
CCGC_0419	8/7/2014	6.99	6.62	2.7%	D/I	Llagas
CCGC_0411	8/7/2014	32.19	32.26	-0.1%	D	Hollister
CCGC_0420	8/7/2014	9.80	9.98	-0.9%	I	Llagas
CCGC_0412	8/7/2014	21.70	21.30	0.9%	D	Bolsa
CCGC_0413	8/7/2014	22.10	22.44	-0.8%	D/I	Hollister
CCGC_0425	8/8/2014	9.18	8.88	1.7%	D	Hollister
CCGC_0425	8/8/2014	9.28	8.86	2.3%	D	Hollister
CCGC_0426	8/8/2014	6.28	6.03	2.0%	D/I	Llagas
CCGC_0427	8/8/2014	7.91	7.59	2.1%	I	Llagas
CCGC_0258	8/21/2014	4.84	4.40	4.7%	D/I	Llagas
CCGC_0252	8/21/2014	7.07	6.61	3.3%	D/I	Llagas
CCGC_0303	8/21/2014	6.52	6.07	3.6%	D	Llagas
CCGC_0295	8/21/2014	5.79	5.32	4.2%	D	Llagas
CCGC_0301	8/21/2014	7.30	6.63	4.8%	D	Llagas

Field Point	Date	Sum Cations (meq/L)	Sum Anions (meq/L)	Anion/Cation balance (% difference)	Use	Basin
CCGC_0255	8/21/2014	7.50	7.00	3.5%	D/I	Llagas
CCGC_0456	8/25/2014	16.50	14.97	4.9%	D	San Juan Bautista
CCGC_0454	8/25/2014	14.74	14.09	2.3%	D/I	San Juan Bautista
CCGC_0457	8/25/2014	22.69	21.15	3.5%	D/I	San Juan Bautista
CCGC_0455	8/25/2014	18.13	17.11	2.9%	D	Hollister
CCGC_0461	8/25/2014	12.34	11.75	2.5%	D/I	Hollister
CCGC_0460	8/25/2014	32.31	28.66	**6.0%**	D	Hollister
CCGC_0462	8/26/2014	27.46	24.89	4.9%	D	Bolsa
CCGC_0463	8/26/2014	19.20	17.50	4.6%	D	Hollister
CCGC_0463	8/26/2014	18.63	17.58	2.9%	D	Hollister
CCGC_0464	8/26/2014	15.06	14.12	3.2%	D	Hollister
CCGC_0464	8/26/2014	14.79	14.24	1.9%	D	Hollister
CCGC_0466	8/26/2014	24.13	21.66	**5.4%**	D	Bolsa
CCGC_0468	8/26/2014	18.17	17.31	2.4%	D	Hollister
CCGC_0465	8/26/2014	13.14	11.90	5.0%	D	Hollister
CCGC_0467	8/26/2014	20.61	18.69	4.9%	D	Hollister
CCGC_0515	8/26/2014	12.76	11.86	3.7%	D	Hollister

Ratio of Calculated Sum of Dissolved Solids to Specific Conductance

The ratio of the calculated sum of dissolved solids (mg/L) to specific conductance was calculated. The ratio was calculated as follows:

$$\frac{Sum\ of\ dissolved\ solids\ in\ mg/L}{Specific\ conductance}$$

The sum of dissolved solids divided by the specific conductance should fall within the range 0.55 to 0.81. 74 of the 164 samples (45 percent) do not fall within this range.

Ratio of the Sum of Reacting Constituents to Specific Conductance

The ratio of the sum of reacting cations (meq/L) to 0.01 times specific conductance, as well as the sum of reacting anions (meq/L) to 0.01 times specific conductance, should be within the range 0.92 to 1.242. This ratio was calculated as follows:

$$\frac{Sum\ of\ reacting\ cations\ (or\ anions) in\ meq/L}{0.01 \times Specific\ Conductance}$$

Of the 164 samples, 25 (15 percent) do not fall within the range for cations and 10 (6.1 percent) do not fall within the range for anions.

Appendix D – CCGC Sampled Well Information and Results

Analytical results for all wells sampled in the Gilroy-Hollister valley under Characterization Monitoring can be found in the following tables.

Any data excluded from the analysis can be found in Appendix B.

FieldPointName	Use	Top of Screened Interval	Bottom of Screened Interval	Well Depth	Sample Date	Analyte Name	Result	Res Qual Code	QA Code	GWBasin
8831FAIR	D/I				15/Jul/2014	Nitrate as NO3		ND	None	GILROY-HOLLISTER
Burnett_D	D				15/Jul/2014	Nitrate as NO3	23	=	None	GILROY-HOLLISTER
Burnett_I	I				15/Jul/2014	Nitrate as NO3	22	=	None	GILROY-HOLLISTER
CCGC_0208	D			300	24/Mar/2014	Nitrate as NO3	21	=	None	GILROY-HOLLISTER
CCGC_0209	D/I			388	24/Mar/2014	Nitrate as NO3	66	=	None	GILROY-HOLLISTER
CCGC_0210	D/I				24/Mar/2014	Nitrate as NO3	14	=	None	GILROY-HOLLISTER
CCGC_0211	D	100	200		24/Mar/2014	Nitrate as NO3	20	=	None	GILROY-HOLLISTER
CCGC_0212	D/I			200	24/Mar/2014	Nitrate as NO3	16	=	None	GILROY-HOLLISTER
CCGC_0213	D			90	24/Mar/2014	Nitrate as NO3	1	=	None	GILROY-HOLLISTER
CCGC_0214	D			100	24/Mar/2014	Nitrate as NO3	18	=	None	GILROY-HOLLISTER
CCGC_0215	D/I			100	24/Mar/2014	Nitrate as NO3	20	=	None	GILROY-HOLLISTER
CCGC_0218	D				25/Mar/2014	Nitrate as NO3	9	=	None	GILROY-HOLLISTER
CCGC_0219	D				25/Mar/2014	Nitrate as NO3	8	=	None	GILROY-HOLLISTER
CCGC_0220	D				25/Mar/2014	Nitrate as NO3	8	=	None	GILROY-HOLLISTER
CCGC_0221	D				25/Mar/2014	Nitrate as NO3	12	=	None	GILROY-HOLLISTER
CCGC_0222	D				25/Mar/2014	Nitrate as NO3	19	=	None	GILROY-HOLLISTER
CCGC_0223	D				25/Mar/2014	Nitrate as NO3	7	=	None	GILROY-HOLLISTER
CCGC_0224	D				25/Mar/2014	Nitrate as NO3	24	=	None	GILROY-HOLLISTER
CCGC_0225	D			260	26/Mar/2014	Nitrate as NO3	26	=	None	GILROY-HOLLISTER
CCGC_0226	D/I				26/Mar/2014	Nitrate as NO3	25	=	None	GILROY-HOLLISTER
CCGC_0227	D/I				26/Mar/2014	Nitrate as NO3	29	=	None	GILROY-HOLLISTER
CCGC_0228	D				26/Mar/2014	Nitrate as NO3	50	=	None	GILROY-HOLLISTER
CCGC_0229	D/I				26/Mar/2014	Nitrate as NO3	5	=	None	GILROY-HOLLISTER
CCGC_0231	D				26/Mar/2014	Nitrate as NO3	7	=	None	GILROY-HOLLISTER
CCGC_0232	D				26/Mar/2014	Nitrate as NO3	8	=	None	GILROY-HOLLISTER
CCGC_0233	D			100	27/Mar/2014	Nitrate as NO3	2	=	None	GILROY-HOLLISTER
CCGC_0235	D/I				27/Mar/2014	Nitrate as NO3	22	=	None	GILROY-HOLLISTER
CCGC_0236	D				27/Mar/2014	Nitrate as NO3	28	=	None	GILROY-HOLLISTER
CCGC_0237	D/I				27/Mar/2014	Nitrate as NO3	19	=	None	GILROY-HOLLISTER
CCGC_0238	D/I	125 230 270	190 250 310		27/Mar/2014	Nitrate as NO3	52	=	None	GILROY-HOLLISTER
CCGC_0240	D				27/Mar/2014	Nitrate as NO3	189	=	None	GILROY-HOLLISTER
CCGC_0241	D/I			210	28/Mar/2014	Nitrate as NO3	10	=	None	GILROY-HOLLISTER
CCGC_0242	D			180	28/Mar/2014	Nitrate as NO3		ND	None	GILROY-HOLLISTER
CCGC_0243	D/I			120	28/Mar/2014	Nitrate as NO3	13	=	None	GILROY-HOLLISTER
CCGC_0244	D/I			220	28/Mar/2014	Nitrate as NO3	19	=	None	GILROY-HOLLISTER
CCGC_0245	D/I			160	27/Mar/2014	Nitrate as NO3	14	=	None	GILROY-HOLLISTER
CCGC_0246	D/I			180	27/Mar/2014	Nitrate as NO3		ND	None	GILROY-HOLLISTER
CCGC_0247	D/I			280	27/Mar/2014	Nitrate as NO3		ND	None	GILROY-HOLLISTER
CCGC_0248	D				24/Mar/2014	Nitrate as NO3	17	=	None	GILROY-HOLLISTER
CCGC_0249	D	137 180	146 212		24/Mar/2014	Nitrate as NO3	10	=	None	GILROY-HOLLISTER
CCGC_0251	D/I				24/Mar/2014	Nitrate as NO3	47	=	None	GILROY-HOLLISTER
CCGC_0252	D/I				24/Mar/2014	Nitrate as NO3	39	=	None	GILROY-HOLLISTER
CCGC_0252	D/I				21/Aug/2014	Nitrate as NO3	41	=	None	GILROY-HOLLISTER
CCGC_0253	D/I				24/Mar/2014	Nitrate as NO3	27	=	None	GILROY-HOLLISTER
CCGC_0254	D/I				24/Mar/2014	Nitrate as NO3	94	=	None	GILROY-HOLLISTER
CCGC_0255	D/I			200	25/Mar/2014	Nitrate as NO3	44	=	None	GILROY-HOLLISTER
CCGC_0255	D/I			200	21/Aug/2014	Nitrate as NO3	40	=	None	GILROY-HOLLISTER
CCGC_0256	D				25/Mar/2014	Nitrate as NO3	4	=	None	GILROY-HOLLISTER
CCGC_0257	D			110	25/Mar/2014	Nitrate as NO3	21	=	None	GILROY-HOLLISTER
CCGC_0258	D/I			240	25/Mar/2014	Nitrate as NO3	38	=	None	GILROY-HOLLISTER
CCGC_0258	D/I			240	21/Aug/2014	Nitrate as NO3	18	=	None	GILROY-HOLLISTER
CCGC_0259	D				25/Mar/2014	Nitrate as NO3	30	=	None	GILROY-HOLLISTER
CCGC_0260	D				25/Mar/2014	Nitrate as NO3	15	=	None	GILROY-HOLLISTER
CCGC_0261	D/I				25/Mar/2014	Nitrate as NO3	204	=	None	GILROY-HOLLISTER
CCGC_0262	D			100	25/Mar/2014	Nitrate as NO3	10	=	None	GILROY-HOLLISTER
CCGC_0263	D/I			100	25/Mar/2014	Nitrate as NO3	47	=	None	GILROY-HOLLISTER
CCGC_0264	D/I			430	25/Mar/2014	Nitrate as NO3	63	=	None	GILROY-HOLLISTER
CCGC_0265	D			220	26/Mar/2014	Nitrate as NO3	16	=	None	GILROY-HOLLISTER

FieldPointName	Use	Top of Screened Interval	Bottom of Screened Interval	Well Depth	Sample Date	Analyte Name	Result	Res Qual Code	QA Code	GWBasin
CCGC_0266	D			330	26/Mar/2014	Nitrate as NO3		ND	None	GILROY-HOLLISTER
CCGC_0267	D			150	26/Mar/2014	Nitrate as NO3		ND	None	GILROY-HOLLISTER
CCGC_0268	D			100	26/Mar/2014	Nitrate as NO3		ND	None	GILROY-HOLLISTER
CCGC_0269	D/I	140 200 260 320	180 220 300 340	330	26/Mar/2014	Nitrate as NO3		ND	None	GILROY-HOLLISTER
CCGC_0270	D/I	90	170	180	26/Mar/2014	Nitrate as NO3	16	=	None	GILROY-HOLLISTER
CCGC_0271	D			126	26/Mar/2014	Nitrate as NO3	10	=	None	GILROY-HOLLISTER
CCGC_0272	D/I	100 220 320	140 300 340	320	26/Mar/2014	Nitrate as NO3		ND	None	GILROY-HOLLISTER
CCGC_0273	D				26/Mar/2014	Nitrate as NO3		ND	None	GILROY-HOLLISTER
CCGC_0274	D/I			200	27/Mar/2014	Nitrate as NO3	8	=	None	GILROY-HOLLISTER
CCGC_0275	D			155	27/Mar/2014	Nitrate as NO3	28	=	None	GILROY-HOLLISTER
CCGC_0276	D/I			310	27/Mar/2014	Nitrate as NO3	3	=	None	GILROY-HOLLISTER
CCGC_0277	D/I				27/Mar/2014	Nitrate as NO3	110	=	None	GILROY-HOLLISTER
CCGC_0278	D				27/Mar/2014	Nitrate as NO3		ND	None	GILROY-HOLLISTER
CCGC_0280	D/I			250	27/Mar/2014	Nitrate as NO3	11	=	None	GILROY-HOLLISTER
CCGC_0281	D			270	28/Mar/2014	Nitrate as NO3	87	=	None	GILROY-HOLLISTER
CCGC_0282	D/I			250	28/Mar/2014	Nitrate as NO3		ND	None	GILROY-HOLLISTER
CCGC_0283	D/I			60	28/Mar/2014	Nitrate as NO3	32	=	None	GILROY-HOLLISTER
CCGC_0284	D/I			350	28/Mar/2014	Nitrate as NO3	3	=	None	GILROY-HOLLISTER
CCGC_0285	D/I	130 240 300	170 280 340	350	28/Mar/2014	Nitrate as NO3	26	=	None	GILROY-HOLLISTER
CCGC_0286	D				24/Mar/2014	Nitrate as NO3	84	=	None	GILROY-HOLLISTER
CCGC_0287	D				24/Mar/2014	Nitrate as NO3	102	=	None	GILROY-HOLLISTER
CCGC_0288	D				24/Mar/2014	Nitrate as NO3	171	=	None	GILROY-HOLLISTER
CCGC_0289	D				25/Mar/2014	Nitrate as NO3	15	=	None	GILROY-HOLLISTER
CCGC_0290	D				25/Mar/2014	Nitrate as NO3	32	=	None	GILROY-HOLLISTER
CCGC_0291	D				25/Mar/2014	Nitrate as NO3	54	=	None	GILROY-HOLLISTER
CCGC_0292	D				24/Mar/2014	Nitrate as NO3	12	=	None	GILROY-HOLLISTER
CCGC_0293	D				25/Mar/2014	Nitrate as NO3	15	=	None	GILROY-HOLLISTER
CCGC_0294	D				24/Mar/2014	Nitrate as NO3	20	=	None	GILROY-HOLLISTER
CCGC_0295	D				25/Mar/2014	Nitrate as NO3	44	=	None	GILROY-HOLLISTER
CCGC_0295	D				21/Aug/2014	Nitrate as NO3	44	=	None	GILROY-HOLLISTER
CCGC_0296	D				24/Mar/2014	Nitrate as NO3	26	=	None	GILROY-HOLLISTER
CCGC_0297	D				24/Mar/2014	Nitrate as NO3	52	=	None	GILROY-HOLLISTER
CCGC_0298	D				25/Mar/2014	Nitrate as NO3	25	=	None	GILROY-HOLLISTER
CCGC_0301	D				26/Mar/2014	Nitrate as NO3	40	=	None	GILROY-HOLLISTER
CCGC_0301	D				21/Aug/2014	Nitrate as NO3	40	=	None	GILROY-HOLLISTER
CCGC_0302	D				26/Mar/2014	Nitrate as NO3	68	=	None	GILROY-HOLLISTER
CCGC_0303	D				26/Mar/2014	Nitrate as NO3	41	=	None	GILROY-HOLLISTER
CCGC_0303	D				21/Aug/2014	Nitrate as NO3	38	=	None	GILROY-HOLLISTER
CCGC_0304	D				26/Mar/2014	Nitrate as NO3	59	=	None	GILROY-HOLLISTER
CCGC_0305	D				26/Mar/2014	Nitrate as NO3	88	=	None	GILROY-HOLLISTER
CCGC_0306	D				26/Mar/2014	Nitrate as NO3	180	=	None	GILROY-HOLLISTER
CCGC_0307	D				25/Mar/2014	Nitrate as NO3	109	=	None	GILROY-HOLLISTER
CCGC_0308	D				25/Mar/2014	Nitrate as NO3	1	=	None	GILROY-HOLLISTER
CCGC_0309	D				25/Mar/2014	Nitrate as NO3	14	=	None	GILROY-HOLLISTER
CCGC_0310	D				27/Mar/2014	Nitrate as NO3		ND	None	GILROY-HOLLISTER
CCGC_0311	D				27/Mar/2014	Nitrate as NO3	1	=	None	GILROY-HOLLISTER
CCGC_0312	D				27/Mar/2014	Nitrate as NO3	5	=	None	GILROY-HOLLISTER
CCGC_0314	D				26/Mar/2014	Nitrate as NO3	143	=	None	GILROY-HOLLISTER
CCGC_0315	D/I				27/Mar/2014	Nitrate as NO3	25	=	None	GILROY-HOLLISTER
CCGC_0317	D				27/Mar/2014	Nitrate as NO3		ND	None	GILROY-HOLLISTER
CCGC_0318	D/I				26/Mar/2014	Nitrate as NO3	32	=	None	GILROY-HOLLISTER
CCGC_0319	D				27/Mar/2014	Nitrate as NO3	29	=	None	GILROY-HOLLISTER
CCGC_0320	D	260	310		27/Mar/2014	Nitrate as NO3	17	=	None	GILROY-HOLLISTER
CCGC_0321	D				27/Mar/2014	Nitrate as NO3	59	=	None	GILROY-HOLLISTER

FieldPointName	Use	Top of Screened Interval	Bottom of Screened Interval	Well Depth	Sample Date	Analyte Name	Result	Res Qual Code	QA Code	GWBasin
CCGC_0322	D				27/Mar/2014	Nitrate as NO3	36	=	None	GILROY-HOLLISTER
CCGC_0366	D	210 390 540	300 420 600		30/Apr/2014	Nitrate as NO3		ND	None	GILROY-HOLLISTER
CCGC_0367	D				30/Apr/2014	Nitrate as NO3	121	=	None	GILROY-HOLLISTER
CCGC_0368	D				30/Apr/2014	Nitrate as NO3	121	=	None	GILROY-HOLLISTER
CCGC_0369	D				30/Apr/2014	Nitrate as NO3	128	=	None	GILROY-HOLLISTER
CCGC_0408	D				07/Aug/2014	Nitrate as NO3	27	=	None	GILROY-HOLLISTER
CCGC_0411	D				07/Aug/2014	Nitrate as NO3	113	=	None	GILROY-HOLLISTER
CCGC_0412	D				07/Aug/2014	Nitrate as NO3	26	=	None	GILROY-HOLLISTER
CCGC_0413	D/I	288	486		07/Aug/2014	Nitrate as NO3	43	=	None	GILROY-HOLLISTER
CCGC_0414	D/I	100	200	205	07/Aug/2014	Nitrate as NO3	16	=	None	GILROY-HOLLISTER
CCGC_0415	D			120	07/Aug/2014	Nitrate as NO3	7	=	None	GILROY-HOLLISTER
CCGC_0416	D				07/Aug/2014	Nitrate as NO3	2	=	None	GILROY-HOLLISTER
CCGC_0417	D/I				07/Aug/2014	Nitrate as NO3	14	=	None	GILROY-HOLLISTER
CCGC_0418	D/I				07/Aug/2014	Nitrate as NO3	39	=	None	GILROY-HOLLISTER
CCGC_0419	D/I				07/Aug/2014	Nitrate as NO3	50	=	None	GILROY-HOLLISTER
CCGC_0420	I				07/Aug/2014	Nitrate as NO3	88	=	None	GILROY-HOLLISTER
CCGC_0421	D				07/Aug/2014	Nitrate as NO3	80	=	None	GILROY-HOLLISTER
CCGC_0422	D				07/Aug/2014	Nitrate as NO3	37	=	None	GILROY-HOLLISTER
CCGC_0425	D	0 160	120 180		08/Aug/2014	Nitrate as NO3	10	=	None	GILROY-HOLLISTER
CCGC_0426	D/I				08/Aug/2014	Nitrate as NO3	32	=	None	GILROY-HOLLISTER
CCGC_0427	I				08/Aug/2014	Nitrate as NO3	123	=	None	GILROY-HOLLISTER
CCGC_0429	D/I				07/Aug/2014	Nitrate as NO3	9	=	None	GILROY-HOLLISTER
CCGC_0454	D/I				25/Aug/2014	Nitrate as NO3	24	=	None	GILROY-HOLLISTER
CCGC_0455	D				25/Aug/2014	Nitrate as NO3	94	=	None	GILROY-HOLLISTER
CCGC_0456	D			250	25/Aug/2014	Nitrate as NO3	1	=	None	GILROY-HOLLISTER
CCGC_0457	D/I				25/Aug/2014	Nitrate as NO3	2	=	None	GILROY-HOLLISTER
CCGC_0460	D	60 120	100 140		25/Aug/2014	Nitrate as NO3	194	=	None	GILROY-HOLLISTER
CCGC_0461	D/I			110	25/Aug/2014	Nitrate as NO3	26	=	None	GILROY-HOLLISTER
CCGC_0462	D				26/Aug/2014	Nitrate as NO3	15	=	None	GILROY-HOLLISTER
CCGC_0463	D			100	26/Aug/2014	Nitrate as NO3	42	=	None	GILROY-HOLLISTER
CCGC_0464	D				26/Aug/2014	Nitrate as NO3	34	=	None	GILROY-HOLLISTER
CCGC_0465	D	340	400		26/Aug/2014	Nitrate as NO3	1	=	None	GILROY-HOLLISTER
CCGC_0466	D				26/Aug/2014	Nitrate as NO3	30	=	None	GILROY-HOLLISTER
CCGC_0467	D	360	440		26/Aug/2014	Nitrate as NO3	127	=	None	GILROY-HOLLISTER
CCGC_0468	D				26/Aug/2014	Nitrate as NO3	75	=	None	GILROY-HOLLISTER
CCGC_0515	D				26/Aug/2014	Nitrate as NO3	2	=	None	GILROY-HOLLISTER
Claire_D/I	D/I	335 383 407	344 391 428		22/Jan/2014	Nitrate as NO3	4	=	None	GILROY-HOLLISTER
Claire_D/I	D/I	335 383 407	344 391 428		14/Jul/2014	Nitrate as NO3	3	=	None	GILROY-HOLLISTER
Ranch2_Dom	D	35 78	75 96		22/Jan/2014	Nitrate as NO3	125	=	None	GILROY-HOLLISTER
Ranch2_Dom	D	35 78	75 96		14/Jul/2014	Nitrate as NO3	121	=	None	GILROY-HOLLISTER
Ranch2_Irr	I				22/Jan/2014	Nitrate as NO3	63	=	None	GILROY-HOLLISTER
Ranch2_Irr	I				14/Jul/2014	Nitrate as NO3	78	=	None	GILROY-HOLLISTER

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
8831FAIR	15/Jul/2014	Alkalinity as CaCO3	102	=	None
8831FAIR	15/Jul/2014	Bicarbonate	124	=	None
8831FAIR	15/Jul/2014	Calcium	26	=	D
8831FAIR	15/Jul/2014	Chloride	97	=	None
8831FAIR	15/Jul/2014	Hardness as CaCO3	131	=	None
8831FAIR	15/Jul/2014	Magnesium	16	=	D
8831FAIR	15/Jul/2014	Nitrate + Nitrite as N	0.2	=	None
8831FAIR	15/Jul/2014	Nitrate as NO3-N		ND	None
8831FAIR	15/Jul/2014	Nitrite as NO2-N	0.2	=	None
8831FAIR	15/Jul/2014	Potassium	3.4	=	D
8831FAIR	15/Jul/2014	QC Ratio TDS/SEC	0.57	=	None
8831FAIR	15/Jul/2014	Sodium	68	=	D
8831FAIR	15/Jul/2014	SpecificConductivity	612	=	None
8831FAIR	15/Jul/2014	Sulfate	43	=	None
8831FAIR	15/Jul/2014	Total Dissolved Solids	351	=	None
Burnett_D	15/Jul/2014	Alkalinity as CaCO3	323	=	None
Burnett_D	15/Jul/2014	Bicarbonate	394	=	None
Burnett_D	15/Jul/2014	Calcium	64	=	D
Burnett_D	15/Jul/2014	Chloride	118	=	None
Burnett_D	15/Jul/2014	Hardness as CaCO3	353	=	None
Burnett_D	15/Jul/2014	Magnesium	47	=	D
Burnett_D	15/Jul/2014	Nitrate + Nitrite as N	5.5	=	None
Burnett_D	15/Jul/2014	Nitrate as NO3-N	5.2	=	None
Burnett_D	15/Jul/2014	Nitrite as NO2-N	0.3	=	None
Burnett_D	15/Jul/2014	Potassium	1.8	=	D
Burnett_D	15/Jul/2014	QC Ratio TDS/SEC	0.56	=	None
Burnett_D	15/Jul/2014	Sodium	84	=	D
Burnett_D	15/Jul/2014	SpecificConductivity	1038	=	None
Burnett_D	15/Jul/2014	Sulfate	25	=	None
Burnett_D	15/Jul/2014	Total Dissolved Solids	580	=	None
Burnett_I	15/Jul/2014	Alkalinity as CaCO3	313	=	None
Burnett_I	15/Jul/2014	Bicarbonate	382	=	None
Burnett_I	15/Jul/2014	Calcium	66	=	D
Burnett_I	15/Jul/2014	Chloride	123	=	None
Burnett_I	15/Jul/2014	Hardness as CaCO3	362	=	None
Burnett_I	15/Jul/2014	Magnesium	48	=	D
Burnett_I	15/Jul/2014	Nitrate + Nitrite as N	5.3	=	None
Burnett_I	15/Jul/2014	Nitrate as NO3-N	5.0	=	None
Burnett_I	15/Jul/2014	Nitrite as NO2-N	0.3	=	None
Burnett_I	15/Jul/2014	Potassium	1.8	=	D
Burnett_I	15/Jul/2014	QC Ratio TDS/SEC	0.58	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
Burnett_I	15/Jul/2014	Sodium	80	=	D
Burnett_I	15/Jul/2014	SpecificConductivity	1033	=	None
Burnett_I	15/Jul/2014	Sulfate	26	=	None
Burnett_I	15/Jul/2014	Total Dissolved Solids	594	=	None
CCGC_0208	24/Mar/2014	Alkalinity as CaCO3	175	=	None
CCGC_0208	24/Mar/2014	Bicarbonate	214	=	None
CCGC_0208	24/Mar/2014	Calcium	61	=	D
CCGC_0208	24/Mar/2014	Chloride	71	=	None
CCGC_0208	24/Mar/2014	Hardness as CaCO3	292	=	None
CCGC_0208	24/Mar/2014	Magnesium	34	=	D
CCGC_0208	24/Mar/2014	Nitrate + Nitrite as N	5	=	None
CCGC_0208	24/Mar/2014	Nitrate as NO3-N	4.7	=	None
CCGC_0208	24/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0208	24/Mar/2014	Potassium	1.6	=	D
CCGC_0208	24/Mar/2014	QC Ratio TDS/SEC	0.57	=	None
CCGC_0208	24/Mar/2014	Sodium	26	=	D
CCGC_0208	24/Mar/2014	SpecificConductivity	697	=	None
CCGC_0208	24/Mar/2014	Sulfate	42	=	None
CCGC_0208	24/Mar/2014	Total Dissolved Solids	394	=	None
CCGC_0209	24/Mar/2014	Alkalinity as CaCO3	108	=	None
CCGC_0209	24/Mar/2014	Bicarbonate	132	=	None
CCGC_0209	24/Mar/2014	Calcium	57	=	D
CCGC_0209	24/Mar/2014	Chloride	68	=	None
CCGC_0209	24/Mar/2014	Hardness as CaCO3	249	=	None
CCGC_0209	24/Mar/2014	Magnesium	26	=	D
CCGC_0209	24/Mar/2014	Nitrate + Nitrite as N	15.3	=	None
CCGC_0209	24/Mar/2014	Nitrate as NO3-N	15	=	None
CCGC_0209	24/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0209	24/Mar/2014	Potassium	1.6	=	D
CCGC_0209	24/Mar/2014	QC Ratio TDS/SEC	0.56	=	None
CCGC_0209	24/Mar/2014	Sodium	27	=	D
CCGC_0209	24/Mar/2014	SpecificConductivity	665	=	None
CCGC_0209	24/Mar/2014	Sulfate	43	=	None
CCGC_0209	24/Mar/2014	Total Dissolved Solids	371	=	None
CCGC_0210	24/Mar/2014	Alkalinity as CaCO3	145	=	None
CCGC_0210	24/Mar/2014	Bicarbonate	177	=	None
CCGC_0210	24/Mar/2014	Calcium	54	=	D
CCGC_0210	24/Mar/2014	Chloride	69	=	None
CCGC_0210	24/Mar/2014	Hardness as CaCO3	246	=	None
CCGC_0210	24/Mar/2014	Magnesium	27	=	D
CCGC_0210	24/Mar/2014	Nitrate + Nitrite as N	3.4	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0210	24/Mar/2014	Nitrate as NO3-N	3.2	=	None
CCGC_0210	24/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0210	24/Mar/2014	Potassium	1.5	=	D
CCGC_0210	24/Mar/2014	QC Ratio TDS/SEC	0.57	=	None
CCGC_0210	24/Mar/2014	Sodium	23	=	D
CCGC_0210	24/Mar/2014	SpecificConductivity	620	=	None
CCGC_0210	24/Mar/2014	Sulfate	39	=	None
CCGC_0210	24/Mar/2014	Total Dissolved Solids	354	=	None
CCGC_0211	24/Mar/2014	Alkalinity as CaCO3	140	=	None
CCGC_0211	24/Mar/2014	Bicarbonate	171	=	None
CCGC_0211	24/Mar/2014	Calcium	56	=	D
CCGC_0211	24/Mar/2014	Chloride	69	=	None
CCGC_0211	24/Mar/2014	Hardness as CaCO3	255	=	None
CCGC_0211	24/Mar/2014	Magnesium	28	=	D
CCGC_0211	24/Mar/2014	Nitrate + Nitrite as N	4.8	=	None
CCGC_0211	24/Mar/2014	Nitrate as NO3-N	4.5	=	None
CCGC_0211	24/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0211	24/Mar/2014	Potassium	1.5	=	D
CCGC_0211	24/Mar/2014	QC Ratio TDS/SEC	0.55	=	None
CCGC_0211	24/Mar/2014	Sodium	25	=	D
CCGC_0211	24/Mar/2014	SpecificConductivity	619	=	None
CCGC_0211	24/Mar/2014	Sulfate	40	=	None
CCGC_0211	24/Mar/2014	Total Dissolved Solids	343	=	None
CCGC_0212	24/Mar/2014	Alkalinity as CaCO3	127	=	None
CCGC_0212	24/Mar/2014	Bicarbonate	155	=	None
CCGC_0212	24/Mar/2014	Calcium	46	=	D
CCGC_0212	24/Mar/2014	Chloride	60	=	None
CCGC_0212	24/Mar/2014	Hardness as CaCO3	226	=	None
CCGC_0212	24/Mar/2014	Magnesium	27	=	D
CCGC_0212	24/Mar/2014	Nitrate + Nitrite as N	3.9	=	None
CCGC_0212	24/Mar/2014	Nitrate as NO3-N	3.6	=	None
CCGC_0212	24/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0212	24/Mar/2014	Potassium	1.2	=	D
CCGC_0212	24/Mar/2014	QC Ratio TDS/SEC	0.56	=	None
CCGC_0212	24/Mar/2014	Sodium	23	=	D
CCGC_0212	24/Mar/2014	SpecificConductivity	565	=	None
CCGC_0212	24/Mar/2014	Sulfate	36	=	None
CCGC_0212	24/Mar/2014	Total Dissolved Solids	317	=	None
CCGC_0213	24/Mar/2014	Alkalinity as CaCO3	189	=	None
CCGC_0213	24/Mar/2014	Bicarbonate	231	=	None
CCGC_0213	24/Mar/2014	Calcium	36	=	D
CCGC_0213	24/Mar/2014	Chloride	11	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0213	24/Mar/2014	Hardness as CaCO3	213	=	None
CCGC_0213	24/Mar/2014	Magnesium	30	=	D
CCGC_0213	24/Mar/2014	Nitrate + Nitrite as N	0.9	=	None
CCGC_0213	24/Mar/2014	Nitrate as NO3-N	0.3	=	None
CCGC_0213	24/Mar/2014	Nitrite as NO2-N	0.6	=	None
CCGC_0213	24/Mar/2014	Potassium		ND	D
CCGC_0213	24/Mar/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0213	24/Mar/2014	Sodium	14	=	D
CCGC_0213	24/Mar/2014	SpecificConductivity	428	=	None
CCGC_0213	24/Mar/2014	Sulfate	19	=	None
CCGC_0213	24/Mar/2014	Total Dissolved Solids	257	=	None
CCGC_0214	24/Mar/2014	Alkalinity as CaCO3	191	=	None
CCGC_0214	24/Mar/2014	Bicarbonate	233	=	None
CCGC_0214	24/Mar/2014	Calcium	60	=	D
CCGC_0214	24/Mar/2014	Chloride	18	=	None
CCGC_0214	24/Mar/2014	Hardness as CaCO3	232	=	None
CCGC_0214	24/Mar/2014	Magnesium	20	=	D
CCGC_0214	24/Mar/2014	Nitrate + Nitrite as N	4.5	=	None
CCGC_0214	24/Mar/2014	Nitrate as NO3-N	4	=	None
CCGC_0214	24/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0214	24/Mar/2014	Potassium		ND	D
CCGC_0214	24/Mar/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0214	24/Mar/2014	Sodium	20	=	D
CCGC_0214	24/Mar/2014	SpecificConductivity	520	=	None
CCGC_0214	24/Mar/2014	Sulfate	29	=	None
CCGC_0214	24/Mar/2014	Total Dissolved Solids	326	=	None
CCGC_0215	24/Mar/2014	Alkalinity as CaCO3	194	=	None
CCGC_0215	24/Mar/2014	Bicarbonate	237	=	None
CCGC_0215	24/Mar/2014	Calcium	61	=	D
CCGC_0215	24/Mar/2014	Chloride	18	=	None
CCGC_0215	24/Mar/2014	Hardness as CaCO3	235	=	None
CCGC_0215	24/Mar/2014	Magnesium	20	=	D
CCGC_0215	24/Mar/2014	Nitrate + Nitrite as N	5	=	None
CCGC_0215	24/Mar/2014	Nitrate as NO3-N	4.4	=	None
CCGC_0215	24/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0215	24/Mar/2014	Potassium		ND	D
CCGC_0215	24/Mar/2014	QC Ratio TDS/SEC	0.62	=	None
CCGC_0215	24/Mar/2014	Sodium	18	=	D
CCGC_0215	24/Mar/2014	SpecificConductivity	513	=	None
CCGC_0215	24/Mar/2014	Sulfate	20	=	None
CCGC_0215	24/Mar/2014	Total Dissolved Solids	317	=	None
CCGC_0218	25/Mar/2014	Alkalinity as CaCO3	228	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0218	25/Mar/2014	Bicarbonate	278	=	None
CCGC_0218	25/Mar/2014	Calcium	61	=	D
CCGC_0218	25/Mar/2014	Chloride	32	=	None
CCGC_0218	25/Mar/2014	Hardness as CaCO3	292	=	None
CCGC_0218	25/Mar/2014	Magnesium	34	=	D
CCGC_0218	25/Mar/2014	Nitrate + Nitrite as N	2.6	=	None
CCGC_0218	25/Mar/2014	Nitrate as NO3-N	2.1	=	None
CCGC_0218	25/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0218	25/Mar/2014	Potassium	1.4	=	D
CCGC_0218	25/Mar/2014	QC Ratio TDS/SEC	0.57	=	None
CCGC_0218	25/Mar/2014	Sodium	28	=	D
CCGC_0218	25/Mar/2014	SpecificConductivity	624	=	None
CCGC_0218	25/Mar/2014	Sulfate	38	=	None
CCGC_0218	25/Mar/2014	Total Dissolved Solids	354	=	None
CCGC_0219	25/Mar/2014	Alkalinity as CaCO3	231	=	None
CCGC_0219	25/Mar/2014	Bicarbonate	282	=	None
CCGC_0219	25/Mar/2014	Calcium	60	=	D
CCGC_0219	25/Mar/2014	Chloride	32	=	None
CCGC_0219	25/Mar/2014	Hardness as CaCO3	286	=	None
CCGC_0219	25/Mar/2014	Magnesium	33	=	D
CCGC_0219	25/Mar/2014	Nitrate + Nitrite as N	2.3	=	None
CCGC_0219	25/Mar/2014	Nitrate as NO3-N	1.8	=	None
CCGC_0219	25/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0219	25/Mar/2014	Potassium	1.6	=	D
CCGC_0219	25/Mar/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0219	25/Mar/2014	Sodium	30	=	D
CCGC_0219	25/Mar/2014	SpecificConductivity	631	=	None
CCGC_0219	25/Mar/2014	Sulfate	42	=	None
CCGC_0219	25/Mar/2014	Total Dissolved Solids	383	=	None
CCGC_0220	25/Mar/2014	Alkalinity as CaCO3	220	=	None
CCGC_0220	25/Mar/2014	Bicarbonate	268	=	None
CCGC_0220	25/Mar/2014	Calcium	61	=	D
CCGC_0220	25/Mar/2014	Chloride	34	=	None
CCGC_0220	25/Mar/2014	Hardness as CaCO3	288	=	None
CCGC_0220	25/Mar/2014	Magnesium	33	=	D
CCGC_0220	25/Mar/2014	Nitrate + Nitrite as N	2.4	=	None
CCGC_0220	25/Mar/2014	Nitrate as NO3-N	1.9	=	None
CCGC_0220	25/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0220	25/Mar/2014	Potassium	1.5	=	D
CCGC_0220	25/Mar/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0220	25/Mar/2014	Sodium	28	=	D
CCGC_0220	25/Mar/2014	SpecificConductivity	627	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0220	25/Mar/2014	Sulfate	39	=	None
CCGC_0220	25/Mar/2014	Total Dissolved Solids	374	=	None
CCGC_0221	25/Mar/2014	Alkalinity as CaCO3	225	=	None
CCGC_0221	25/Mar/2014	Bicarbonate	275	=	None
CCGC_0221	25/Mar/2014	Calcium	64	=	D
CCGC_0221	25/Mar/2014	Chloride	38	=	None
CCGC_0221	25/Mar/2014	Hardness as CaCO3	300	=	None
CCGC_0221	25/Mar/2014	Magnesium	34	=	D
CCGC_0221	25/Mar/2014	Nitrate + Nitrite as N	3.1	=	None
CCGC_0221	25/Mar/2014	Nitrate as NO3-N	2.6	=	None
CCGC_0221	25/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0221	25/Mar/2014	Potassium	1.5	=	D
CCGC_0221	25/Mar/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0221	25/Mar/2014	Sodium	31	=	D
CCGC_0221	25/Mar/2014	SpecificConductivity	638	=	None
CCGC_0221	25/Mar/2014	Sulfate	41	=	None
CCGC_0221	25/Mar/2014	Total Dissolved Solids	374	=	None
CCGC_0222	25/Mar/2014	Alkalinity as CaCO3	178	=	None
CCGC_0222	25/Mar/2014	Bicarbonate	217	=	None
CCGC_0222	25/Mar/2014	Calcium	65	=	D
CCGC_0222	25/Mar/2014	Chloride	76	=	None
CCGC_0222	25/Mar/2014	Hardness as CaCO3	306	=	None
CCGC_0222	25/Mar/2014	Magnesium	35	=	D
CCGC_0222	25/Mar/2014	Nitrate + Nitrite as N	4.7	=	None
CCGC_0222	25/Mar/2014	Nitrate as NO3-N	4.4	=	None
CCGC_0222	25/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0222	25/Mar/2014	Potassium	1.6	=	D
CCGC_0222	25/Mar/2014	QC Ratio TDS/SEC	0.55	=	None
CCGC_0222	25/Mar/2014	Sodium	38	=	D
CCGC_0222	25/Mar/2014	SpecificConductivity	727	=	None
CCGC_0222	25/Mar/2014	Sulfate	42	=	None
CCGC_0222	25/Mar/2014	Total Dissolved Solids	403	=	None
CCGC_0223	25/Mar/2014	Alkalinity as CaCO3	224	=	None
CCGC_0223	25/Mar/2014	Bicarbonate	273	=	None
CCGC_0223	25/Mar/2014	Calcium	60	=	D
CCGC_0223	25/Mar/2014	Chloride	38	=	None
CCGC_0223	25/Mar/2014	Hardness as CaCO3	290	=	None
CCGC_0223	25/Mar/2014	Magnesium	34	=	D
CCGC_0223	25/Mar/2014	Nitrate + Nitrite as N	2	=	None
CCGC_0223	25/Mar/2014	Nitrate as NO3-N	1.5	=	None
CCGC_0223	25/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0223	25/Mar/2014	Potassium	1.6	=	D

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0223	25/Mar/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0223	25/Mar/2014	Sodium	30	=	D
CCGC_0223	25/Mar/2014	SpecificConductivity	626	=	None
CCGC_0223	25/Mar/2014	Sulfate	41	=	None
CCGC_0223	25/Mar/2014	Total Dissolved Solids	380	=	None
CCGC_0224	25/Mar/2014	Alkalinity as CaCO3	219	=	None
CCGC_0224	25/Mar/2014	Bicarbonate	267	=	None
CCGC_0224	25/Mar/2014	Calcium	68	=	D
CCGC_0224	25/Mar/2014	Chloride	56	=	None
CCGC_0224	25/Mar/2014	Hardness as CaCO3	326	=	None
CCGC_0224	25/Mar/2014	Magnesium	38	=	D
CCGC_0224	25/Mar/2014	Nitrate + Nitrite as N	5.7	=	None
CCGC_0224	25/Mar/2014	Nitrate as NO3-N	5.3	=	None
CCGC_0224	25/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0224	25/Mar/2014	Potassium	1.6	=	D
CCGC_0224	25/Mar/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0224	25/Mar/2014	Sodium	31	=	D
CCGC_0224	25/Mar/2014	SpecificConductivity	730	=	None
CCGC_0224	25/Mar/2014	Sulfate	43	=	None
CCGC_0224	25/Mar/2014	Total Dissolved Solids	443	=	None
CCGC_0225	26/Mar/2014	Alkalinity as CaCO3	257	=	None
CCGC_0225	26/Mar/2014	Bicarbonate	314	=	None
CCGC_0225	26/Mar/2014	Calcium	66	=	D
CCGC_0225	26/Mar/2014	Chloride	70	=	None
CCGC_0225	26/Mar/2014	Hardness as CaCO3	325	=	None
CCGC_0225	26/Mar/2014	Magnesium	39	=	D
CCGC_0225	26/Mar/2014	Nitrate + Nitrite as N	6	=	None
CCGC_0225	26/Mar/2014	Nitrate as NO3-N	5.8	=	None
CCGC_0225	26/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0225	26/Mar/2014	Potassium	2.1	=	D
CCGC_0225	26/Mar/2014	QC Ratio TDS/SEC	0.55	=	None
CCGC_0225	26/Mar/2014	Sodium	51	=	D
CCGC_0225	26/Mar/2014	SpecificConductivity	829	=	None
CCGC_0225	26/Mar/2014	Sulfate	20	=	None
CCGC_0225	26/Mar/2014	Total Dissolved Solids	460	=	None
CCGC_0226	26/Mar/2014	Alkalinity as CaCO3	185	=	None
CCGC_0226	26/Mar/2014	Bicarbonate	226	=	None
CCGC_0226	26/Mar/2014	Calcium	53	=	D
CCGC_0226	26/Mar/2014	Chloride	24	=	None
CCGC_0226	26/Mar/2014	Hardness as CaCO3	256	=	None
CCGC_0226	26/Mar/2014	Magnesium	30	=	D
CCGC_0226	26/Mar/2014	Nitrate + Nitrite as N	6	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0226	26/Mar/2014	Nitrate as NO3-N	5.6	=	None
CCGC_0226	26/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0226	26/Mar/2014	Potassium	1.3	=	D
CCGC_0226	26/Mar/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0226	26/Mar/2014	Sodium	20	=	D
CCGC_0226	26/Mar/2014	SpecificConductivity	559	=	None
CCGC_0226	26/Mar/2014	Sulfate	28	=	None
CCGC_0226	26/Mar/2014	Total Dissolved Solids	334	=	None
CCGC_0227	26/Mar/2014	Alkalinity as CaCO3	168	=	None
CCGC_0227	26/Mar/2014	Bicarbonate	205	=	None
CCGC_0227	26/Mar/2014	Calcium	56	=	D
CCGC_0227	26/Mar/2014	Chloride	44	=	None
CCGC_0227	26/Mar/2014	Hardness as CaCO3	263	=	None
CCGC_0227	26/Mar/2014	Magnesium	30	=	D
CCGC_0227	26/Mar/2014	Nitrate + Nitrite as N	6.9	=	None
CCGC_0227	26/Mar/2014	Nitrate as NO3-N	6.6	=	None
CCGC_0227	26/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0227	26/Mar/2014	Potassium	1.4	=	D
CCGC_0227	26/Mar/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0227	26/Mar/2014	Sodium	21	=	D
CCGC_0227	26/Mar/2014	SpecificConductivity	595	=	None
CCGC_0227	26/Mar/2014	Sulfate	34	=	None
CCGC_0227	26/Mar/2014	Total Dissolved Solids	354	=	None
CCGC_0228	26/Mar/2014	Alkalinity as CaCO3	276	=	None
CCGC_0228	26/Mar/2014	Bicarbonate	337	=	None
CCGC_0228	26/Mar/2014	Calcium	90	=	D
CCGC_0228	26/Mar/2014	Chloride	65	=	None
CCGC_0228	26/Mar/2014	Hardness as CaCO3	377	=	None
CCGC_0228	26/Mar/2014	Magnesium	37	=	D
CCGC_0228	26/Mar/2014	Nitrate + Nitrite as N	11.6	=	None
CCGC_0228	26/Mar/2014	Nitrate as NO3-N	11.4	=	None
CCGC_0228	26/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0228	26/Mar/2014	Potassium		ND	D
CCGC_0228	26/Mar/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0228	26/Mar/2014	Sodium	61	=	D
CCGC_0228	26/Mar/2014	SpecificConductivity	983	=	None
CCGC_0228	26/Mar/2014	Sulfate	65	=	None
CCGC_0228	26/Mar/2014	Total Dissolved Solids	580	=	None
CCGC_0229	26/Mar/2014	Alkalinity as CaCO3	194	=	None
CCGC_0229	26/Mar/2014	Bicarbonate	237	=	None
CCGC_0229	26/Mar/2014	Calcium	52	=	D
CCGC_0229	26/Mar/2014	Chloride	22	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0229	26/Mar/2014	Hardness as CaCO3	253	=	None
CCGC_0229	26/Mar/2014	Magnesium	30	=	D
CCGC_0229	26/Mar/2014	Nitrate + Nitrite as N	1.6	=	None
CCGC_0229	26/Mar/2014	Nitrate as NO3-N	1.2	=	None
CCGC_0229	26/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0229	26/Mar/2014	Potassium		ND	D
CCGC_0229	26/Mar/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0229	26/Mar/2014	Sodium	18	=	D
CCGC_0229	26/Mar/2014	SpecificConductivity	534	=	None
CCGC_0229	26/Mar/2014	Sulfate	39	=	None
CCGC_0229	26/Mar/2014	Total Dissolved Solids	317	=	None
CCGC_0231	26/Mar/2014	Alkalinity as CaCO3	197	=	None
CCGC_0231	26/Mar/2014	Bicarbonate	240	=	None
CCGC_0231	26/Mar/2014	Calcium	56	=	D
CCGC_0231	26/Mar/2014	Chloride	21	=	None
CCGC_0231	26/Mar/2014	Hardness as CaCO3	259	=	None
CCGC_0231	26/Mar/2014	Magnesium	29	=	D
CCGC_0231	26/Mar/2014	Nitrate + Nitrite as N	2.1	=	None
CCGC_0231	26/Mar/2014	Nitrate as NO3-N	1.6	=	None
CCGC_0231	26/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0231	26/Mar/2014	Potassium	1.3	=	D
CCGC_0231	26/Mar/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0231	26/Mar/2014	Sodium	18	=	D
CCGC_0231	26/Mar/2014	SpecificConductivity	557	=	None
CCGC_0231	26/Mar/2014	Sulfate	39	=	None
CCGC_0231	26/Mar/2014	Total Dissolved Solids	326	=	None
CCGC_0232	26/Mar/2014	Alkalinity as CaCO3	193	=	None
CCGC_0232	26/Mar/2014	Bicarbonate	235	=	None
CCGC_0232	26/Mar/2014	Calcium	52	=	D
CCGC_0232	26/Mar/2014	Chloride	20	=	None
CCGC_0232	26/Mar/2014	Hardness as CaCO3	253	=	None
CCGC_0232	26/Mar/2014	Magnesium	30	=	D
CCGC_0232	26/Mar/2014	Nitrate + Nitrite as N	2.4	=	None
CCGC_0232	26/Mar/2014	Nitrate as NO3-N	1.9	=	None
CCGC_0232	26/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0232	26/Mar/2014	Potassium	1.1	=	D
CCGC_0232	26/Mar/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0232	26/Mar/2014	Sodium	19	=	D
CCGC_0232	26/Mar/2014	SpecificConductivity	545	=	None
CCGC_0232	26/Mar/2014	Sulfate	38	=	None
CCGC_0232	26/Mar/2014	Total Dissolved Solids	320	=	None
CCGC_0233	27/Mar/2014	Alkalinity as CaCO3	154	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0233	27/Mar/2014	Bicarbonate	188	=	None
CCGC_0233	27/Mar/2014	Calcium	41	=	D
CCGC_0233	27/Mar/2014	Chloride	12	=	None
CCGC_0233	27/Mar/2014	Hardness as CaCO3	185	=	None
CCGC_0233	27/Mar/2014	Magnesium	20	=	D
CCGC_0233	27/Mar/2014	Nitrate + Nitrite as N	0.9	=	None
CCGC_0233	27/Mar/2014	Nitrate as NO3-N	0.5	=	None
CCGC_0233	27/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0233	27/Mar/2014	Potassium		ND	D
CCGC_0233	27/Mar/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0233	27/Mar/2014	Sodium	14	=	D
CCGC_0233	27/Mar/2014	SpecificConductivity	402	=	None
CCGC_0233	27/Mar/2014	Sulfate	28	=	None
CCGC_0233	27/Mar/2014	Total Dissolved Solids	247	=	None
CCGC_0235	27/Mar/2014	Alkalinity as CaCO3	197	=	None
CCGC_0235	27/Mar/2014	Bicarbonate	240	=	None
CCGC_0235	27/Mar/2014	Calcium	53	=	D
CCGC_0235	27/Mar/2014	Chloride	28	=	None
CCGC_0235	27/Mar/2014	Hardness as CaCO3	289	=	None
CCGC_0235	27/Mar/2014	Magnesium	38	=	D
CCGC_0235	27/Mar/2014	Nitrate + Nitrite as N	5.4	=	None
CCGC_0235	27/Mar/2014	Nitrate as NO3-N	4.9	=	None
CCGC_0235	27/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0235	27/Mar/2014	Potassium		ND	D
CCGC_0235	27/Mar/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0235	27/Mar/2014	Sodium	16	=	D
CCGC_0235	27/Mar/2014	SpecificConductivity	612	=	None
CCGC_0235	27/Mar/2014	Sulfate	24	=	None
CCGC_0235	27/Mar/2014	Total Dissolved Solids	374	=	None
CCGC_0236	27/Mar/2014	Alkalinity as CaCO3	230	=	None
CCGC_0236	27/Mar/2014	Bicarbonate	281	=	None
CCGC_0236	27/Mar/2014	Calcium	48	=	D
CCGC_0236	27/Mar/2014	Chloride	36	=	None
CCGC_0236	27/Mar/2014	Hardness as CaCO3	301	=	None
CCGC_0236	27/Mar/2014	Magnesium	44	=	D
CCGC_0236	27/Mar/2014	Nitrate + Nitrite as N	6.6	=	None
CCGC_0236	27/Mar/2014	Nitrate as NO3-N	6.2	=	None
CCGC_0236	27/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0236	27/Mar/2014	Potassium		ND	D
CCGC_0236	27/Mar/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0236	27/Mar/2014	Sodium	16	=	D
CCGC_0236	27/Mar/2014	SpecificConductivity	650	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0236	27/Mar/2014	Sulfate	28	=	None
CCGC_0236	27/Mar/2014	Total Dissolved Solids	391	=	None
CCGC_0237	27/Mar/2014	Alkalinity as CaCO3	170	=	None
CCGC_0237	27/Mar/2014	Bicarbonate	207	=	None
CCGC_0237	27/Mar/2014	Calcium	44	=	D
CCGC_0237	27/Mar/2014	Chloride	27	=	None
CCGC_0237	27/Mar/2014	Hardness as CaCO3	225	=	None
CCGC_0237	27/Mar/2014	Magnesium	28	=	D
CCGC_0237	27/Mar/2014	Nitrate + Nitrite as N	4.7	=	None
CCGC_0237	27/Mar/2014	Nitrate as NO3-N	4.3	=	None
CCGC_0237	27/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0237	27/Mar/2014	Potassium		ND	D
CCGC_0237	27/Mar/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0237	27/Mar/2014	Sodium	16	=	D
CCGC_0237	27/Mar/2014	SpecificConductivity	506	=	None
CCGC_0237	27/Mar/2014	Sulfate	27	=	None
CCGC_0237	27/Mar/2014	Total Dissolved Solids	311	=	None
CCGC_0238	27/Mar/2014	Alkalinity as CaCO3	276	=	None
CCGC_0238	27/Mar/2014	Bicarbonate	337	=	None
CCGC_0238	27/Mar/2014	Calcium	105	=	D
CCGC_0238	27/Mar/2014	Chloride	172	=	None
CCGC_0238	27/Mar/2014	Hardness as CaCO3	534	=	None
CCGC_0238	27/Mar/2014	Magnesium	66	=	D
CCGC_0238	27/Mar/2014	Nitrate + Nitrite as N	11.8	=	None
CCGC_0238	27/Mar/2014	Nitrate as NO3-N	11.7	=	None
CCGC_0238	27/Mar/2014	Nitrite as NO2-N		ND	None
CCGC_0238	27/Mar/2014	Potassium	1	=	D
CCGC_0238	27/Mar/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0238	27/Mar/2014	Sodium	77	=	D
CCGC_0238	27/Mar/2014	SpecificConductivity	1405	=	None
CCGC_0238	27/Mar/2014	Sulfate	127	=	None
CCGC_0238	27/Mar/2014	Total Dissolved Solids	843	=	None
CCGC_0240	27/Mar/2014	Alkalinity as CaCO3	171	=	None
CCGC_0240	27/Mar/2014	Bicarbonate	209	=	None
CCGC_0240	27/Mar/2014	Calcium	70	=	D
CCGC_0240	27/Mar/2014	Chloride	66	=	None
CCGC_0240	27/Mar/2014	Hardness as CaCO3	459	=	None
CCGC_0240	27/Mar/2014	Magnesium	69	=	D
CCGC_0240	27/Mar/2014	Nitrate + Nitrite as N	43	=	None
CCGC_0240	27/Mar/2014	Nitrate as NO3-N	42.8	=	None
CCGC_0240	27/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0240	27/Mar/2014	Potassium		ND	D

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0240	27/Mar/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0240	27/Mar/2014	Sodium	32	=	D
CCGC_0240	27/Mar/2014	SpecificConductivity	1061	=	None
CCGC_0240	27/Mar/2014	Sulfate	79	=	None
CCGC_0240	27/Mar/2014	Total Dissolved Solids	628	=	None
CCGC_0241	28/Mar/2014	Alkalinity as CaCO3	235	=	None
CCGC_0241	28/Mar/2014	Bicarbonate	287	=	None
CCGC_0241	28/Mar/2014	Calcium	92	=	D
CCGC_0241	28/Mar/2014	Chloride	342	=	None
CCGC_0241	28/Mar/2014	Hardness as CaCO3	617	=	None
CCGC_0241	28/Mar/2014	Magnesium	94	=	D
CCGC_0241	28/Mar/2014	Nitrate + Nitrite as N	2.4	=	None
CCGC_0241	28/Mar/2014	Nitrate as NO3-N	2.3	=	None
CCGC_0241	28/Mar/2014	Nitrite as NO2-N		ND	None
CCGC_0241	28/Mar/2014	Potassium	4.8	=	D
CCGC_0241	28/Mar/2014	QC Ratio TDS/SEC	0.57	=	None
CCGC_0241	28/Mar/2014	Sodium	170	=	D
CCGC_0241	28/Mar/2014	SpecificConductivity	1837	=	None
CCGC_0241	28/Mar/2014	Sulfate	146	=	None
CCGC_0241	28/Mar/2014	Total Dissolved Solids	1043	=	None
CCGC_0242	28/Mar/2014	Alkalinity as CaCO3	239	=	None
CCGC_0242	28/Mar/2014	Bicarbonate	292	=	None
CCGC_0242	28/Mar/2014	Calcium	65	=	D
CCGC_0242	28/Mar/2014	Chloride	110	=	None
CCGC_0242	28/Mar/2014	Hardness as CaCO3	294	=	None
CCGC_0242	28/Mar/2014	Magnesium	32	=	D
CCGC_0242	28/Mar/2014	Nitrate + Nitrite as N	0.3	=	None
CCGC_0242	28/Mar/2014	Nitrate as NO3-N		ND	None
CCGC_0242	28/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0242	28/Mar/2014	Potassium	1.8	=	D
CCGC_0242	28/Mar/2014	QC Ratio TDS/SEC	0.62	=	None
CCGC_0242	28/Mar/2014	Sodium	194	=	D
CCGC_0242	28/Mar/2014	SpecificConductivity	1323	=	None
CCGC_0242	28/Mar/2014	Sulfate	247	=	None
CCGC_0242	28/Mar/2014	Total Dissolved Solids	817	=	None
CCGC_0243	28/Mar/2014	Alkalinity as CaCO3	326	=	None
CCGC_0243	28/Mar/2014	Bicarbonate	398	=	None
CCGC_0243	28/Mar/2014	Calcium	88	=	D
CCGC_0243	28/Mar/2014	Chloride	90	=	None
CCGC_0243	28/Mar/2014	Hardness as CaCO3	487	=	None
CCGC_0243	28/Mar/2014	Magnesium	65	=	D
CCGC_0243	28/Mar/2014	Nitrate + Nitrite as N	3.2	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0243	28/Mar/2014	Nitrate as NO3-N	3	=	None
CCGC_0243	28/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0243	28/Mar/2014	Potassium	3.2	=	D
CCGC_0243	28/Mar/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0243	28/Mar/2014	Sodium	124	=	D
CCGC_0243	28/Mar/2014	SpecificConductivity	1325	=	None
CCGC_0243	28/Mar/2014	Sulfate	222	=	None
CCGC_0243	28/Mar/2014	Total Dissolved Solids	848	=	None
CCGC_0244	28/Mar/2014	Alkalinity as CaCO3	386	=	None
CCGC_0244	28/Mar/2014	Bicarbonate	471	=	None
CCGC_0244	28/Mar/2014	Calcium	101	=	D
CCGC_0244	28/Mar/2014	Chloride	169	=	None
CCGC_0244	28/Mar/2014	Hardness as CaCO3	516	=	None
CCGC_0244	28/Mar/2014	Magnesium	64	=	D
CCGC_0244	28/Mar/2014	Nitrate + Nitrite as N	4.4	=	None
CCGC_0244	28/Mar/2014	Nitrate as NO3-N	4.4	=	None
CCGC_0244	28/Mar/2014	Nitrite as NO2-N		ND	None
CCGC_0244	28/Mar/2014	Potassium	2.6	=	D
CCGC_0244	28/Mar/2014	QC Ratio TDS/SEC	0.58	=	None
CCGC_0244	28/Mar/2014	Sodium	120	=	D
CCGC_0244	28/Mar/2014	SpecificConductivity	1418	=	None
CCGC_0244	28/Mar/2014	Sulfate	79	=	None
CCGC_0244	28/Mar/2014	Total Dissolved Solids	823	=	None
CCGC_0245	27/Mar/2014	Alkalinity as CaCO3	324	=	None
CCGC_0245	27/Mar/2014	Bicarbonate	395	=	None
CCGC_0245	27/Mar/2014	Calcium	80	=	D
CCGC_0245	27/Mar/2014	Chloride	153	=	None
CCGC_0245	27/Mar/2014	Hardness as CaCO3	430	=	None
CCGC_0245	27/Mar/2014	Magnesium	56	=	D
CCGC_0245	27/Mar/2014	Nitrate + Nitrite as N	3.3	=	None
CCGC_0245	27/Mar/2014	Nitrate as NO3-N	3.2	=	None
CCGC_0245	27/Mar/2014	Nitrite as NO2-N	0.1	=	None
CCGC_0245	27/Mar/2014	Potassium	2.4	=	D
CCGC_0245	27/Mar/2014	QC Ratio TDS/SEC	0.60	=	None
CCGC_0245	27/Mar/2014	Sodium	108	=	D
CCGC_0245	27/Mar/2014	SpecificConductivity	1296	=	None
CCGC_0245	27/Mar/2014	Sulfate	98	=	None
CCGC_0245	27/Mar/2014	Total Dissolved Solids	774	=	None
CCGC_0246	27/Mar/2014	Alkalinity as CaCO3	114	=	None
CCGC_0246	27/Mar/2014	Bicarbonate	139	=	None
CCGC_0246	27/Mar/2014	Calcium	34	=	D
CCGC_0246	27/Mar/2014	Chloride	414	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0246	27/Mar/2014	Hardness as CaCO3	134	=	None
CCGC_0246	27/Mar/2014	Magnesium	12	=	D
CCGC_0246	27/Mar/2014	Nitrate + Nitrite as N		ND	None
CCGC_0246	27/Mar/2014	Nitrate as NO3-N		ND	None
CCGC_0246	27/Mar/2014	Nitrite as NO2-N		ND	None
CCGC_0246	27/Mar/2014	Potassium	1.8	=	D
CCGC_0246	27/Mar/2014	QC Ratio TDS/SEC	0.55	=	None
CCGC_0246	27/Mar/2014	Sodium	365	=	D
CCGC_0246	27/Mar/2014	SpecificConductivity	1933	=	None
CCGC_0246	27/Mar/2014	Sulfate	142	=	None
CCGC_0246	27/Mar/2014	Total Dissolved Solids	1057	=	None
CCGC_0247	27/Mar/2014	Alkalinity as CaCO3	149	=	None
CCGC_0247	27/Mar/2014	Bicarbonate	182	=	None
CCGC_0247	27/Mar/2014	Calcium	42	=	D
CCGC_0247	27/Mar/2014	Chloride	186	=	None
CCGC_0247	27/Mar/2014	Hardness as CaCO3	220	=	None
CCGC_0247	27/Mar/2014	Magnesium	28	=	D
CCGC_0247	27/Mar/2014	Nitrate + Nitrite as N	0.1	=	None
CCGC_0247	27/Mar/2014	Nitrate as NO3-N		ND	None
CCGC_0247	27/Mar/2014	Nitrite as NO2-N	0.1	=	None
CCGC_0247	27/Mar/2014	Potassium	2.5	=	D
CCGC_0247	27/Mar/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0247	27/Mar/2014	Sodium	237	=	D
CCGC_0247	27/Mar/2014	SpecificConductivity	1494	=	None
CCGC_0247	27/Mar/2014	Sulfate	270	=	None
CCGC_0247	27/Mar/2014	Total Dissolved Solids	900	=	None
CCGC_0248	24/Mar/2014	Alkalinity as CaCO3	202	=	None
CCGC_0248	24/Mar/2014	Bicarbonate	246	=	None
CCGC_0248	24/Mar/2014	Calcium	56	=	D
CCGC_0248	24/Mar/2014	Chloride	45	=	None
CCGC_0248	24/Mar/2014	Hardness as CaCO3	272	=	None
CCGC_0248	24/Mar/2014	Magnesium	32	=	D
CCGC_0248	24/Mar/2014	Nitrate + Nitrite as N	4.3	=	None
CCGC_0248	24/Mar/2014	Nitrate as NO3-N	3.9	=	None
CCGC_0248	24/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0248	24/Mar/2014	Potassium	1.9	=	D
CCGC_0248	24/Mar/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0248	24/Mar/2014	Sodium	33	=	D
CCGC_0248	24/Mar/2014	SpecificConductivity	658	=	None
CCGC_0248	24/Mar/2014	Sulfate	49	=	None
CCGC_0248	24/Mar/2014	Total Dissolved Solids	397	=	None
CCGC_0249	24/Mar/2014	Alkalinity as CaCO3	129	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0249	24/Mar/2014	Bicarbonate	157	=	None
CCGC_0249	24/Mar/2014	Calcium	46	=	D
CCGC_0249	24/Mar/2014	Chloride	66	=	None
CCGC_0249	24/Mar/2014	Hardness as CaCO3	222	=	None
CCGC_0249	24/Mar/2014	Magnesium	26	=	D
CCGC_0249	24/Mar/2014	Nitrate + Nitrite as N	2.6	=	None
CCGC_0249	24/Mar/2014	Nitrate as NO3-N	2.3	=	None
CCGC_0249	24/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0249	24/Mar/2014	Potassium	1.4	=	D
CCGC_0249	24/Mar/2014	QC Ratio TDS/SEC	0.56	=	None
CCGC_0249	24/Mar/2014	Sodium	32	=	D
CCGC_0249	24/Mar/2014	SpecificConductivity	578	=	None
CCGC_0249	24/Mar/2014	Sulfate	39	=	None
CCGC_0249	24/Mar/2014	Total Dissolved Solids	323	=	None
CCGC_0251	24/Mar/2014	Alkalinity as CaCO3	175	=	None
CCGC_0251	24/Mar/2014	Bicarbonate	214	=	None
CCGC_0251	24/Mar/2014	Calcium	68	=	D
CCGC_0251	24/Mar/2014	Chloride	89	=	None
CCGC_0251	24/Mar/2014	Hardness as CaCO3	330	=	None
CCGC_0251	24/Mar/2014	Magnesium	39	=	D
CCGC_0251	24/Mar/2014	Nitrate + Nitrite as N	10.9	=	None
CCGC_0251	24/Mar/2014	Nitrate as NO3-N	10.7	=	None
CCGC_0251	24/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0251	24/Mar/2014	Potassium	1.6	=	D
CCGC_0251	24/Mar/2014	QC Ratio TDS/SEC	0.55	=	None
CCGC_0251	24/Mar/2014	Sodium	30	=	D
CCGC_0251	24/Mar/2014	SpecificConductivity	793	=	None
CCGC_0251	24/Mar/2014	Sulfate	35	=	None
CCGC_0251	24/Mar/2014	Total Dissolved Solids	434	=	None
CCGC_0252	24/Mar/2014	Alkalinity as CaCO3	176	=	None
CCGC_0252	24/Mar/2014	Bicarbonate	215	=	None
CCGC_0252	24/Mar/2014	Calcium	58	=	D
CCGC_0252	24/Mar/2014	Chloride	51	=	None
CCGC_0252	24/Mar/2014	Hardness as CaCO3	285	=	None
CCGC_0252	24/Mar/2014	Magnesium	34	=	D
CCGC_0252	24/Mar/2014	Nitrate + Nitrite as N	9.2	=	None
CCGC_0252	24/Mar/2014	Nitrate as NO3-N	8.8	=	None
CCGC_0252	24/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0252	24/Mar/2014	Potassium	1.4	=	D
CCGC_0252	24/Mar/2014	QC Ratio TDS/SEC	0.57	=	None
CCGC_0252	24/Mar/2014	Sodium	23	=	D
CCGC_0252	24/Mar/2014	SpecificConductivity	656	=	None
CCGC_0252	24/Mar/2014	Sulfate	37	=	None
CCGC_0252	24/Mar/2014	Total Dissolved Solids	377	=	None
CCGC_0252	21/Aug/2014	Alkalinity as CaCO3	181	=	None
CCGC_0252	21/Aug/2014	Bicarbonate	221	=	None
CCGC_0252	21/Aug/2014	Calcium	60	=	D
CCGC_0252	21/Aug/2014	Chloride	54	=	None
CCGC_0252	21/Aug/2014	Hardness as CaCO3	298	=	None
CCGC_0252	21/Aug/2014	Magnesium	36	=	D
CCGC_0252	21/Aug/2014	Nitrate + Nitrite as N	9.5	=	None
CCGC_0252	21/Aug/2014	Nitrate as NO3-N	9.2	=	None
CCGC_0252	21/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0252	21/Aug/2014	Potassium	0.9	=	D
CCGC_0252	21/Aug/2014	QC Ratio TDS/SEC	0.57	=	None
CCGC_0252	21/Aug/2014	Sodium	25	=	D
CCGC_0252	21/Aug/2014	SpecificConductivity	656	=	None
CCGC_0252	21/Aug/2014	Sulfate	39	=	None
CCGC_0252	21/Aug/2014	Total Dissolved Solids	374	=	None
CCGC_0253	24/Mar/2014	Alkalinity as CaCO3	177	=	None
CCGC_0253	24/Mar/2014	Bicarbonate	216	=	None
CCGC_0253	24/Mar/2014	Calcium	49	=	D
CCGC_0253	24/Mar/2014	Chloride	28	=	None
CCGC_0253	24/Mar/2014	Hardness as CaCO3	238	=	None
CCGC_0253	24/Mar/2014	Magnesium	28	=	D
CCGC_0253	24/Mar/2014	Nitrate + Nitrite as N	6.5	=	None
CCGC_0253	24/Mar/2014	Nitrate as NO3-N	6.1	=	None
CCGC_0253	24/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0253	24/Mar/2014	Potassium	1.3	=	D
CCGC_0253	24/Mar/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0253	24/Mar/2014	Sodium	20	=	D
CCGC_0253	24/Mar/2014	SpecificConductivity	541	=	None
CCGC_0253	24/Mar/2014	Sulfate	30	=	None
CCGC_0253	24/Mar/2014	Total Dissolved Solids	317	=	None
CCGC_0254	24/Mar/2014	Alkalinity as CaCO3	258	=	None
CCGC_0254	24/Mar/2014	Bicarbonate	315	=	None
CCGC_0254	24/Mar/2014	Calcium	89	=	D
CCGC_0254	24/Mar/2014	Chloride	31	=	None
CCGC_0254	24/Mar/2014	Hardness as CaCO3	391	=	None
CCGC_0254	24/Mar/2014	Magnesium	41	=	D
CCGC_0254	24/Mar/2014	Nitrate + Nitrite as N	21.7	=	None
CCGC_0254	24/Mar/2014	Nitrate as NO3-N	21.2	=	None
CCGC_0254	24/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0254	24/Mar/2014	Potassium	2.2	=	D

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0254	24/Mar/2014	QC Ratio TDS/SEC	0.62	=	None
CCGC_0254	24/Mar/2014	Sodium	36	=	D
CCGC_0254	24/Mar/2014	SpecificConductivity	868	=	None
CCGC_0254	24/Mar/2014	Sulfate	63	=	None
CCGC_0254	24/Mar/2014	Total Dissolved Solids	540	=	None
CCGC_0255	25/Mar/2014	Alkalinity as CaCO3	236	=	None
CCGC_0255	25/Mar/2014	Bicarbonate	288	=	None
CCGC_0255	25/Mar/2014	Calcium	53	=	D
CCGC_0255	25/Mar/2014	Chloride	31	=	None
CCGC_0255	25/Mar/2014	Hardness as CaCO3	309	=	None
CCGC_0255	25/Mar/2014	Magnesium	43	=	D
CCGC_0255	25/Mar/2014	Nitrate + Nitrite as N	10.5	=	None
CCGC_0255	25/Mar/2014	Nitrate as NO3-N	10	=	None
CCGC_0255	25/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0255	25/Mar/2014	Potassium		ND	D
CCGC_0255	25/Mar/2014	QC Ratio TDS/SEC	0.62	=	None
CCGC_0255	25/Mar/2014	Sodium	32	=	D
CCGC_0255	25/Mar/2014	SpecificConductivity	668	=	None
CCGC_0255	25/Mar/2014	Sulfate	34	=	None
CCGC_0255	25/Mar/2014	Total Dissolved Solids	414	=	None
CCGC_0255	21/Aug/2014	Alkalinity as CaCO3	234	=	None
CCGC_0255	21/Aug/2014	Bicarbonate	285	=	None
CCGC_0255	21/Aug/2014	Calcium	52	=	D
CCGC_0255	21/Aug/2014	Chloride	35	=	None
CCGC_0255	21/Aug/2014	Hardness as CaCO3	303	=	None
CCGC_0255	21/Aug/2014	Magnesium	42	=	D
CCGC_0255	21/Aug/2014	Nitrate + Nitrite as N	9.4	=	None
CCGC_0255	21/Aug/2014	Nitrate as NO3-N	9.0	=	None
CCGC_0255	21/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0255	21/Aug/2014	Potassium	0.5	=	D
CCGC_0255	21/Aug/2014	QC Ratio TDS/SEC	0.58	=	None
CCGC_0255	21/Aug/2014	Sodium	33	=	D
CCGC_0255	21/Aug/2014	SpecificConductivity	656	=	None
CCGC_0255	21/Aug/2014	Sulfate	33	=	None
CCGC_0255	21/Aug/2014	Total Dissolved Solids	380	=	None
CCGC_0256	25/Mar/2014	Alkalinity as CaCO3	157	=	None
CCGC_0256	25/Mar/2014	Bicarbonate	192	=	None
CCGC_0256	25/Mar/2014	Calcium	49	=	D
CCGC_0256	25/Mar/2014	Chloride	14	=	None
CCGC_0256	25/Mar/2014	Hardness as CaCO3	221	=	None
CCGC_0256	25/Mar/2014	Magnesium	24	=	D
CCGC_0256	25/Mar/2014	Nitrate + Nitrite as N	1.5	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0256	25/Mar/2014	Nitrate as NO3-N	1	=	None
CCGC_0256	25/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0256	25/Mar/2014	Potassium	1.4	=	D
CCGC_0256	25/Mar/2014	QC Ratio TDS/SEC	0.58	=	None
CCGC_0256	25/Mar/2014	Sodium	13	=	D
CCGC_0256	25/Mar/2014	SpecificConductivity	441	=	None
CCGC_0256	25/Mar/2014	Sulfate	44	=	None
CCGC_0256	25/Mar/2014	Total Dissolved Solids	257	=	None
CCGC_0257	25/Mar/2014	Alkalinity as CaCO3	156	=	None
CCGC_0257	25/Mar/2014	Bicarbonate	190	=	None
CCGC_0257	25/Mar/2014	Calcium	37	=	D
CCGC_0257	25/Mar/2014	Chloride	20	=	None
CCGC_0257	25/Mar/2014	Hardness as CaCO3	199	=	None
CCGC_0257	25/Mar/2014	Magnesium	26	=	D
CCGC_0257	25/Mar/2014	Nitrate + Nitrite as N	5.2	=	None
CCGC_0257	25/Mar/2014	Nitrate as NO3-N	4.7	=	None
CCGC_0257	25/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0257	25/Mar/2014	Potassium	1	=	D
CCGC_0257	25/Mar/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0257	25/Mar/2014	Sodium	23	=	D
CCGC_0257	25/Mar/2014	SpecificConductivity	462	=	None
CCGC_0257	25/Mar/2014	Sulfate	26	=	None
CCGC_0257	25/Mar/2014	Total Dissolved Solids	277	=	None
CCGC_0258	25/Mar/2014	Alkalinity as CaCO3	141	=	None
CCGC_0258	25/Mar/2014	Bicarbonate	172	=	None
CCGC_0258	25/Mar/2014	Calcium	38	=	D
CCGC_0258	25/Mar/2014	Chloride	18	=	None
CCGC_0258	25/Mar/2014	Hardness as CaCO3	202	=	None
CCGC_0258	25/Mar/2014	Magnesium	26	=	D
CCGC_0258	25/Mar/2014	Nitrate + Nitrite as N	9.2	=	None
CCGC_0258	25/Mar/2014	Nitrate as NO3-N	8.7	=	None
CCGC_0258	25/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0258	25/Mar/2014	Potassium	1	=	D
CCGC_0258	25/Mar/2014	QC Ratio TDS/SEC	0.67	=	None
CCGC_0258	25/Mar/2014	Sodium	24	=	D
CCGC_0258	25/Mar/2014	SpecificConductivity	460	=	None
CCGC_0258	25/Mar/2014	Sulfate	23	=	None
CCGC_0258	25/Mar/2014	Total Dissolved Solids	308	=	None
CCGC_0258	21/Aug/2014	Alkalinity as CaCO3	149	=	None
CCGC_0258	21/Aug/2014	Bicarbonate	182	=	None
CCGC_0258	21/Aug/2014	Calcium	38	=	D
CCGC_0258	21/Aug/2014	Chloride	19	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0258	21/Aug/2014	Hardness as CaCO3	194	=	None
CCGC_0258	21/Aug/2014	Magnesium	24	=	D
CCGC_0258	21/Aug/2014	Nitrate + Nitrite as N	4.3	=	None
CCGC_0258	21/Aug/2014	Nitrate as NO3-N	4.0	=	None
CCGC_0258	21/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0258	21/Aug/2014	Potassium	0.5	=	D
CCGC_0258	21/Aug/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0258	21/Aug/2014	Sodium	22	=	D
CCGC_0258	21/Aug/2014	SpecificConductivity	427	=	None
CCGC_0258	21/Aug/2014	Sulfate	29	=	None
CCGC_0258	21/Aug/2014	Total Dissolved Solids	254	=	None
CCGC_0259	25/Mar/2014	Alkalinity as CaCO3	183	=	None
CCGC_0259	25/Mar/2014	Bicarbonate	223	=	None
CCGC_0259	25/Mar/2014	Calcium	53	=	D
CCGC_0259	25/Mar/2014	Chloride	30	=	None
CCGC_0259	25/Mar/2014	Hardness as CaCO3	285	=	None
CCGC_0259	25/Mar/2014	Magnesium	37	=	D
CCGC_0259	25/Mar/2014	Nitrate + Nitrite as N	7.2	=	None
CCGC_0259	25/Mar/2014	Nitrate as NO3-N	6.7	=	None
CCGC_0259	25/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0259	25/Mar/2014	Potassium		ND	D
CCGC_0259	25/Mar/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0259	25/Mar/2014	Sodium	19	=	D
CCGC_0259	25/Mar/2014	SpecificConductivity	610	=	None
CCGC_0259	25/Mar/2014	Sulfate	50	=	None
CCGC_0259	25/Mar/2014	Total Dissolved Solids	363	=	None
CCGC_0260	25/Mar/2014	Alkalinity as CaCO3	335	=	None
CCGC_0260	25/Mar/2014	Bicarbonate	409	=	None
CCGC_0260	25/Mar/2014	Calcium	62	=	D
CCGC_0260	25/Mar/2014	Chloride	47	=	None
CCGC_0260	25/Mar/2014	Hardness as CaCO3	332	=	None
CCGC_0260	25/Mar/2014	Magnesium	43	=	D
CCGC_0260	25/Mar/2014	Nitrate + Nitrite as N	3.8	=	None
CCGC_0260	25/Mar/2014	Nitrate as NO3-N	3.4	=	None
CCGC_0260	25/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0260	25/Mar/2014	Potassium	1.8	=	D
CCGC_0260	25/Mar/2014	QC Ratio TDS/SEC	0.57	=	None
CCGC_0260	25/Mar/2014	Sodium	71	=	D
CCGC_0260	25/Mar/2014	SpecificConductivity	863	=	None
CCGC_0260	25/Mar/2014	Sulfate	35	=	None
CCGC_0260	25/Mar/2014	Total Dissolved Solids	488	=	None
CCGC_0261	25/Mar/2014	Alkalinity as CaCO3	259	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0261	25/Mar/2014	Bicarbonate	316	=	None
CCGC_0261	25/Mar/2014	Calcium	87	=	D
CCGC_0261	25/Mar/2014	Chloride	64	=	None
CCGC_0261	25/Mar/2014	Hardness as CaCO3	489	=	None
CCGC_0261	25/Mar/2014	Magnesium	66	=	D
CCGC_0261	25/Mar/2014	Nitrate + Nitrite as N	46.5	=	None
CCGC_0261	25/Mar/2014	Nitrate as NO3-N	46.2	=	None
CCGC_0261	25/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0261	25/Mar/2014	Potassium	1.2	=	D
CCGC_0261	25/Mar/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0261	25/Mar/2014	Sodium	55	=	D
CCGC_0261	25/Mar/2014	SpecificConductivity	1137	=	None
CCGC_0261	25/Mar/2014	Sulfate	48	=	None
CCGC_0261	25/Mar/2014	Total Dissolved Solids	680	=	None
CCGC_0262	25/Mar/2014	Alkalinity as CaCO3	129	=	None
CCGC_0262	25/Mar/2014	Bicarbonate	157	=	None
CCGC_0262	25/Mar/2014	Calcium	30	=	D
CCGC_0262	25/Mar/2014	Chloride	8	=	None
CCGC_0262	25/Mar/2014	Hardness as CaCO3	161	=	None
CCGC_0262	25/Mar/2014	Magnesium	21	=	D
CCGC_0262	25/Mar/2014	Nitrate + Nitrite as N	2.7	=	None
CCGC_0262	25/Mar/2014	Nitrate as NO3-N	2.2	=	None
CCGC_0262	25/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0262	25/Mar/2014	Potassium	1.2	=	D
CCGC_0262	25/Mar/2014	QC Ratio TDS/SEC	0.57	=	None
CCGC_0262	25/Mar/2014	Sodium	14	=	D
CCGC_0262	25/Mar/2014	SpecificConductivity	349	=	None
CCGC_0262	25/Mar/2014	Sulfate	24	=	None
CCGC_0262	25/Mar/2014	Total Dissolved Solids	200	=	None
CCGC_0263	25/Mar/2014	Alkalinity as CaCO3	305	=	None
CCGC_0263	25/Mar/2014	Bicarbonate	372	=	None
CCGC_0263	25/Mar/2014	Calcium	86	=	D
CCGC_0263	25/Mar/2014	Chloride	39	=	None
CCGC_0263	25/Mar/2014	Hardness as CaCO3	417	=	None
CCGC_0263	25/Mar/2014	Magnesium	49	=	D
CCGC_0263	25/Mar/2014	Nitrate + Nitrite as N	11.2	=	None
CCGC_0263	25/Mar/2014	Nitrate as NO3-N	10.7	=	None
CCGC_0263	25/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0263	25/Mar/2014	Potassium	1.7	=	D
CCGC_0263	25/Mar/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0263	25/Mar/2014	Sodium	33	=	D
CCGC_0263	25/Mar/2014	SpecificConductivity	884	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0263	25/Mar/2014	Sulfate	54	=	None
CCGC_0263	25/Mar/2014	Total Dissolved Solids	528	=	None
CCGC_0264	25/Mar/2014	Alkalinity as CaCO3	232	=	None
CCGC_0264	25/Mar/2014	Bicarbonate	283	=	None
CCGC_0264	25/Mar/2014	Calcium	64	=	D
CCGC_0264	25/Mar/2014	Chloride	54	=	None
CCGC_0264	25/Mar/2014	Hardness as CaCO3	341	=	None
CCGC_0264	25/Mar/2014	Magnesium	44	=	D
CCGC_0264	25/Mar/2014	Nitrate + Nitrite as N	14.7	=	None
CCGC_0264	25/Mar/2014	Nitrate as NO3-N	14.3	=	None
CCGC_0264	25/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0264	25/Mar/2014	Potassium	1.5	=	D
CCGC_0264	25/Mar/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0264	25/Mar/2014	Sodium	43	=	D
CCGC_0264	25/Mar/2014	SpecificConductivity	824	=	None
CCGC_0264	25/Mar/2014	Sulfate	42	=	None
CCGC_0264	25/Mar/2014	Total Dissolved Solids	520	=	None
CCGC_0265	26/Mar/2014	Alkalinity as CaCO3	270	=	None
CCGC_0265	26/Mar/2014	Bicarbonate	329	=	None
CCGC_0265	26/Mar/2014	Calcium	80	=	D
CCGC_0265	26/Mar/2014	Chloride	58	=	None
CCGC_0265	26/Mar/2014	Hardness as CaCO3	373	=	None
CCGC_0265	26/Mar/2014	Magnesium	42	=	D
CCGC_0265	26/Mar/2014	Nitrate + Nitrite as N	3.9	=	None
CCGC_0265	26/Mar/2014	Nitrate as NO3-N	3.5	=	None
CCGC_0265	26/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0265	26/Mar/2014	Potassium	1.9	=	D
CCGC_0265	26/Mar/2014	QC Ratio TDS/SEC	0.57	=	None
CCGC_0265	26/Mar/2014	Sodium	41	=	D
CCGC_0265	26/Mar/2014	SpecificConductivity	884	=	None
CCGC_0265	26/Mar/2014	Sulfate	75	=	None
CCGC_0265	26/Mar/2014	Total Dissolved Solids	508	=	None
CCGC_0266	26/Mar/2014	Alkalinity as CaCO3	290	=	None
CCGC_0266	26/Mar/2014	Bicarbonate	354	=	None
CCGC_0266	26/Mar/2014	Calcium	70	=	D
CCGC_0266	26/Mar/2014	Chloride	58	=	None
CCGC_0266	26/Mar/2014	Hardness as CaCO3	335	=	None
CCGC_0266	26/Mar/2014	Magnesium	39	=	D
CCGC_0266	26/Mar/2014	Nitrate + Nitrite as N	0.4	=	None
CCGC_0266	26/Mar/2014	Nitrate as NO3-N		ND	None
CCGC_0266	26/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0266	26/Mar/2014	Potassium	1.9	=	D

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0266	26/Mar/2014	QC Ratio TDS/SEC	0.56	=	None
CCGC_0266	26/Mar/2014	Sodium	44	=	D
CCGC_0266	26/Mar/2014	SpecificConductivity	820	=	None
CCGC_0266	26/Mar/2014	Sulfate	40	=	None
CCGC_0266	26/Mar/2014	Total Dissolved Solids	457	=	None
CCGC_0267	26/Mar/2014	Alkalinity as CaCO3	244	=	None
CCGC_0267	26/Mar/2014	Bicarbonate	298	=	None
CCGC_0267	26/Mar/2014	Calcium	54	=	D
CCGC_0267	26/Mar/2014	Chloride	43	=	None
CCGC_0267	26/Mar/2014	Hardness as CaCO3	267	=	None
CCGC_0267	26/Mar/2014	Magnesium	32	=	D
CCGC_0267	26/Mar/2014	Nitrate + Nitrite as N	0.5	=	None
CCGC_0267	26/Mar/2014	Nitrate as NO3-N		ND	None
CCGC_0267	26/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0267	26/Mar/2014	Potassium	1.7	=	D
CCGC_0267	26/Mar/2014	QC Ratio TDS/SEC	0.55	=	None
CCGC_0267	26/Mar/2014	Sodium	46	=	D
CCGC_0267	26/Mar/2014	SpecificConductivity	689	=	None
CCGC_0267	26/Mar/2014	Sulfate	40	=	None
CCGC_0267	26/Mar/2014	Total Dissolved Solids	380	=	None
CCGC_0268	26/Mar/2014	Alkalinity as CaCO3	300	=	None
CCGC_0268	26/Mar/2014	Bicarbonate	366	=	None
CCGC_0268	26/Mar/2014	Calcium	45	=	D
CCGC_0268	26/Mar/2014	Chloride	241	=	None
CCGC_0268	26/Mar/2014	Hardness as CaCO3	186	=	None
CCGC_0268	26/Mar/2014	Magnesium	18	=	D
CCGC_0268	26/Mar/2014	Nitrate + Nitrite as N		ND	None
CCGC_0268	26/Mar/2014	Nitrate as NO3-N		ND	None
CCGC_0268	26/Mar/2014	Nitrite as NO2-N		ND	None
CCGC_0268	26/Mar/2014	Potassium	1.9	=	D
CCGC_0268	26/Mar/2014	QC Ratio TDS/SEC	0.55	=	None
CCGC_0268	26/Mar/2014	Sodium	218	=	D
CCGC_0268	26/Mar/2014	SpecificConductivity	1382	=	None
CCGC_0268	26/Mar/2014	Sulfate		ND	None
CCGC_0268	26/Mar/2014	Total Dissolved Solids	754	=	None
CCGC_0269	26/Mar/2014	Alkalinity as CaCO3	253	=	None
CCGC_0269	26/Mar/2014	Bicarbonate	309	=	None
CCGC_0269	26/Mar/2014	Calcium	30	=	D
CCGC_0269	26/Mar/2014	Chloride	24	=	None
CCGC_0269	26/Mar/2014	Hardness as CaCO3	116	=	None
CCGC_0269	26/Mar/2014	Magnesium	10	=	D
CCGC_0269	26/Mar/2014	Nitrate + Nitrite as N	0.6	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0269	26/Mar/2014	Nitrate as NO3-N		ND	None
CCGC_0269	26/Mar/2014	Nitrite as NO2-N	0.6	=	None
CCGC_0269	26/Mar/2014	Potassium	1.7	=	D
CCGC_0269	26/Mar/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0269	26/Mar/2014	Sodium	89	=	D
CCGC_0269	26/Mar/2014	SpecificConductivity	569	=	None
CCGC_0269	26/Mar/2014	Sulfate	5	=	None
CCGC_0269	26/Mar/2014	Total Dissolved Solids	348	=	None
CCGC_0270	26/Mar/2014	Alkalinity as CaCO3	279	=	None
CCGC_0270	26/Mar/2014	Bicarbonate	340	=	None
CCGC_0270	26/Mar/2014	Calcium	70	=	D
CCGC_0270	26/Mar/2014	Chloride	63	=	None
CCGC_0270	26/Mar/2014	Hardness as CaCO3	340	=	None
CCGC_0270	26/Mar/2014	Magnesium	40	=	D
CCGC_0270	26/Mar/2014	Nitrate + Nitrite as N	4	=	None
CCGC_0270	26/Mar/2014	Nitrate as NO3-N	3.6	=	None
CCGC_0270	26/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0270	26/Mar/2014	Potassium	2.2	=	D
CCGC_0270	26/Mar/2014	QC Ratio TDS/SEC	0.57	=	None
CCGC_0270	26/Mar/2014	Sodium	41	=	D
CCGC_0270	26/Mar/2014	SpecificConductivity	839	=	None
CCGC_0270	26/Mar/2014	Sulfate	30	=	None
CCGC_0270	26/Mar/2014	Total Dissolved Solids	480	=	None
CCGC_0271	26/Mar/2014	Alkalinity as CaCO3	209	=	None
CCGC_0271	26/Mar/2014	Bicarbonate	255	=	None
CCGC_0271	26/Mar/2014	Calcium	59	=	D
CCGC_0271	26/Mar/2014	Chloride	31	=	None
CCGC_0271	26/Mar/2014	Hardness as CaCO3	271	=	None
CCGC_0271	26/Mar/2014	Magnesium	30	=	D
CCGC_0271	26/Mar/2014	Nitrate + Nitrite as N	2.8	=	None
CCGC_0271	26/Mar/2014	Nitrate as NO3-N	2.3	=	None
CCGC_0271	26/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0271	26/Mar/2014	Potassium	1.4	=	D
CCGC_0271	26/Mar/2014	QC Ratio TDS/SEC	0.58	=	None
CCGC_0271	26/Mar/2014	Sodium	32	=	D
CCGC_0271	26/Mar/2014	SpecificConductivity	652	=	None
CCGC_0271	26/Mar/2014	Sulfate	61	=	None
CCGC_0271	26/Mar/2014	Total Dissolved Solids	380	=	None
CCGC_0272	26/Mar/2014	Alkalinity as CaCO3	422	=	None
CCGC_0272	26/Mar/2014	Bicarbonate	515	=	None
CCGC_0272	26/Mar/2014	Calcium	22	=	D
CCGC_0272	26/Mar/2014	Chloride	182	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0272	26/Mar/2014	Hardness as CaCO3	137	=	None
CCGC_0272	26/Mar/2014	Magnesium	20	=	D
CCGC_0272	26/Mar/2014	Nitrate + Nitrite as N		ND	None
CCGC_0272	26/Mar/2014	Nitrate as NO3-N		ND	None
CCGC_0272	26/Mar/2014	Nitrite as NO2-N		ND	None
CCGC_0272	26/Mar/2014	Potassium	1.8	=	D
CCGC_0272	26/Mar/2014	QC Ratio TDS/SEC	0.57	=	None
CCGC_0272	26/Mar/2014	Sodium	278	=	D
CCGC_0272	26/Mar/2014	SpecificConductivity	1430	=	None
CCGC_0272	26/Mar/2014	Sulfate	23	=	None
CCGC_0272	26/Mar/2014	Total Dissolved Solids	814	=	None
CCGC_0273	26/Mar/2014	Alkalinity as CaCO3	246	=	None
CCGC_0273	26/Mar/2014	Bicarbonate	300	=	None
CCGC_0273	26/Mar/2014	Calcium	16	=	D
CCGC_0273	26/Mar/2014	Chloride	82	=	None
CCGC_0273	26/Mar/2014	Hardness as CaCO3	85	=	None
CCGC_0273	26/Mar/2014	Magnesium	11	=	D
CCGC_0273	26/Mar/2014	Nitrate + Nitrite as N	0.3	=	None
CCGC_0273	26/Mar/2014	Nitrate as NO3-N		ND	None
CCGC_0273	26/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0273	26/Mar/2014	Potassium	1.8	=	D
CCGC_0273	26/Mar/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0273	26/Mar/2014	Sodium	135	=	D
CCGC_0273	26/Mar/2014	SpecificConductivity	732	=	None
CCGC_0273	26/Mar/2014	Sulfate		ND	None
CCGC_0273	26/Mar/2014	Total Dissolved Solids	460	=	None
CCGC_0274	27/Mar/2014	Alkalinity as CaCO3	243	=	None
CCGC_0274	27/Mar/2014	Bicarbonate	296	=	None
CCGC_0274	27/Mar/2014	Calcium	48	=	D
CCGC_0274	27/Mar/2014	Chloride	65	=	None
CCGC_0274	27/Mar/2014	Hardness as CaCO3	256	=	None
CCGC_0274	27/Mar/2014	Magnesium	33	=	D
CCGC_0274	27/Mar/2014	Nitrate + Nitrite as N	2.2	=	None
CCGC_0274	27/Mar/2014	Nitrate as NO3-N	1.9	=	None
CCGC_0274	27/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0274	27/Mar/2014	Potassium	4.4	=	D
CCGC_0274	27/Mar/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0274	27/Mar/2014	Sodium	55	=	D
CCGC_0274	27/Mar/2014	SpecificConductivity	732	=	None
CCGC_0274	27/Mar/2014	Sulfate	24	=	None
CCGC_0274	27/Mar/2014	Total Dissolved Solids	460	=	None
CCGC_0275	27/Mar/2014	Alkalinity as CaCO3	323	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0275	27/Mar/2014	Bicarbonate	394	=	None
CCGC_0275	27/Mar/2014	Calcium	66	=	D
CCGC_0275	27/Mar/2014	Chloride	106	=	None
CCGC_0275	27/Mar/2014	Hardness as CaCO3	515	=	None
CCGC_0275	27/Mar/2014	Magnesium	85	=	D
CCGC_0275	27/Mar/2014	Nitrate + Nitrite as N	6.6	=	None
CCGC_0275	27/Mar/2014	Nitrate as NO3-N	6.4	=	None
CCGC_0275	27/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0275	27/Mar/2014	Potassium	2.8	=	D
CCGC_0275	27/Mar/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0275	27/Mar/2014	Sodium	123	=	D
CCGC_0275	27/Mar/2014	SpecificConductivity	1429	=	None
CCGC_0275	27/Mar/2014	Sulfate	246	=	None
CCGC_0275	27/Mar/2014	Total Dissolved Solids	908	=	None
CCGC_0276	27/Mar/2014	Alkalinity as CaCO3	295	=	None
CCGC_0276	27/Mar/2014	Bicarbonate	360	=	None
CCGC_0276	27/Mar/2014	Calcium	51	=	D
CCGC_0276	27/Mar/2014	Chloride	105	=	None
CCGC_0276	27/Mar/2014	Hardness as CaCO3	424	=	None
CCGC_0276	27/Mar/2014	Magnesium	72	=	D
CCGC_0276	27/Mar/2014	Nitrate + Nitrite as N	1.0	=	None
CCGC_0276	27/Mar/2014	Nitrate as NO3-N	0.7	=	None
CCGC_0276	27/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0276	27/Mar/2014	Potassium	3	=	D
CCGC_0276	27/Mar/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0276	27/Mar/2014	Sodium	132	=	D
CCGC_0276	27/Mar/2014	SpecificConductivity	1343	=	None
CCGC_0276	27/Mar/2014	Sulfate	240	=	None
CCGC_0276	27/Mar/2014	Total Dissolved Solids	854	=	None
CCGC_0277	27/Mar/2014	Alkalinity as CaCO3	379	=	None
CCGC_0277	27/Mar/2014	Bicarbonate	462	=	None
CCGC_0277	27/Mar/2014	Calcium	140	=	D
CCGC_0277	27/Mar/2014	Chloride	134	=	None
CCGC_0277	27/Mar/2014	Hardness as CaCO3	555	=	None
CCGC_0277	27/Mar/2014	Magnesium	50	=	D
CCGC_0277	27/Mar/2014	Nitrate + Nitrite as N	24.9	=	None
CCGC_0277	27/Mar/2014	Nitrate as NO3-N	24.9	=	None
CCGC_0277	27/Mar/2014	Nitrite as NO2-N		ND	None
CCGC_0277	27/Mar/2014	Potassium	2.5	=	D
CCGC_0277	27/Mar/2014	QC Ratio TDS/SEC	0.66	=	None
CCGC_0277	27/Mar/2014	Sodium	149	=	D
CCGC_0277	27/Mar/2014	SpecificConductivity	1690	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0277	27/Mar/2014	Sulfate	202	=	None
CCGC_0277	27/Mar/2014	Total Dissolved Solids	1114	=	None
CCGC_0278	27/Mar/2014	Alkalinity as CaCO3	416	=	None
CCGC_0278	27/Mar/2014	Bicarbonate	508	=	None
CCGC_0278	27/Mar/2014	Calcium	170	=	D
CCGC_0278	27/Mar/2014	Chloride	149	=	None
CCGC_0278	27/Mar/2014	Hardness as CaCO3	577	=	None
CCGC_0278	27/Mar/2014	Magnesium	37	=	D
CCGC_0278	27/Mar/2014	Nitrate + Nitrite as N		ND	None
CCGC_0278	27/Mar/2014	Nitrate as NO3-N		ND	None
CCGC_0278	27/Mar/2014	Nitrite as NO2-N		ND	None
CCGC_0278	27/Mar/2014	Potassium		ND	D
CCGC_0278	27/Mar/2014	QC Ratio TDS/SEC	0.62	=	None
CCGC_0278	27/Mar/2014	Sodium	105	=	D
CCGC_0278	27/Mar/2014	SpecificConductivity	1468	=	None
CCGC_0278	27/Mar/2014	Sulfate	136	=	None
CCGC_0278	27/Mar/2014	Total Dissolved Solids	908	=	None
CCGC_0280	27/Mar/2014	Alkalinity as CaCO3	398	=	None
CCGC_0280	27/Mar/2014	Bicarbonate	486	=	None
CCGC_0280	27/Mar/2014	Calcium	144	=	D
CCGC_0280	27/Mar/2014	Chloride	208	=	None
CCGC_0280	27/Mar/2014	Hardness as CaCO3	738	=	None
CCGC_0280	27/Mar/2014	Magnesium	92	=	D
CCGC_0280	27/Mar/2014	Nitrate + Nitrite as N	2.4	=	None
CCGC_0280	27/Mar/2014	Nitrate as NO3-N	2.4	=	None
CCGC_0280	27/Mar/2014	Nitrite as NO2-N		ND	None
CCGC_0280	27/Mar/2014	Potassium	1.8	=	D
CCGC_0280	27/Mar/2014	QC Ratio TDS/SEC	0.67	=	None
CCGC_0280	27/Mar/2014	Sodium	169	=	D
CCGC_0280	27/Mar/2014	SpecificConductivity	2023	=	None
CCGC_0280	27/Mar/2014	Sulfate	357	=	None
CCGC_0280	27/Mar/2014	Total Dissolved Solids	1354	=	None
CCGC_0281	28/Mar/2014	Alkalinity as CaCO3	558	=	None
CCGC_0281	28/Mar/2014	Bicarbonate	681	=	None
CCGC_0281	28/Mar/2014	Calcium	117	=	D
CCGC_0281	28/Mar/2014	Chloride	242	=	None
CCGC_0281	28/Mar/2014	Hardness as CaCO3	1046	=	None
CCGC_0281	28/Mar/2014	Magnesium	183	=	D
CCGC_0281	28/Mar/2014	Nitrate + Nitrite as N	19.6	=	None
CCGC_0281	28/Mar/2014	Nitrate as NO3-N	19.6	=	None
CCGC_0281	28/Mar/2014	Nitrite as NO2-N		ND	None
CCGC_0281	28/Mar/2014	Potassium	4	=	D

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0281	28/Mar/2014	QC Ratio TDS/SEC	0.68	=	None
CCGC_0281	28/Mar/2014	Sodium	312	=	D
CCGC_0281	28/Mar/2014	SpecificConductivity	2751	=	None
CCGC_0281	28/Mar/2014	Sulfate	535	=	None
CCGC_0281	28/Mar/2014	Total Dissolved Solids	1874	=	None
CCGC_0282	28/Mar/2014	Alkalinity as CaCO3	402	=	None
CCGC_0282	28/Mar/2014	Bicarbonate	490	=	None
CCGC_0282	28/Mar/2014	Calcium	33	=	D
CCGC_0282	28/Mar/2014	Chloride	107	=	None
CCGC_0282	28/Mar/2014	Hardness as CaCO3	165	=	None
CCGC_0282	28/Mar/2014	Magnesium	20	=	D
CCGC_0282	28/Mar/2014	Nitrate + Nitrite as N	0.2	=	None
CCGC_0282	28/Mar/2014	Nitrate as NO3-N		ND	None
CCGC_0282	28/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0282	28/Mar/2014	Potassium	1.3	=	D
CCGC_0282	28/Mar/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0282	28/Mar/2014	Sodium	210	=	D
CCGC_0282	28/Mar/2014	SpecificConductivity	1066	=	None
CCGC_0282	28/Mar/2014	Sulfate		ND	None
CCGC_0282	28/Mar/2014	Total Dissolved Solids	626	=	None
CCGC_0283	28/Mar/2014	Alkalinity as CaCO3	137	=	None
CCGC_0283	28/Mar/2014	Bicarbonate	167	=	None
CCGC_0283	28/Mar/2014	Calcium	38	=	D
CCGC_0283	28/Mar/2014	Chloride	12	=	None
CCGC_0283	28/Mar/2014	Hardness as CaCO3	206	=	None
CCGC_0283	28/Mar/2014	Magnesium	27	=	D
CCGC_0283	28/Mar/2014	Nitrate + Nitrite as N	7.6	=	None
CCGC_0283	28/Mar/2014	Nitrate as NO3-N	7.1	=	None
CCGC_0283	28/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0283	28/Mar/2014	Potassium		ND	D
CCGC_0283	28/Mar/2014	QC Ratio TDS/SEC	0.65	=	None
CCGC_0283	28/Mar/2014	Sodium	15	=	D
CCGC_0283	28/Mar/2014	SpecificConductivity	442	=	None
CCGC_0283	28/Mar/2014	Sulfate	37	=	None
CCGC_0283	28/Mar/2014	Total Dissolved Solids	286	=	None
CCGC_0284	28/Mar/2014	Alkalinity as CaCO3	253	=	None
CCGC_0284	28/Mar/2014	Bicarbonate	309	=	None
CCGC_0284	28/Mar/2014	Calcium	46	=	D
CCGC_0284	28/Mar/2014	Chloride	44	=	None
CCGC_0284	28/Mar/2014	Hardness as CaCO3	205	=	None
CCGC_0284	28/Mar/2014	Magnesium	22	=	D
CCGC_0284	28/Mar/2014	Nitrate + Nitrite as N	1.2	=	None
CCGC_0284	28/Mar/2014	Nitrate as NO3-N	0.7	=	None
CCGC_0284	28/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0284	28/Mar/2014	Potassium	1.4	=	D
CCGC_0284	28/Mar/2014	QC Ratio TDS/SEC	0.58	=	None
CCGC_0284	28/Mar/2014	Sodium	78	=	D
CCGC_0284	28/Mar/2014	SpecificConductivity	680	=	None
CCGC_0284	28/Mar/2014	Sulfate	29	=	None
CCGC_0284	28/Mar/2014	Total Dissolved Solids	391	=	None
CCGC_0285	28/Mar/2014	Alkalinity as CaCO3	162	=	None
CCGC_0285	28/Mar/2014	Bicarbonate	198	=	None
CCGC_0285	28/Mar/2014	Calcium	57	=	D
CCGC_0285	28/Mar/2014	Chloride	38	=	None
CCGC_0285	28/Mar/2014	Hardness as CaCO3	245	=	None
CCGC_0285	28/Mar/2014	Magnesium	25	=	D
CCGC_0285	28/Mar/2014	Nitrate + Nitrite as N	6.3	=	None
CCGC_0285	28/Mar/2014	Nitrate as NO3-N	5.9	=	None
CCGC_0285	28/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0285	28/Mar/2014	Potassium	1.3	=	D
CCGC_0285	28/Mar/2014	QC Ratio TDS/SEC	0.66	=	None
CCGC_0285	28/Mar/2014	Sodium	24	=	D
CCGC_0285	28/Mar/2014	SpecificConductivity	557	=	None
CCGC_0285	28/Mar/2014	Sulfate	32	=	None
CCGC_0285	28/Mar/2014	Total Dissolved Solids	366	=	None
CCGC_0286	24/Mar/2014	Alkalinity as CaCO3	225	=	None
CCGC_0286	24/Mar/2014	Bicarbonate	275	=	None
CCGC_0286	24/Mar/2014	Calcium	63	=	D
CCGC_0286	24/Mar/2014	Chloride	47	=	None
CCGC_0286	24/Mar/2014	Hardness as CaCO3	384	=	None
CCGC_0286	24/Mar/2014	Magnesium	55	=	D
CCGC_0286	24/Mar/2014	Nitrate + Nitrite as N	19.4	=	None
CCGC_0286	24/Mar/2014	Nitrate as NO3-N	19	=	None
CCGC_0286	24/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0286	24/Mar/2014	Potassium	1	=	D
CCGC_0286	24/Mar/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0286	24/Mar/2014	Sodium	28	=	D
CCGC_0286	24/Mar/2014	SpecificConductivity	827	=	None
CCGC_0286	24/Mar/2014	Sulfate	55	=	None
CCGC_0286	24/Mar/2014	Total Dissolved Solids	508	=	None
CCGC_0287	24/Mar/2014	Alkalinity as CaCO3	190	=	None
CCGC_0287	24/Mar/2014	Bicarbonate	232	=	None
CCGC_0287	24/Mar/2014	Calcium	61	=	D
CCGC_0287	24/Mar/2014	Chloride	54	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0287	24/Mar/2014	Hardness as CaCO3	371	=	None
CCGC_0287	24/Mar/2014	Magnesium	53	=	D
CCGC_0287	24/Mar/2014	Nitrate + Nitrite as N	23.4	=	None
CCGC_0287	24/Mar/2014	Nitrate as NO3-N	23.1	=	None
CCGC_0287	24/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0287	24/Mar/2014	Potassium		ND	D
CCGC_0287	24/Mar/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0287	24/Mar/2014	Sodium	24	=	D
CCGC_0287	24/Mar/2014	SpecificConductivity	824	=	None
CCGC_0287	24/Mar/2014	Sulfate	48	=	None
CCGC_0287	24/Mar/2014	Total Dissolved Solids	503	=	None
CCGC_0288	24/Mar/2014	Alkalinity as CaCO3	211	=	None
CCGC_0288	24/Mar/2014	Bicarbonate	257	=	None
CCGC_0288	24/Mar/2014	Calcium	71	=	D
CCGC_0288	24/Mar/2014	Chloride	70	=	None
CCGC_0288	24/Mar/2014	Hardness as CaCO3	461	=	None
CCGC_0288	24/Mar/2014	Magnesium	69	=	D
CCGC_0288	24/Mar/2014	Nitrate + Nitrite as N	39	=	None
CCGC_0288	24/Mar/2014	Nitrate as NO3-N	38.7	=	None
CCGC_0288	24/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0288	24/Mar/2014	Potassium		ND	D
CCGC_0288	24/Mar/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0288	24/Mar/2014	Sodium	37	=	D
CCGC_0288	24/Mar/2014	SpecificConductivity	1062	=	None
CCGC_0288	24/Mar/2014	Sulfate	71	=	None
CCGC_0288	24/Mar/2014	Total Dissolved Solids	637	=	None
CCGC_0289	25/Mar/2014	Alkalinity as CaCO3	164	=	None
CCGC_0289	25/Mar/2014	Bicarbonate	200	=	None
CCGC_0289	25/Mar/2014	Calcium	50	=	D
CCGC_0289	25/Mar/2014	Chloride	40	=	None
CCGC_0289	25/Mar/2014	Hardness as CaCO3	253	=	None
CCGC_0289	25/Mar/2014	Magnesium	31	=	D
CCGC_0289	25/Mar/2014	Nitrate + Nitrite as N	3.9	=	None
CCGC_0289	25/Mar/2014	Nitrate as NO3-N	3.4	=	None
CCGC_0289	25/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0289	25/Mar/2014	Potassium	1.1	=	D
CCGC_0289	25/Mar/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0289	25/Mar/2014	Sodium	18	=	D
CCGC_0289	25/Mar/2014	SpecificConductivity	538	=	None
CCGC_0289	25/Mar/2014	Sulfate	28	=	None
CCGC_0289	25/Mar/2014	Total Dissolved Solids	320	=	None
CCGC_0290	25/Mar/2014	Alkalinity as CaCO3	204	=	None
CCGC_0290	25/Mar/2014	Bicarbonate	249	=	None
CCGC_0290	25/Mar/2014	Calcium	53	=	D
CCGC_0290	25/Mar/2014	Chloride	26	=	None
CCGC_0290	25/Mar/2014	Hardness as CaCO3	285	=	None
CCGC_0290	25/Mar/2014	Magnesium	37	=	D
CCGC_0290	25/Mar/2014	Nitrate + Nitrite as N	7.8	=	None
CCGC_0290	25/Mar/2014	Nitrate as NO3-N	7.3	=	None
CCGC_0290	25/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0290	25/Mar/2014	Potassium		ND	D
CCGC_0290	25/Mar/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0290	25/Mar/2014	Sodium	19	=	D
CCGC_0290	25/Mar/2014	SpecificConductivity	590	=	None
CCGC_0290	25/Mar/2014	Sulfate	31	=	None
CCGC_0290	25/Mar/2014	Total Dissolved Solids	354	=	None
CCGC_0291	25/Mar/2014	Alkalinity as CaCO3	235	=	None
CCGC_0291	25/Mar/2014	Bicarbonate	287	=	None
CCGC_0291	25/Mar/2014	Calcium	67	=	D
CCGC_0291	25/Mar/2014	Chloride	24	=	None
CCGC_0291	25/Mar/2014	Hardness as CaCO3	336	=	None
CCGC_0291	25/Mar/2014	Magnesium	41	=	D
CCGC_0291	25/Mar/2014	Nitrate + Nitrite as N	12.7	=	None
CCGC_0291	25/Mar/2014	Nitrate as NO3-N	12.2	=	None
CCGC_0291	25/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0291	25/Mar/2014	Potassium	1.2	=	D
CCGC_0291	25/Mar/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0291	25/Mar/2014	Sodium	20	=	D
CCGC_0291	25/Mar/2014	SpecificConductivity	681	=	None
CCGC_0291	25/Mar/2014	Sulfate	38	=	None
CCGC_0291	25/Mar/2014	Total Dissolved Solids	428	=	None
CCGC_0292	24/Mar/2014	Alkalinity as CaCO3	85	=	None
CCGC_0292	24/Mar/2014	Bicarbonate	104	=	None
CCGC_0292	24/Mar/2014	Calcium	30	=	D
CCGC_0292	24/Mar/2014	Chloride	73	=	None
CCGC_0292	24/Mar/2014	Hardness as CaCO3	170	=	None
CCGC_0292	24/Mar/2014	Magnesium	23	=	D
CCGC_0292	24/Mar/2014	Nitrate + Nitrite as N	2.8	=	None
CCGC_0292	24/Mar/2014	Nitrate as NO3-N	2.6	=	None
CCGC_0292	24/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0292	24/Mar/2014	Potassium	1.1	=	D
CCGC_0292	24/Mar/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0292	24/Mar/2014	Sodium	37	=	D
CCGC_0292	24/Mar/2014	SpecificConductivity	515	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0292	24/Mar/2014	Sulfate	35	=	None
CCGC_0292	24/Mar/2014	Total Dissolved Solids	303	=	None
CCGC_0293	25/Mar/2014	Alkalinity as CaCO3	212	=	None
CCGC_0293	25/Mar/2014	Bicarbonate	259	=	None
CCGC_0293	25/Mar/2014	Calcium	51	=	D
CCGC_0293	25/Mar/2014	Chloride	18	=	None
CCGC_0293	25/Mar/2014	Hardness as CaCO3	267	=	None
CCGC_0293	25/Mar/2014	Magnesium	34	=	D
CCGC_0293	25/Mar/2014	Nitrate + Nitrite as N	3.9	=	None
CCGC_0293	25/Mar/2014	Nitrate as NO3-N	3.4	=	None
CCGC_0293	25/Mar/2014	Nitrite as NO2-N	0.6	=	None
CCGC_0293	25/Mar/2014	Potassium		ND	D
CCGC_0293	25/Mar/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0293	25/Mar/2014	Sodium	15	=	D
CCGC_0293	25/Mar/2014	SpecificConductivity	529	=	None
CCGC_0293	25/Mar/2014	Sulfate	22	=	None
CCGC_0293	25/Mar/2014	Total Dissolved Solids	317	=	None
CCGC_0294	24/Mar/2014	Alkalinity as CaCO3	206	=	None
CCGC_0294	24/Mar/2014	Bicarbonate	251	=	None
CCGC_0294	24/Mar/2014	Calcium	50	=	D
CCGC_0294	24/Mar/2014	Chloride	58	=	None
CCGC_0294	24/Mar/2014	Hardness as CaCO3	323	=	None
CCGC_0294	24/Mar/2014	Magnesium	48	=	D
CCGC_0294	24/Mar/2014	Nitrate + Nitrite as N	4.9	=	None
CCGC_0294	24/Mar/2014	Nitrate as NO3-N	4.5	=	None
CCGC_0294	24/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0294	24/Mar/2014	Potassium		ND	D
CCGC_0294	24/Mar/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0294	24/Mar/2014	Sodium	24	=	D
CCGC_0294	24/Mar/2014	SpecificConductivity	698	=	None
CCGC_0294	24/Mar/2014	Sulfate	47	=	None
CCGC_0294	24/Mar/2014	Total Dissolved Solids	443	=	None
CCGC_0295	25/Mar/2014	Alkalinity as CaCO3	168	=	None
CCGC_0295	25/Mar/2014	Bicarbonate	205	=	None
CCGC_0295	25/Mar/2014	Calcium	45	=	D
CCGC_0295	25/Mar/2014	Chloride	19	=	None
CCGC_0295	25/Mar/2014	Hardness as CaCO3	240	=	None
CCGC_0295	25/Mar/2014	Magnesium	31	=	D
CCGC_0295	25/Mar/2014	Nitrate + Nitrite as N	10.4	=	None
CCGC_0295	25/Mar/2014	Nitrate as NO3-N	9.9	=	None
CCGC_0295	25/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0295	25/Mar/2014	Potassium		ND	D

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0295	25/Mar/2014	QC Ratio TDS/SEC	0.55	=	None
CCGC_0295	25/Mar/2014	Sodium	14	=	D
CCGC_0295	25/Mar/2014	SpecificConductivity	500	=	None
CCGC_0295	25/Mar/2014	Sulfate	23	=	None
CCGC_0295	25/Mar/2014	Total Dissolved Solids	274	=	None
CCGC_0295	21/Aug/2014	Alkalinity as CaCO3	170	=	None
CCGC_0295	21/Aug/2014	Bicarbonate	207	=	None
CCGC_0295	21/Aug/2014	Calcium	48	=	D
CCGC_0295	21/Aug/2014	Chloride	24	=	None
CCGC_0295	21/Aug/2014	Hardness as CaCO3	256	=	None
CCGC_0295	21/Aug/2014	Magnesium	33	=	D
CCGC_0295	21/Aug/2014	Nitrate + Nitrite as N	10.1	=	None
CCGC_0295	21/Aug/2014	Nitrate as NO3-N	9.8	=	None
CCGC_0295	21/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0295	21/Aug/2014	Potassium	1	=	D
CCGC_0295	21/Aug/2014	QC Ratio TDS/SEC	0.57	=	None
CCGC_0295	21/Aug/2014	Sodium	15	=	D
CCGC_0295	21/Aug/2014	SpecificConductivity	523	=	None
CCGC_0295	21/Aug/2014	Sulfate	26	=	None
CCGC_0295	21/Aug/2014	Total Dissolved Solids	300	=	None
CCGC_0296	24/Mar/2014	Alkalinity as CaCO3	224	=	None
CCGC_0296	24/Mar/2014	Bicarbonate	273	=	None
CCGC_0296	24/Mar/2014	Calcium	57	=	D
CCGC_0296	24/Mar/2014	Chloride	31	=	None
CCGC_0296	24/Mar/2014	Hardness as CaCO3	299	=	None
CCGC_0296	24/Mar/2014	Magnesium	38	=	D
CCGC_0296	24/Mar/2014	Nitrate + Nitrite as N	6.3	=	None
CCGC_0296	24/Mar/2014	Nitrate as NO3-N	5.8	=	None
CCGC_0296	24/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0296	24/Mar/2014	Potassium	1	=	D
CCGC_0296	24/Mar/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0296	24/Mar/2014	Sodium	16	=	D
CCGC_0296	24/Mar/2014	SpecificConductivity	605	=	None
CCGC_0296	24/Mar/2014	Sulfate	24	=	None
CCGC_0296	24/Mar/2014	Total Dissolved Solids	371	=	None
CCGC_0297	24/Mar/2014	Alkalinity as CaCO3	206	=	None
CCGC_0297	24/Mar/2014	Bicarbonate	251	=	None
CCGC_0297	24/Mar/2014	Calcium	37	=	D
CCGC_0297	24/Mar/2014	Chloride	38	=	None
CCGC_0297	24/Mar/2014	Hardness as CaCO3	327	=	None
CCGC_0297	24/Mar/2014	Magnesium	57	=	D
CCGC_0297	24/Mar/2014	Nitrate + Nitrite as N	12.2	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0297	24/Mar/2014	Nitrate as NO3-N	11.8	=	None
CCGC_0297	24/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0297	24/Mar/2014	Potassium		ND	D
CCGC_0297	24/Mar/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0297	24/Mar/2014	Sodium	19	=	D
CCGC_0297	24/Mar/2014	SpecificConductivity	705	=	None
CCGC_0297	24/Mar/2014	Sulfate	47	=	None
CCGC_0297	24/Mar/2014	Total Dissolved Solids	443	=	None
CCGC_0298	25/Mar/2014	Alkalinity as CaCO3	147	=	None
CCGC_0298	25/Mar/2014	Bicarbonate	179	=	None
CCGC_0298	25/Mar/2014	Calcium	29	=	D
CCGC_0298	25/Mar/2014	Chloride	15	=	None
CCGC_0298	25/Mar/2014	Hardness as CaCO3	171	=	None
CCGC_0298	25/Mar/2014	Magnesium	24	=	D
CCGC_0298	25/Mar/2014	Nitrate + Nitrite as N	6.2	=	None
CCGC_0298	25/Mar/2014	Nitrate as NO3-N	5.7	=	None
CCGC_0298	25/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0298	25/Mar/2014	Potassium		ND	D
CCGC_0298	25/Mar/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0298	25/Mar/2014	Sodium	25	=	D
CCGC_0298	25/Mar/2014	SpecificConductivity	418	=	None
CCGC_0298	25/Mar/2014	Sulfate	16	=	None
CCGC_0298	25/Mar/2014	Total Dissolved Solids	251	=	None
CCGC_0301	26/Mar/2014	Alkalinity as CaCO3	188	=	None
CCGC_0301	26/Mar/2014	Bicarbonate	229	=	None
CCGC_0301	26/Mar/2014	Calcium	62	=	D
CCGC_0301	26/Mar/2014	Chloride	47	=	None
CCGC_0301	26/Mar/2014	Hardness as CaCO3	307	=	None
CCGC_0301	26/Mar/2014	Magnesium	37	=	D
CCGC_0301	26/Mar/2014	Nitrate + Nitrite as N	9.4	=	None
CCGC_0301	26/Mar/2014	Nitrate as NO3-N	9	=	None
CCGC_0301	26/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0301	26/Mar/2014	Potassium	1.3	=	D
CCGC_0301	26/Mar/2014	QC Ratio TDS/SEC	0.56	=	None
CCGC_0301	26/Mar/2014	Sodium	21	=	D
CCGC_0301	26/Mar/2014	SpecificConductivity	694	=	None
CCGC_0301	26/Mar/2014	Sulfate	36	=	None
CCGC_0301	26/Mar/2014	Total Dissolved Solids	387	=	None
CCGC_0301	21/Aug/2014	Alkalinity as CaCO3	191	=	None
CCGC_0301	21/Aug/2014	Bicarbonate	233	=	None
CCGC_0301	21/Aug/2014	Calcium	64	=	D
CCGC_0301	21/Aug/2014	Chloride	48	=	None
CCGC_0301	21/Aug/2014	Hardness as CaCO3	316	=	None
CCGC_0301	21/Aug/2014	Magnesium	38	=	D
CCGC_0301	21/Aug/2014	Nitrate + Nitrite as N	9.4	=	None
CCGC_0301	21/Aug/2014	Nitrate as NO3-N	9.1	=	None
CCGC_0301	21/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0301	21/Aug/2014	Potassium	0.9	=	D
CCGC_0301	21/Aug/2014	QC Ratio TDS/SEC	0.56	=	None
CCGC_0301	21/Aug/2014	Sodium	22	=	D
CCGC_0301	21/Aug/2014	SpecificConductivity	652	=	None
CCGC_0301	21/Aug/2014	Sulfate	39	=	None
CCGC_0301	21/Aug/2014	Total Dissolved Solids	366	=	None
CCGC_0302	26/Mar/2014	Alkalinity as CaCO3	211	=	None
CCGC_0302	26/Mar/2014	Bicarbonate	257	=	None
CCGC_0302	26/Mar/2014	Calcium	67	=	D
CCGC_0302	26/Mar/2014	Chloride	41	=	None
CCGC_0302	26/Mar/2014	Hardness as CaCO3	348	=	None
CCGC_0302	26/Mar/2014	Magnesium	44	=	D
CCGC_0302	26/Mar/2014	Nitrate + Nitrite as N	15.7	=	None
CCGC_0302	26/Mar/2014	Nitrate as NO3-N	15.3	=	None
CCGC_0302	26/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0302	26/Mar/2014	Potassium	1.3	=	D
CCGC_0302	26/Mar/2014	QC Ratio TDS/SEC	0.58	=	None
CCGC_0302	26/Mar/2014	Sodium	24	=	D
CCGC_0302	26/Mar/2014	SpecificConductivity	784	=	None
CCGC_0302	26/Mar/2014	Sulfate	51	=	None
CCGC_0302	26/Mar/2014	Total Dissolved Solids	451	=	None
CCGC_0303	26/Mar/2014	Alkalinity as CaCO3	194	=	None
CCGC_0303	26/Mar/2014	Bicarbonate	237	=	None
CCGC_0303	26/Mar/2014	Calcium	58	=	D
CCGC_0303	26/Mar/2014	Chloride	29	=	None
CCGC_0303	26/Mar/2014	Hardness as CaCO3	293	=	None
CCGC_0303	26/Mar/2014	Magnesium	36	=	D
CCGC_0303	26/Mar/2014	Nitrate + Nitrite as N	9.7	=	None
CCGC_0303	26/Mar/2014	Nitrate as NO3-N	9.2	=	None
CCGC_0303	26/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0303	26/Mar/2014	Potassium	1.2	=	D
CCGC_0303	26/Mar/2014	QC Ratio TDS/SEC	0.58	=	None
CCGC_0303	26/Mar/2014	Sodium	18	=	D
CCGC_0303	26/Mar/2014	SpecificConductivity	613	=	None
CCGC_0303	26/Mar/2014	Sulfate	33	=	None
CCGC_0303	26/Mar/2014	Total Dissolved Solids	357	=	None
CCGC_0303	21/Aug/2014	Alkalinity as CaCO3	198	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0303	21/Aug/2014	Bicarbonate	242	=	None
CCGC_0303	21/Aug/2014	Calcium	57	=	D
CCGC_0303	21/Aug/2014	Chloride	28	=	None
CCGC_0303	21/Aug/2014	Hardness as CaCO3	286	=	None
CCGC_0303	21/Aug/2014	Magnesium	35	=	D
CCGC_0303	21/Aug/2014	Nitrate + Nitrite as N	8.9	=	None
CCGC_0303	21/Aug/2014	Nitrate as NO3-N	8.6	=	None
CCGC_0303	21/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0303	21/Aug/2014	Potassium	0.6	=	D
CCGC_0303	21/Aug/2014	QC Ratio TDS/SEC	0.60	=	None
CCGC_0303	21/Aug/2014	Sodium	18	=	D
CCGC_0303	21/Aug/2014	SpecificConductivity	576	=	None
CCGC_0303	21/Aug/2014	Sulfate	34	=	None
CCGC_0303	21/Aug/2014	Total Dissolved Solids	348	=	None
CCGC_0304	26/Mar/2014	Alkalinity as CaCO3	200	=	None
CCGC_0304	26/Mar/2014	Bicarbonate	244	=	None
CCGC_0304	26/Mar/2014	Calcium	58	=	D
CCGC_0304	26/Mar/2014	Chloride	28	=	None
CCGC_0304	26/Mar/2014	Hardness as CaCO3	281	=	None
CCGC_0304	26/Mar/2014	Magnesium	33	=	D
CCGC_0304	26/Mar/2014	Nitrate + Nitrite as N	13.8	=	None
CCGC_0304	26/Mar/2014	Nitrate as NO3-N	13.3	=	None
CCGC_0304	26/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0304	26/Mar/2014	Potassium	1.4	=	D
CCGC_0304	26/Mar/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0304	26/Mar/2014	Sodium	31	=	D
CCGC_0304	26/Mar/2014	SpecificConductivity	683	=	None
CCGC_0304	26/Mar/2014	Sulfate	38	=	None
CCGC_0304	26/Mar/2014	Total Dissolved Solids	414	=	None
CCGC_0305	26/Mar/2014	Alkalinity as CaCO3	325	=	None
CCGC_0305	26/Mar/2014	Bicarbonate	397	=	None
CCGC_0305	26/Mar/2014	Calcium	88	=	D
CCGC_0305	26/Mar/2014	Chloride	62	=	None
CCGC_0305	26/Mar/2014	Hardness as CaCO3	475	=	None
CCGC_0305	26/Mar/2014	Magnesium	62	=	D
CCGC_0305	26/Mar/2014	Nitrate + Nitrite as N	20.2	=	None
CCGC_0305	26/Mar/2014	Nitrate as NO3-N	19.8	=	None
CCGC_0305	26/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0305	26/Mar/2014	Potassium	1.5	=	D
CCGC_0305	26/Mar/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0305	26/Mar/2014	Sodium	56	=	D
CCGC_0305	26/Mar/2014	SpecificConductivity	1131	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0305	26/Mar/2014	Sulfate	77	=	None
CCGC_0305	26/Mar/2014	Total Dissolved Solids	683	=	None
CCGC_0306	26/Mar/2014	Alkalinity as CaCO3	451	=	None
CCGC_0306	26/Mar/2014	Bicarbonate	550	=	None
CCGC_0306	26/Mar/2014	Calcium	144	=	D
CCGC_0306	26/Mar/2014	Chloride	67	=	None
CCGC_0306	26/Mar/2014	Hardness as CaCO3	841	=	None
CCGC_0306	26/Mar/2014	Magnesium	117	=	D
CCGC_0306	26/Mar/2014	Nitrate + Nitrite as N	40.9	=	None
CCGC_0306	26/Mar/2014	Nitrate as NO3-N	40.6	=	None
CCGC_0306	26/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0306	26/Mar/2014	Potassium	1	=	D
CCGC_0306	26/Mar/2014	QC Ratio TDS/SEC	0.64	=	None
CCGC_0306	26/Mar/2014	Sodium	62	=	D
CCGC_0306	26/Mar/2014	SpecificConductivity	1706	=	None
CCGC_0306	26/Mar/2014	Sulfate	193	=	None
CCGC_0306	26/Mar/2014	Total Dissolved Solids	1088	=	None
CCGC_0307	25/Mar/2014	Alkalinity as CaCO3	608	=	None
CCGC_0307	25/Mar/2014	Bicarbonate	742	=	None
CCGC_0307	25/Mar/2014	Calcium	164	=	D
CCGC_0307	25/Mar/2014	Chloride	299	=	None
CCGC_0307	25/Mar/2014	Hardness as CaCO3	1377	=	None
CCGC_0307	25/Mar/2014	Magnesium	235	=	D
CCGC_0307	25/Mar/2014	Nitrate + Nitrite as N	24.6	=	None
CCGC_0307	25/Mar/2014	Nitrate as NO3-N	24.6	=	None
CCGC_0307	25/Mar/2014	Nitrite as NO2-N		ND	None
CCGC_0307	25/Mar/2014	Potassium	4.7	=	D
CCGC_0307	25/Mar/2014	QC Ratio TDS/SEC	0.69	=	None
CCGC_0307	25/Mar/2014	Sodium	308	=	D
CCGC_0307	25/Mar/2014	SpecificConductivity	3186	=	None
CCGC_0307	25/Mar/2014	Sulfate	683	=	None
CCGC_0307	25/Mar/2014	Total Dissolved Solids	2214	=	None
CCGC_0308	25/Mar/2014	Alkalinity as CaCO3	523	=	None
CCGC_0308	25/Mar/2014	Bicarbonate	638	=	None
CCGC_0308	25/Mar/2014	Calcium	104	=	D
CCGC_0308	25/Mar/2014	Chloride	153	=	None
CCGC_0308	25/Mar/2014	Hardness as CaCO3	886	=	None
CCGC_0308	25/Mar/2014	Magnesium	152	=	D
CCGC_0308	25/Mar/2014	Nitrate + Nitrite as N	0.3	=	None
CCGC_0308	25/Mar/2014	Nitrate as NO3-N	0.2	=	None
CCGC_0308	25/Mar/2014	Nitrite as NO2-N		ND	None
CCGC_0308	25/Mar/2014	Potassium	3.4	=	D

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0308	25/Mar/2014	QC Ratio TDS/SEC	0.66	=	None
CCGC_0308	25/Mar/2014	Sodium	192	=	D
CCGC_0308	25/Mar/2014	SpecificConductivity	2151	=	None
CCGC_0308	25/Mar/2014	Sulfate	433	=	None
CCGC_0308	25/Mar/2014	Total Dissolved Solids	1422	=	None
CCGC_0309	25/Mar/2014	Alkalinity as CaCO3	396	=	None
CCGC_0309	25/Mar/2014	Bicarbonate	483	=	None
CCGC_0309	25/Mar/2014	Calcium	74	=	D
CCGC_0309	25/Mar/2014	Chloride	106	=	None
CCGC_0309	25/Mar/2014	Hardness as CaCO3	580	=	None
CCGC_0309	25/Mar/2014	Magnesium	96	=	D
CCGC_0309	25/Mar/2014	Nitrate + Nitrite as N	3.4	=	None
CCGC_0309	25/Mar/2014	Nitrate as NO3-N	3.2	=	None
CCGC_0309	25/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0309	25/Mar/2014	Potassium	3	=	D
CCGC_0309	25/Mar/2014	QC Ratio TDS/SEC	0.65	=	None
CCGC_0309	25/Mar/2014	Sodium	174	=	D
CCGC_0309	25/Mar/2014	SpecificConductivity	1614	=	None
CCGC_0309	25/Mar/2014	Sulfate	282	=	None
CCGC_0309	25/Mar/2014	Total Dissolved Solids	1043	=	None
CCGC_0310	27/Mar/2014	Alkalinity as CaCO3	744	=	None
CCGC_0310	27/Mar/2014	Bicarbonate	908	=	None
CCGC_0310	27/Mar/2014	Calcium	152	=	D
CCGC_0310	27/Mar/2014	Chloride	220	=	None
CCGC_0310	27/Mar/2014	Hardness as CaCO3	1314	=	None
CCGC_0310	27/Mar/2014	Magnesium	227	=	D
CCGC_0310	27/Mar/2014	Nitrate + Nitrite as N		ND	None
CCGC_0310	27/Mar/2014	Nitrate as NO3-N		ND	None
CCGC_0310	27/Mar/2014	Nitrite as NO2-N		ND	None
CCGC_0310	27/Mar/2014	Potassium	4.5	=	D
CCGC_0310	27/Mar/2014	QC Ratio TDS/SEC	0.73	=	None
CCGC_0310	27/Mar/2014	Sodium	344	=	D
CCGC_0310	27/Mar/2014	SpecificConductivity	3231	=	None
CCGC_0310	27/Mar/2014	Sulfate	848	=	D
CCGC_0310	27/Mar/2014	Total Dissolved Solids	2346	=	None
CCGC_0311	27/Mar/2014	Alkalinity as CaCO3	590	=	None
CCGC_0311	27/Mar/2014	Bicarbonate	720	=	None
CCGC_0311	27/Mar/2014	Calcium	124	=	D
CCGC_0311	27/Mar/2014	Chloride	198	=	None
CCGC_0311	27/Mar/2014	Hardness as CaCO3	1109	=	None
CCGC_0311	27/Mar/2014	Magnesium	194	=	D
CCGC_0311	27/Mar/2014	Nitrate + Nitrite as N	0.3	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0311	27/Mar/2014	Nitrate as NO3-N	0.3	=	None
CCGC_0311	27/Mar/2014	Nitrite as NO2-N		ND	None
CCGC_0311	27/Mar/2014	Potassium	4.1	=	D
CCGC_0311	27/Mar/2014	QC Ratio TDS/SEC	0.7	=	None
CCGC_0311	27/Mar/2014	Sodium	256	=	D
CCGC_0311	27/Mar/2014	SpecificConductivity	2632	=	None
CCGC_0311	27/Mar/2014	Sulfate	618	=	None
CCGC_0311	27/Mar/2014	Total Dissolved Solids	1854	=	None
CCGC_0312	27/Mar/2014	Alkalinity as CaCO3	641	=	None
CCGC_0312	27/Mar/2014	Bicarbonate	782	=	None
CCGC_0312	27/Mar/2014	Calcium	127	=	D
CCGC_0312	27/Mar/2014	Chloride	217	=	None
CCGC_0312	27/Mar/2014	Hardness as CaCO3	1178	=	None
CCGC_0312	27/Mar/2014	Magnesium	209	=	D
CCGC_0312	27/Mar/2014	Nitrate + Nitrite as N	1.1	=	None
CCGC_0312	27/Mar/2014	Nitrate as NO3-N	1.1	=	None
CCGC_0312	27/Mar/2014	Nitrite as NO2-N		ND	None
CCGC_0312	27/Mar/2014	Potassium	4.6	=	D
CCGC_0312	27/Mar/2014	QC Ratio TDS/SEC	0.71	=	None
CCGC_0312	27/Mar/2014	Sodium	303	=	D
CCGC_0312	27/Mar/2014	SpecificConductivity	2900	=	None
CCGC_0312	27/Mar/2014	Sulfate	705	=	None
CCGC_0312	27/Mar/2014	Total Dissolved Solids	2060	=	None
CCGC_0314	26/Mar/2014	Alkalinity as CaCO3	255	=	None
CCGC_0314	26/Mar/2014	Bicarbonate	311	=	None
CCGC_0314	26/Mar/2014	Calcium	90	=	D
CCGC_0314	26/Mar/2014	Chloride	53	=	None
CCGC_0314	26/Mar/2014	Hardness as CaCO3	459	=	None
CCGC_0314	26/Mar/2014	Magnesium	57	=	D
CCGC_0314	26/Mar/2014	Nitrate + Nitrite as N	32.6	=	None
CCGC_0314	26/Mar/2014	Nitrate as NO3-N	32.2	=	None
CCGC_0314	26/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0314	26/Mar/2014	Potassium	1.6	=	D
CCGC_0314	26/Mar/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0314	26/Mar/2014	Sodium	42	=	D
CCGC_0314	26/Mar/2014	SpecificConductivity	1042	=	None
CCGC_0314	26/Mar/2014	Sulfate	64	=	None
CCGC_0314	26/Mar/2014	Total Dissolved Solids	614	=	None
CCGC_0315	27/Mar/2014	Alkalinity as CaCO3	262	=	None
CCGC_0315	27/Mar/2014	Bicarbonate	320	=	None
CCGC_0315	27/Mar/2014	Calcium	87	=	D
CCGC_0315	27/Mar/2014	Chloride	50	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0315	27/Mar/2014	Hardness as CaCO3	374	=	None
CCGC_0315	27/Mar/2014	Magnesium	38	=	D
CCGC_0315	27/Mar/2014	Nitrate + Nitrite as N	6.1	=	None
CCGC_0315	27/Mar/2014	Nitrate as NO3-N	5.7	=	None
CCGC_0315	27/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0315	27/Mar/2014	Potassium	1.5	=	D
CCGC_0315	27/Mar/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0315	27/Mar/2014	Sodium	35	=	D
CCGC_0315	27/Mar/2014	SpecificConductivity	796	=	None
CCGC_0315	27/Mar/2014	Sulfate	54	=	None
CCGC_0315	27/Mar/2014	Total Dissolved Solids	488	=	None
CCGC_0317	27/Mar/2014	Alkalinity as CaCO3	258	=	None
CCGC_0317	27/Mar/2014	Bicarbonate	315	=	None
CCGC_0317	27/Mar/2014	Calcium	35	=	D
CCGC_0317	27/Mar/2014	Chloride	32	=	None
CCGC_0317	27/Mar/2014	Hardness as CaCO3	199	=	None
CCGC_0317	27/Mar/2014	Magnesium	27	=	D
CCGC_0317	27/Mar/2014	Nitrate + Nitrite as N	0.5	=	None
CCGC_0317	27/Mar/2014	Nitrate as NO3-N		ND	None
CCGC_0317	27/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0317	27/Mar/2014	Potassium	3.2	=	D
CCGC_0317	27/Mar/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0317	27/Mar/2014	Sodium	57	=	D
CCGC_0317	27/Mar/2014	SpecificConductivity	584	=	None
CCGC_0317	27/Mar/2014	Sulfate	1	=	None
CCGC_0317	27/Mar/2014	Total Dissolved Solids	368	=	None
CCGC_0318	26/Mar/2014	Alkalinity as CaCO3	352	=	None
CCGC_0318	26/Mar/2014	Bicarbonate	429	=	None
CCGC_0318	26/Mar/2014	Calcium	97	=	D
CCGC_0318	26/Mar/2014	Chloride	86	=	None
CCGC_0318	26/Mar/2014	Hardness as CaCO3	498	=	None
CCGC_0318	26/Mar/2014	Magnesium	62	=	D
CCGC_0318	26/Mar/2014	Nitrate + Nitrite as N	7.5	=	None
CCGC_0318	26/Mar/2014	Nitrate as NO3-N	7.2	=	None
CCGC_0318	26/Mar/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0318	26/Mar/2014	Potassium	2	=	D
CCGC_0318	26/Mar/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0318	26/Mar/2014	Sodium	58	=	D
CCGC_0318	26/Mar/2014	SpecificConductivity	1151	=	None
CCGC_0318	26/Mar/2014	Sulfate	90	=	None
CCGC_0318	26/Mar/2014	Total Dissolved Solids	688	=	None
CCGC_0319	27/Mar/2014	Alkalinity as CaCO3	324	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0319	27/Mar/2014	Bicarbonate	395	=	None
CCGC_0319	27/Mar/2014	Calcium	63	=	D
CCGC_0319	27/Mar/2014	Chloride	37	=	None
CCGC_0319	27/Mar/2014	Hardness as CaCO3	363	=	None
CCGC_0319	27/Mar/2014	Magnesium	50	=	D
CCGC_0319	27/Mar/2014	Nitrate + Nitrite as N	6.9	=	None
CCGC_0319	27/Mar/2014	Nitrate as NO3-N	6.5	=	None
CCGC_0319	27/Mar/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0319	27/Mar/2014	Potassium	1.1	=	D
CCGC_0319	27/Mar/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0319	27/Mar/2014	Sodium	61	=	D
CCGC_0319	27/Mar/2014	SpecificConductivity	903	=	None
CCGC_0319	27/Mar/2014	Sulfate	80	=	None
CCGC_0319	27/Mar/2014	Total Dissolved Solids	551	=	None
CCGC_0320	27/Mar/2014	Alkalinity as CaCO3	232	=	None
CCGC_0320	27/Mar/2014	Bicarbonate	283	=	None
CCGC_0320	27/Mar/2014	Calcium	60	=	D
CCGC_0320	27/Mar/2014	Chloride	23	=	None
CCGC_0320	27/Mar/2014	Hardness as CaCO3	253	=	None
CCGC_0320	27/Mar/2014	Magnesium	25	=	D
CCGC_0320	27/Mar/2014	Nitrate + Nitrite as N	4.4	=	None
CCGC_0320	27/Mar/2014	Nitrate as NO3-N	3.9	=	None
CCGC_0320	27/Mar/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0320	27/Mar/2014	Potassium	1.3	=	D
CCGC_0320	27/Mar/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0320	27/Mar/2014	Sodium	31	=	D
CCGC_0320	27/Mar/2014	SpecificConductivity	612	=	None
CCGC_0320	27/Mar/2014	Sulfate	40	=	None
CCGC_0320	27/Mar/2014	Total Dissolved Solids	383	=	None
CCGC_0321	27/Mar/2014	Alkalinity as CaCO3	236	=	None
CCGC_0321	27/Mar/2014	Bicarbonate	288	=	None
CCGC_0321	27/Mar/2014	Calcium	47	=	D
CCGC_0321	27/Mar/2014	Chloride	50	=	None
CCGC_0321	27/Mar/2014	Hardness as CaCO3	294	=	None
CCGC_0321	27/Mar/2014	Magnesium	43	=	D
CCGC_0321	27/Mar/2014	Nitrate + Nitrite as N	13.6	=	None
CCGC_0321	27/Mar/2014	Nitrate as NO3-N	13.2	=	None
CCGC_0321	27/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0321	27/Mar/2014	Potassium		ND	D
CCGC_0321	27/Mar/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0321	27/Mar/2014	Sodium	21	=	D
CCGC_0321	27/Mar/2014	SpecificConductivity	680	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0321	27/Mar/2014	Sulfate	39	=	None
CCGC_0321	27/Mar/2014	Total Dissolved Solids	417	=	None
CCGC_0322	27/Mar/2014	Alkalinity as CaCO3	198	=	None
CCGC_0322	27/Mar/2014	Bicarbonate	242	=	None
CCGC_0322	27/Mar/2014	Calcium	56	=	D
CCGC_0322	27/Mar/2014	Chloride	63	=	None
CCGC_0322	27/Mar/2014	Hardness as CaCO3	313	=	None
CCGC_0322	27/Mar/2014	Magnesium	42	=	D
CCGC_0322	27/Mar/2014	Nitrate + Nitrite as N	8.4	=	None
CCGC_0322	27/Mar/2014	Nitrate as NO3-N	8.1	=	None
CCGC_0322	27/Mar/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0322	27/Mar/2014	Potassium		ND	D
CCGC_0322	27/Mar/2014	QC Ratio TDS/SEC	0.6	=	None
CCGC_0322	27/Mar/2014	Sodium	21	=	D
CCGC_0322	27/Mar/2014	SpecificConductivity	719	=	None
CCGC_0322	27/Mar/2014	Sulfate	34	=	None
CCGC_0322	27/Mar/2014	Total Dissolved Solids	428	=	None
CCGC_0366	30/Apr/2014	Alkalinity as CaCO3	328	=	None
CCGC_0366	30/Apr/2014	Bicarbonate	400	=	None
CCGC_0366	30/Apr/2014	Calcium	104	=	D
CCGC_0366	30/Apr/2014	Chloride	123	=	None
CCGC_0366	30/Apr/2014	Hardness as CaCO3	606	=	None
CCGC_0366	30/Apr/2014	Magnesium	84	=	D
CCGC_0366	30/Apr/2014	Nitrate + Nitrite as N	0.4	=	None
CCGC_0366	30/Apr/2014	Nitrate as NO3-N		ND	None
CCGC_0366	30/Apr/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0366	30/Apr/2014	Potassium	3.8	=	D
CCGC_0366	30/Apr/2014	QC Ratio TDS/SEC	0.66	=	None
CCGC_0366	30/Apr/2014	Sodium	166	=	D
CCGC_0366	30/Apr/2014	SpecificConductivity	1745	=	None
CCGC_0366	30/Apr/2014	Sulfate	442	=	None
CCGC_0366	30/Apr/2014	Total Dissolved Solids	1146	=	None
CCGC_0367	30/Apr/2014	Alkalinity as CaCO3	469	=	None
CCGC_0367	30/Apr/2014	Bicarbonate	572	=	None
CCGC_0367	30/Apr/2014	Calcium	165	=	D
CCGC_0367	30/Apr/2014	Chloride	179	=	None
CCGC_0367	30/Apr/2014	Hardness as CaCO3	692	=	None
CCGC_0367	30/Apr/2014	Magnesium	68	=	D
CCGC_0367	30/Apr/2014	Nitrate + Nitrite as N	27.8	=	None
CCGC_0367	30/Apr/2014	Nitrate as NO3-N	27.4	=	None
CCGC_0367	30/Apr/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0367	30/Apr/2014	Potassium	2.6	=	D

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0367	30/Apr/2014	QC Ratio TDS/SEC	0.65	=	None
CCGC_0367	30/Apr/2014	Sodium	204	=	D
CCGC_0367	30/Apr/2014	SpecificConductivity	2102	=	None
CCGC_0367	30/Apr/2014	Sulfate	305	=	None
CCGC_0367	30/Apr/2014	Total Dissolved Solids	1374	=	None
CCGC_0368	30/Apr/2014	Alkalinity as CaCO3	580	=	None
CCGC_0368	30/Apr/2014	Bicarbonate	708	=	None
CCGC_0368	30/Apr/2014	Calcium	128	=	D
CCGC_0368	30/Apr/2014	Chloride	289	=	None
CCGC_0368	30/Apr/2014	Hardness as CaCO3	1028	=	None
CCGC_0368	30/Apr/2014	Magnesium	172	=	D
CCGC_0368	30/Apr/2014	Nitrate + Nitrite as N	27.6	=	None
CCGC_0368	30/Apr/2014	Nitrate as NO3-N	27.3	=	None
CCGC_0368	30/Apr/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0368	30/Apr/2014	Potassium	3.8	=	D
CCGC_0368	30/Apr/2014	QC Ratio TDS/SEC	0.67	=	None
CCGC_0368	30/Apr/2014	Sodium	274	=	D
CCGC_0368	30/Apr/2014	SpecificConductivity	2880	=	None
CCGC_0368	30/Apr/2014	Sulfate	510	=	None
CCGC_0368	30/Apr/2014	Total Dissolved Solids	1943	=	None
CCGC_0369	30/Apr/2014	Alkalinity as CaCO3	454	=	None
CCGC_0369	30/Apr/2014	Bicarbonate	554	=	None
CCGC_0369	30/Apr/2014	Calcium	160	=	D
CCGC_0369	30/Apr/2014	Chloride	190	=	None
CCGC_0369	30/Apr/2014	Hardness as CaCO3	836	=	None
CCGC_0369	30/Apr/2014	Magnesium	106	=	D
CCGC_0369	30/Apr/2014	Nitrate + Nitrite as N	29.2	=	None
CCGC_0369	30/Apr/2014	Nitrate as NO3-N	28.8	=	None
CCGC_0369	30/Apr/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0369	30/Apr/2014	Potassium	2.0	=	D
CCGC_0369	30/Apr/2014	QC Ratio TDS/SEC	0.69	=	None
CCGC_0369	30/Apr/2014	Sodium	229	=	D
CCGC_0369	30/Apr/2014	SpecificConductivity	2405	=	None
CCGC_0369	30/Apr/2014	Sulfate	478	=	None
CCGC_0369	30/Apr/2014	Total Dissolved Solids	1666	=	None
CCGC_0408	07/Aug/2014	Alkalinity as CaCO3	353	=	None
CCGC_0408	07/Aug/2014	Bicarbonate	431	=	None
CCGC_0408	07/Aug/2014	Calcium	62	=	D
CCGC_0408	07/Aug/2014	Chloride	113	=	None
CCGC_0408	07/Aug/2014	Hardness as CaCO3	571	=	None
CCGC_0408	07/Aug/2014	Magnesium	101	=	D
CCGC_0408	07/Aug/2014	Nitrate + Nitrite as N	6.4	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0408	07/Aug/2014	Nitrate as NO3-N	6.0	=	None
CCGC_0408	07/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0408	07/Aug/2014	Potassium	3.9	=	D
CCGC_0408	07/Aug/2014	QC Ratio TDS/SEC	0.66	=	None
CCGC_0408	07/Aug/2014	Sodium	162	=	D
CCGC_0408	07/Aug/2014	SpecificConductivity	1608	=	None
CCGC_0408	07/Aug/2014	Sulfate	342	=	None
CCGC_0408	07/Aug/2014	Total Dissolved Solids	1062	=	None
CCGC_0411	07/Aug/2014	Alkalinity as CaCO3	401	=	None
CCGC_0411	07/Aug/2014	Bicarbonate	489	=	None
CCGC_0411	07/Aug/2014	Calcium	96	=	D
CCGC_0411	07/Aug/2014	Chloride	487	=	None
CCGC_0411	07/Aug/2014	Hardness as CaCO3	849	=	None
CCGC_0411	07/Aug/2014	Magnesium	148	=	D
CCGC_0411	07/Aug/2014	Nitrate + Nitrite as N	25.7	=	None
CCGC_0411	07/Aug/2014	Nitrate as NO3-N	25.5	=	None
CCGC_0411	07/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0411	07/Aug/2014	Potassium	3.5	=	D
CCGC_0411	07/Aug/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0411	07/Aug/2014	Sodium	348	=	D
CCGC_0411	07/Aug/2014	SpecificConductivity	3078	=	None
CCGC_0411	07/Aug/2014	Sulfate	417	=	None
CCGC_0411	07/Aug/2014	Total Dissolved Solids	1940	=	None
CCGC_0412	07/Aug/2014	Alkalinity as CaCO3	461	=	None
CCGC_0412	07/Aug/2014	Bicarbonate	562	=	None
CCGC_0412	07/Aug/2014	Calcium	83	=	D
CCGC_0412	07/Aug/2014	Chloride	166	=	None
CCGC_0412	07/Aug/2014	Hardness as CaCO3	677	=	None
CCGC_0412	07/Aug/2014	Magnesium	114	=	D
CCGC_0412	07/Aug/2014	Nitrate + Nitrite as N	6.3	=	None
CCGC_0412	07/Aug/2014	Nitrate as NO3-N	5.9	=	None
CCGC_0412	07/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0412	07/Aug/2014	Potassium	3.4	=	D
CCGC_0412	07/Aug/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0412	07/Aug/2014	Sodium	186	=	D
CCGC_0412	07/Aug/2014	SpecificConductivity	1920	=	None
CCGC_0412	07/Aug/2014	Sulfate	335	=	None
CCGC_0412	07/Aug/2014	Total Dissolved Solids	1218	=	None
CCGC_0413	07/Aug/2014	Alkalinity as CaCO3	379	=	None
CCGC_0413	07/Aug/2014	Bicarbonate	462	=	None
CCGC_0413	07/Aug/2014	Calcium	101	=	D
CCGC_0413	07/Aug/2014	Chloride	178	=	None
CCGC_0413	07/Aug/2014	Hardness as CaCO3	718	=	None
CCGC_0413	07/Aug/2014	Magnesium	113	=	D
CCGC_0413	07/Aug/2014	Nitrate + Nitrite as N	10.1	=	None
CCGC_0413	07/Aug/2014	Nitrate as NO3-N	9.8	=	None
CCGC_0413	07/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0413	07/Aug/2014	Potassium	4.2	=	D
CCGC_0413	07/Aug/2014	QC Ratio TDS/SEC	0.67	=	None
CCGC_0413	07/Aug/2014	Sodium	176	=	D
CCGC_0413	07/Aug/2014	SpecificConductivity	2020	=	None
CCGC_0413	07/Aug/2014	Sulfate	439	=	None
CCGC_0413	07/Aug/2014	Total Dissolved Solids	1355	=	None
CCGC_0414	07/Aug/2014	Alkalinity as CaCO3	202	=	None
CCGC_0414	07/Aug/2014	Bicarbonate	246	=	None
CCGC_0414	07/Aug/2014	Calcium	55	=	D
CCGC_0414	07/Aug/2014	Chloride	20	=	None
CCGC_0414	07/Aug/2014	Hardness as CaCO3	244	=	None
CCGC_0414	07/Aug/2014	Magnesium	26	=	D
CCGC_0414	07/Aug/2014	Nitrate + Nitrite as N	3.9	=	None
CCGC_0414	07/Aug/2014	Nitrate as NO3-N	3.6	=	None
CCGC_0414	07/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0414	07/Aug/2014	Potassium	1.6	=	D
CCGC_0414	07/Aug/2014	QC Ratio TDS/SEC	0.60	=	None
CCGC_0414	07/Aug/2014	Sodium	22	=	D
CCGC_0414	07/Aug/2014	SpecificConductivity	541	=	None
CCGC_0414	07/Aug/2014	Sulfate	41	=	None
CCGC_0414	07/Aug/2014	Total Dissolved Solids	322	=	None
CCGC_0415	07/Aug/2014	Alkalinity as CaCO3	233	=	None
CCGC_0415	07/Aug/2014	Bicarbonate	284	=	None
CCGC_0415	07/Aug/2014	Calcium	58	=	D
CCGC_0415	07/Aug/2014	Chloride	23	=	None
CCGC_0415	07/Aug/2014	Hardness as CaCO3	248	=	None
CCGC_0415	07/Aug/2014	Magnesium	25	=	D
CCGC_0415	07/Aug/2014	Nitrate + Nitrite as N	1.8	=	None
CCGC_0415	07/Aug/2014	Nitrate as NO3-N	1.5	=	None
CCGC_0415	07/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0415	07/Aug/2014	Potassium	1.4	=	D
CCGC_0415	07/Aug/2014	QC Ratio TDS/SEC	0.60	=	None
CCGC_0415	07/Aug/2014	Sodium	33	=	D
CCGC_0415	07/Aug/2014	SpecificConductivity	592	=	None
CCGC_0415	07/Aug/2014	Sulfate	42	=	None
CCGC_0415	07/Aug/2014	Total Dissolved Solids	355	=	None
CCGC_0416	07/Aug/2014	Alkalinity as CaCO3	182	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0416	07/Aug/2014	Bicarbonate	222	=	None
CCGC_0416	07/Aug/2014	Calcium	48	=	D
CCGC_0416	07/Aug/2014	Chloride	17	=	None
CCGC_0416	07/Aug/2014	Hardness as CaCO3	206	=	None
CCGC_0416	07/Aug/2014	Magnesium	21	=	D
CCGC_0416	07/Aug/2014	Nitrate + Nitrite as N	0.9	=	None
CCGC_0416	07/Aug/2014	Nitrate as NO3-N	0.6	=	None
CCGC_0416	07/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0416	07/Aug/2014	Potassium	1.7	=	D
CCGC_0416	07/Aug/2014	QC Ratio TDS/SEC	0.58	=	None
CCGC_0416	07/Aug/2014	Sodium	22	=	D
CCGC_0416	07/Aug/2014	SpecificConductivity	470	=	None
CCGC_0416	07/Aug/2014	Sulfate	38	=	None
CCGC_0416	07/Aug/2014	Total Dissolved Solids	272	=	None
CCGC_0417	07/Aug/2014	Alkalinity as CaCO3	212	=	None
CCGC_0417	07/Aug/2014	Bicarbonate	259	=	None
CCGC_0417	07/Aug/2014	Calcium	58	=	D
CCGC_0417	07/Aug/2014	Chloride	19	=	None
CCGC_0417	07/Aug/2014	Hardness as CaCO3	268	=	None
CCGC_0417	07/Aug/2014	Magnesium	30	=	D
CCGC_0417	07/Aug/2014	Nitrate + Nitrite as N	3.4	=	None
CCGC_0417	07/Aug/2014	Nitrate as NO3-N	3.1	=	None
CCGC_0417	07/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0417	07/Aug/2014	Potassium	1.4	=	D
CCGC_0417	07/Aug/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0417	07/Aug/2014	Sodium	18	=	D
CCGC_0417	07/Aug/2014	SpecificConductivity	560	=	None
CCGC_0417	07/Aug/2014	Sulfate	41	=	None
CCGC_0417	07/Aug/2014	Total Dissolved Solids	352	=	None
CCGC_0418	07/Aug/2014	Alkalinity as CaCO3	327	=	None
CCGC_0418	07/Aug/2014	Bicarbonate	399	=	None
CCGC_0418	07/Aug/2014	Calcium	94	=	D
CCGC_0418	07/Aug/2014	Chloride	102	=	None
CCGC_0418	07/Aug/2014	Hardness as CaCO3	478	=	None
CCGC_0418	07/Aug/2014	Magnesium	59	=	D
CCGC_0418	07/Aug/2014	Nitrate + Nitrite as N	9.1	=	None
CCGC_0418	07/Aug/2014	Nitrate as NO3-N	8.8	=	None
CCGC_0418	07/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0418	07/Aug/2014	Potassium	2.1	=	D
CCGC_0418	07/Aug/2014	QC Ratio TDS/SEC	0.62	=	None
CCGC_0418	07/Aug/2014	Sodium	66	=	D
CCGC_0418	07/Aug/2014	SpecificConductivity	1124	=	None
CCGC_0418	07/Aug/2014	Sulfate	95	=	None
CCGC_0418	07/Aug/2014	Total Dissolved Solids	695	=	None
CCGC_0419	07/Aug/2014	Alkalinity as CaCO3	192	=	None
CCGC_0419	07/Aug/2014	Bicarbonate	234	=	None
CCGC_0419	07/Aug/2014	Calcium	55	=	D
CCGC_0419	07/Aug/2014	Chloride	45	=	None
CCGC_0419	07/Aug/2014	Hardness as CaCO3	261	=	None
CCGC_0419	07/Aug/2014	Magnesium	30	=	D
CCGC_0419	07/Aug/2014	Nitrate + Nitrite as N	11.6	=	None
CCGC_0419	07/Aug/2014	Nitrate as NO3-N	11.3	=	None
CCGC_0419	07/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0419	07/Aug/2014	Potassium	1.5	=	D
CCGC_0419	07/Aug/2014	QC Ratio TDS/SEC	0.60	=	None
CCGC_0419	07/Aug/2014	Sodium	40	=	D
CCGC_0419	07/Aug/2014	SpecificConductivity	662	=	None
CCGC_0419	07/Aug/2014	Sulfate	34	=	None
CCGC_0419	07/Aug/2014	Total Dissolved Solids	398	=	None
CCGC_0420	07/Aug/2014	Alkalinity as CaCO3	237	=	None
CCGC_0420	07/Aug/2014	Bicarbonate	289	=	None
CCGC_0420	07/Aug/2014	Calcium	2	=	D
CCGC_0420	07/Aug/2014	Chloride	106	=	None
CCGC_0420	07/Aug/2014	Hardness as CaCO3	5	=	None
CCGC_0420	07/Aug/2014	Magnesium		ND	D
CCGC_0420	07/Aug/2014	Nitrate + Nitrite as N	20.1	=	None
CCGC_0420	07/Aug/2014	Nitrate as NO3-N	19.8	=	None
CCGC_0420	07/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0420	07/Aug/2014	Potassium		ND	D
CCGC_0420	07/Aug/2014	QC Ratio TDS/SEC	0.60	=	None
CCGC_0420	07/Aug/2014	Sodium	223	=	D
CCGC_0420	07/Aug/2014	SpecificConductivity	1039	=	None
CCGC_0420	07/Aug/2014	Sulfate	40	=	None
CCGC_0420	07/Aug/2014	Total Dissolved Solids	628	=	None
CCGC_0421	07/Aug/2014	Alkalinity as CaCO3	221	=	None
CCGC_0421	07/Aug/2014	Bicarbonate	270	=	None
CCGC_0421	07/Aug/2014	Calcium	86	=	D
CCGC_0421	07/Aug/2014	Chloride	129	=	None
CCGC_0421	07/Aug/2014	Hardness as CaCO3	421	=	None
CCGC_0421	07/Aug/2014	Magnesium	50	=	D
CCGC_0421	07/Aug/2014	Nitrate + Nitrite as N	18.3	=	None
CCGC_0421	07/Aug/2014	Nitrate as NO3-N	18.0	=	None
CCGC_0421	07/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0421	07/Aug/2014	Potassium	1.9	=	D

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0421	07/Aug/2014	QC Ratio TDS/SEC	0.55	=	None
CCGC_0421	07/Aug/2014	Sodium	48	=	D
CCGC_0421	07/Aug/2014	SpecificConductivity	1018	=	None
CCGC_0421	07/Aug/2014	Sulfate	35	=	None
CCGC_0421	07/Aug/2014	Total Dissolved Solids	563	=	None
CCGC_0422	07/Aug/2014	Alkalinity as CaCO3	143	=	None
CCGC_0422	07/Aug/2014	Bicarbonate	174	=	None
CCGC_0422	07/Aug/2014	Calcium	63	=	D
CCGC_0422	07/Aug/2014	Chloride	73	=	None
CCGC_0422	07/Aug/2014	Hardness as CaCO3	285	=	None
CCGC_0422	07/Aug/2014	Magnesium	31	=	D
CCGC_0422	07/Aug/2014	Nitrate + Nitrite as N	8.7	=	None
CCGC_0422	07/Aug/2014	Nitrate as NO3-N	8.4	=	None
CCGC_0422	07/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0422	07/Aug/2014	Potassium	1.6	=	D
CCGC_0422	07/Aug/2014	QC Ratio TDS/SEC	0.54	=	None
CCGC_0422	07/Aug/2014	Sodium	31	=	D
CCGC_0422	07/Aug/2014	SpecificConductivity	676	=	None
CCGC_0422	07/Aug/2014	Sulfate	50	=	None
CCGC_0422	07/Aug/2014	Total Dissolved Solids	368	=	None
CCGC_0425	08/Aug/2014	Alkalinity as CaCO3	276	=	None
CCGC_0425	08/Aug/2014	Bicarbonate	337	=	None
CCGC_0425	08/Aug/2014	Calcium	75	=	D
CCGC_0425	08/Aug/2014	Chloride	55	=	None
CCGC_0425	08/Aug/2014	Hardness as CaCO3	348	=	None
CCGC_0425	08/Aug/2014	Magnesium	39	=	D
CCGC_0425	08/Aug/2014	Nitrate + Nitrite as N	2.6	=	None
CCGC_0425	08/Aug/2014	Nitrate as NO3-N	2.3	=	None
CCGC_0425	08/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0425	08/Aug/2014	Potassium	2.1	=	D
CCGC_0425	08/Aug/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0425	08/Aug/2014	Sodium	50	=	D
CCGC_0425	08/Aug/2014	SpecificConductivity	836	=	None
CCGC_0425	08/Aug/2014	Sulfate	79	=	None
CCGC_0425	08/Aug/2014	Total Dissolved Solids	508	=	None
CCGC_0426	08/Aug/2014	Alkalinity as CaCO3	179	=	None
CCGC_0426	08/Aug/2014	Bicarbonate	218	=	None
CCGC_0426	08/Aug/2014	Calcium	55	=	D
CCGC_0426	08/Aug/2014	Chloride	42	=	None
CCGC_0426	08/Aug/2014	Hardness as CaCO3	269	=	None
CCGC_0426	08/Aug/2014	Magnesium	32	=	D
CCGC_0426	08/Aug/2014	Nitrate + Nitrite as N	7.5	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0426	08/Aug/2014	Nitrate as NO3-N	7.2	=	None
CCGC_0426	08/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0426	08/Aug/2014	Potassium	1.2	=	D
CCGC_0426	08/Aug/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0426	08/Aug/2014	Sodium	20	=	D
CCGC_0426	08/Aug/2014	SpecificConductivity	610	=	None
CCGC_0426	08/Aug/2014	Sulfate	36	=	None
CCGC_0426	08/Aug/2014	Total Dissolved Solids	362	=	None
CCGC_0427	08/Aug/2014	Alkalinity as CaCO3	129	=	None
CCGC_0427	08/Aug/2014	Bicarbonate	157	=	None
CCGC_0427	08/Aug/2014	Calcium	62	=	D
CCGC_0427	08/Aug/2014	Chloride	55	=	None
CCGC_0427	08/Aug/2014	Hardness as CaCO3	357	=	None
CCGC_0427	08/Aug/2014	Magnesium	49	=	D
CCGC_0427	08/Aug/2014	Nitrate + Nitrite as N	27.9	=	None
CCGC_0427	08/Aug/2014	Nitrate as NO3-N	27.7	=	None
CCGC_0427	08/Aug/2014	Nitrite as NO2-N	0.2	=	None
CCGC_0427	08/Aug/2014	Potassium		ND	D
CCGC_0427	08/Aug/2014	QC Ratio TDS/SEC	0.60	=	None
CCGC_0427	08/Aug/2014	Sodium	18	=	D
CCGC_0427	08/Aug/2014	SpecificConductivity	795	=	None
CCGC_0427	08/Aug/2014	Sulfate	71	=	None
CCGC_0427	08/Aug/2014	Total Dissolved Solids	478	=	None
CCGC_0429	07/Aug/2014	Alkalinity as CaCO3	205	=	None
CCGC_0429	07/Aug/2014	Bicarbonate	250	=	None
CCGC_0429	07/Aug/2014	Calcium	56	=	D
CCGC_0429	07/Aug/2014	Chloride	19	=	None
CCGC_0429	07/Aug/2014	Hardness as CaCO3	251	=	None
CCGC_0429	07/Aug/2014	Magnesium	27	=	D
CCGC_0429	07/Aug/2014	Nitrate + Nitrite as N	2.4	=	None
CCGC_0429	07/Aug/2014	Nitrate as NO3-N	2.0	=	None
CCGC_0429	07/Aug/2014	Nitrite as NO2-N	0.3	=	None
CCGC_0429	07/Aug/2014	Potassium	1.3	=	D
CCGC_0429	07/Aug/2014	QC Ratio TDS/SEC	0.66	=	None
CCGC_0429	07/Aug/2014	Sodium	17	=	D
CCGC_0429	07/Aug/2014	SpecificConductivity	534	=	None
CCGC_0429	07/Aug/2014	Sulfate	40	=	None
CCGC_0429	07/Aug/2014	Total Dissolved Solids	350	=	None
CCGC_0454	25/Aug/2014	Alkalinity as CaCO3	335	=	None
CCGC_0454	25/Aug/2014	Bicarbonate	409	=	None
CCGC_0454	25/Aug/2014	Calcium	65	=	D
CCGC_0454	25/Aug/2014	Chloride	201	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0454	25/Aug/2014	Hardness as CaCO3	426	=	None
CCGC_0454	25/Aug/2014	Magnesium	64	=	D
CCGC_0454	25/Aug/2014	Nitrate + Nitrite as N	5.8	=	None
CCGC_0454	25/Aug/2014	Nitrate as NO3-N	5.5	=	None
CCGC_0454	25/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0454	25/Aug/2014	Potassium	2.3	=	D
CCGC_0454	25/Aug/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0454	25/Aug/2014	Sodium	142	=	D
CCGC_0454	25/Aug/2014	SpecificConductivity	1355	=	None
CCGC_0454	25/Aug/2014	Sulfate	64	=	None
CCGC_0454	25/Aug/2014	Total Dissolved Solids	828	=	None
CCGC_0455	25/Aug/2014	Alkalinity as CaCO3	384	=	None
CCGC_0455	25/Aug/2014	Bicarbonate	468	=	None
CCGC_0455	25/Aug/2014	Calcium	140	=	D
CCGC_0455	25/Aug/2014	Chloride	191	=	None
CCGC_0455	25/Aug/2014	Hardness as CaCO3	704	=	None
CCGC_0455	25/Aug/2014	Magnesium	86	=	D
CCGC_0455	25/Aug/2014	Nitrate + Nitrite as N	21.5	=	None
CCGC_0455	25/Aug/2014	Nitrate as NO3-N	21.1	=	None
CCGC_0455	25/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0455	25/Aug/2014	Potassium	2.5	=	D
CCGC_0455	25/Aug/2014	QC Ratio TDS/SEC	0.60	=	None
CCGC_0455	25/Aug/2014	Sodium	92	=	D
CCGC_0455	25/Aug/2014	SpecificConductivity	1612	=	None
CCGC_0455	25/Aug/2014	Sulfate	122	=	None
CCGC_0455	25/Aug/2014	Total Dissolved Solids	971	=	None
CCGC_0456	25/Aug/2014	Alkalinity as CaCO3	392	=	None
CCGC_0456	25/Aug/2014	Bicarbonate	478	=	None
CCGC_0456	25/Aug/2014	Calcium	91	=	D
CCGC_0456	25/Aug/2014	Chloride	78	=	None
CCGC_0456	25/Aug/2014	Hardness as CaCO3	520	=	None
CCGC_0456	25/Aug/2014	Magnesium	71	=	D
CCGC_0456	25/Aug/2014	Nitrate + Nitrite as N	0.7	=	None
CCGC_0456	25/Aug/2014	Nitrate as NO3-N	0.2	=	None
CCGC_0456	25/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0456	25/Aug/2014	Potassium	4.4	=	D
CCGC_0456	25/Aug/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0456	25/Aug/2014	Sodium	138	=	D
CCGC_0456	25/Aug/2014	SpecificConductivity	1339	=	None
CCGC_0456	25/Aug/2014	Sulfate	236	=	None
CCGC_0456	25/Aug/2014	Total Dissolved Solids	817	=	None
CCGC_0457	25/Aug/2014	Alkalinity as CaCO3	388	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0457	25/Aug/2014	Bicarbonate	473	=	None
CCGC_0457	25/Aug/2014	Calcium	109	=	D
CCGC_0457	25/Aug/2014	Chloride	239	=	None
CCGC_0457	25/Aug/2014	Hardness as CaCO3	672	=	None
CCGC_0457	25/Aug/2014	Magnesium	97	=	D
CCGC_0457	25/Aug/2014	Nitrate + Nitrite as N	0.8	=	None
CCGC_0457	25/Aug/2014	Nitrate as NO3-N	0.4	=	None
CCGC_0457	25/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0457	25/Aug/2014	Potassium	10.3	=	D
CCGC_0457	25/Aug/2014	QC Ratio TDS/SEC	0.63	=	None
CCGC_0457	25/Aug/2014	Sodium	207	=	D
CCGC_0457	25/Aug/2014	SpecificConductivity	1950	=	None
CCGC_0457	25/Aug/2014	Sulfate	318	=	None
CCGC_0457	25/Aug/2014	Total Dissolved Solids	1237	=	None
CCGC_0460	25/Aug/2014	Alkalinity as CaCO3	441	=	None
CCGC_0460	25/Aug/2014	Bicarbonate	538	=	None
CCGC_0460	25/Aug/2014	Calcium	174	=	D
CCGC_0460	25/Aug/2014	Chloride	321	=	None
CCGC_0460	25/Aug/2014	Hardness as CaCO3	1266	=	None
CCGC_0460	25/Aug/2014	Magnesium	202	=	D
CCGC_0460	25/Aug/2014	Nitrate + Nitrite as N	44.2	=	None
CCGC_0460	25/Aug/2014	Nitrate as NO3-N	43.8	=	None
CCGC_0460	25/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0460	25/Aug/2014	Potassium	2.0	=	D
CCGC_0460	25/Aug/2014	QC Ratio TDS/SEC	0.65	=	None
CCGC_0460	25/Aug/2014	Sodium	160	=	D
CCGC_0460	25/Aug/2014	SpecificConductivity	2569	=	None
CCGC_0460	25/Aug/2014	Sulfate	368	=	None
CCGC_0460	25/Aug/2014	Total Dissolved Solids	1680	=	None
CCGC_0461	25/Aug/2014	Alkalinity as CaCO3	326	=	None
CCGC_0461	25/Aug/2014	Bicarbonate	398	=	None
CCGC_0461	25/Aug/2014	Calcium	91	=	D
CCGC_0461	25/Aug/2014	Chloride	130	=	None
CCGC_0461	25/Aug/2014	Hardness as CaCO3	474	=	None
CCGC_0461	25/Aug/2014	Magnesium	60	=	D
CCGC_0461	25/Aug/2014	Nitrate + Nitrite as N	6.2	=	None
CCGC_0461	25/Aug/2014	Nitrate as NO3-N	5.8	=	None
CCGC_0461	25/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0461	25/Aug/2014	Potassium	3.0	=	D
CCGC_0461	25/Aug/2014	QC Ratio TDS/SEC	0.58	=	None
CCGC_0461	25/Aug/2014	Sodium	64	=	D
CCGC_0461	25/Aug/2014	SpecificConductivity	1116	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0461	25/Aug/2014	Sulfate	55	=	None
CCGC_0461	25/Aug/2014	Total Dissolved Solids	648	=	None
CCGC_0462	26/Aug/2014	Alkalinity as CaCO3	580	=	None
CCGC_0462	26/Aug/2014	Bicarbonate	708	=	None
CCGC_0462	26/Aug/2014	Calcium	89	=	D
CCGC_0462	26/Aug/2014	Chloride	242	=	None
CCGC_0462	26/Aug/2014	Hardness as CaCO3	795	=	None
CCGC_0462	26/Aug/2014	Magnesium	139	=	D
CCGC_0462	26/Aug/2014	Nitrate + Nitrite as N	3.9	=	None
CCGC_0462	26/Aug/2014	Nitrate as NO3-N	3.4	=	None
CCGC_0462	26/Aug/2014	Nitrite as NO2-N	0.6	=	None
CCGC_0462	26/Aug/2014	Potassium	3.8	=	D
CCGC_0462	26/Aug/2014	QC Ratio TDS/SEC	0.61	=	None
CCGC_0462	26/Aug/2014	Sodium	264	=	D
CCGC_0462	26/Aug/2014	SpecificConductivity	2217	=	None
CCGC_0462	26/Aug/2014	Sulfate	299	=	None
CCGC_0462	26/Aug/2014	Total Dissolved Solids	1343	=	None
CCGC_0463	26/Aug/2014	Alkalinity as CaCO3	465	=	None
CCGC_0463	26/Aug/2014	Bicarbonate	567	=	None
CCGC_0463	26/Aug/2014	Calcium	144	=	D
CCGC_0463	26/Aug/2014	Chloride	217	=	None
CCGC_0463	26/Aug/2014	Hardness as CaCO3	759	=	None
CCGC_0463	26/Aug/2014	Magnesium	97	=	D
CCGC_0463	26/Aug/2014	Nitrate + Nitrite as N	10.1	=	None
CCGC_0463	26/Aug/2014	Nitrate as NO3-N	9.6	=	None
CCGC_0463	26/Aug/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0463	26/Aug/2014	Potassium	3.0	=	D
CCGC_0463	26/Aug/2014	QC Ratio TDS/SEC	0.55	=	None
CCGC_0463	26/Aug/2014	Sodium	91	=	D
CCGC_0463	26/Aug/2014	SpecificConductivity	1634	=	None
CCGC_0463	26/Aug/2014	Sulfate	67	=	None
CCGC_0463	26/Aug/2014	Total Dissolved Solids	894	=	None
CCGC_0464	26/Aug/2014	Alkalinity as CaCO3	375	=	None
CCGC_0464	26/Aug/2014	Bicarbonate	458	=	None
CCGC_0464	26/Aug/2014	Calcium	112	=	D
CCGC_0464	26/Aug/2014	Chloride	160	=	None
CCGC_0464	26/Aug/2014	Hardness as CaCO3	597	=	None
CCGC_0464	26/Aug/2014	Magnesium	77	=	D
CCGC_0464	26/Aug/2014	Nitrate + Nitrite as N	8.1	=	None
CCGC_0464	26/Aug/2014	Nitrate as NO3-N	7.6	=	None
CCGC_0464	26/Aug/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0464	26/Aug/2014	Potassium	2.0	=	D

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0464	26/Aug/2014	QC Ratio TDS/SEC	0.53	=	None
CCGC_0464	26/Aug/2014	Sodium	71	=	D
CCGC_0464	26/Aug/2014	SpecificConductivity	1331	=	None
CCGC_0464	26/Aug/2014	Sulfate	75	=	None
CCGC_0464	26/Aug/2014	Total Dissolved Solids	706	=	None
CCGC_0465	26/Aug/2014	Alkalinity as CaCO3	321	=	None
CCGC_0465	26/Aug/2014	Bicarbonate	392	=	None
CCGC_0465	26/Aug/2014	Calcium	42	=	D
CCGC_0465	26/Aug/2014	Chloride	173	=	None
CCGC_0465	26/Aug/2014	Hardness as CaCO3	286	=	None
CCGC_0465	26/Aug/2014	Magnesium	44	=	D
CCGC_0465	26/Aug/2014	Nitrate + Nitrite as N	0.6	=	None
CCGC_0465	26/Aug/2014	Nitrate as NO3-N	0.2	=	None
CCGC_0465	26/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0465	26/Aug/2014	Potassium	2.8	=	D
CCGC_0465	26/Aug/2014	QC Ratio TDS/SEC	0.56	=	None
CCGC_0465	26/Aug/2014	Sodium	169	=	D
CCGC_0465	26/Aug/2014	SpecificConductivity	1175	=	None
CCGC_0465	26/Aug/2014	Sulfate	28	=	None
CCGC_0465	26/Aug/2014	Total Dissolved Solids	663	=	None
CCGC_0466	26/Aug/2014	Alkalinity as CaCO3	484	=	None
CCGC_0466	26/Aug/2014	Bicarbonate	590	=	None
CCGC_0466	26/Aug/2014	Calcium	92	=	D
CCGC_0466	26/Aug/2014	Chloride	170	=	None
CCGC_0466	26/Aug/2014	Hardness as CaCO3	753	=	None
CCGC_0466	26/Aug/2014	Magnesium	127	=	D
CCGC_0466	26/Aug/2014	Nitrate + Nitrite as N	7.3	=	None
CCGC_0466	26/Aug/2014	Nitrate as NO3-N	6.8	=	None
CCGC_0466	26/Aug/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0466	26/Aug/2014	Potassium	3.4	=	D
CCGC_0466	26/Aug/2014	QC Ratio TDS/SEC	0.65	=	None
CCGC_0466	26/Aug/2014	Sodium	207	=	D
CCGC_0466	26/Aug/2014	SpecificConductivity	1914	=	None
CCGC_0466	26/Aug/2014	Sulfate	322	=	None
CCGC_0466	26/Aug/2014	Total Dissolved Solids	1238	=	None
CCGC_0467	26/Aug/2014	Alkalinity as CaCO3	384	=	None
CCGC_0467	26/Aug/2014	Bicarbonate	468	=	None
CCGC_0467	26/Aug/2014	Calcium	167	=	D
CCGC_0467	26/Aug/2014	Chloride	213	=	None
CCGC_0467	26/Aug/2014	Hardness as CaCO3	845	=	None
CCGC_0467	26/Aug/2014	Magnesium	104	=	D
CCGC_0467	26/Aug/2014	Nitrate + Nitrite as N	29.3	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
CCGC_0467	26/Aug/2014	Nitrate as NO3-N	28.6	=	None
CCGC_0467	26/Aug/2014	Nitrite as NO2-N	0.7	=	None
CCGC_0467	26/Aug/2014	Potassium	2.6	=	D
CCGC_0467	26/Aug/2014	QC Ratio TDS/SEC	0.60	=	None
CCGC_0467	26/Aug/2014	Sodium	84	=	D
CCGC_0467	26/Aug/2014	SpecificConductivity	1756	=	None
CCGC_0467	26/Aug/2014	Sulfate	142	=	None
CCGC_0467	26/Aug/2014	Total Dissolved Solids	1057	=	None
CCGC_0468	26/Aug/2014	Alkalinity as CaCO3	395	=	None
CCGC_0468	26/Aug/2014	Bicarbonate	482	=	None
CCGC_0468	26/Aug/2014	Calcium	140	=	D
CCGC_0468	26/Aug/2014	Chloride	214	=	None
CCGC_0468	26/Aug/2014	Hardness as CaCO3	733	=	None
CCGC_0468	26/Aug/2014	Magnesium	93	=	D
CCGC_0468	26/Aug/2014	Nitrate + Nitrite as N	17.4	=	None
CCGC_0468	26/Aug/2014	Nitrate as NO3-N	16.9	=	None
CCGC_0468	26/Aug/2014	Nitrite as NO2-N	0.5	=	None
CCGC_0468	26/Aug/2014	Potassium	2.2	=	D
CCGC_0468	26/Aug/2014	QC Ratio TDS/SEC	0.60	=	None
CCGC_0468	26/Aug/2014	Sodium	80	=	D
CCGC_0468	26/Aug/2014	SpecificConductivity	1620	=	None
CCGC_0468	26/Aug/2014	Sulfate	104	=	None
CCGC_0468	26/Aug/2014	Total Dissolved Solids	977	=	None
CCGC_0515	26/Aug/2014	Alkalinity as CaCO3	311	=	None
CCGC_0515	26/Aug/2014	Bicarbonate	379	=	None
CCGC_0515	26/Aug/2014	Calcium	70	=	D
CCGC_0515	26/Aug/2014	Chloride	128	=	None
CCGC_0515	26/Aug/2014	Hardness as CaCO3	265	=	None
CCGC_0515	26/Aug/2014	Magnesium	22	=	D
CCGC_0515	26/Aug/2014	Nitrate + Nitrite as N	0.8	=	None
CCGC_0515	26/Aug/2014	Nitrate as NO3-N	0.4	=	None
CCGC_0515	26/Aug/2014	Nitrite as NO2-N	0.4	=	None
CCGC_0515	26/Aug/2014	Potassium	2.3	=	D
CCGC_0515	26/Aug/2014	QC Ratio TDS/SEC	0.59	=	None
CCGC_0515	26/Aug/2014	Sodium	170	=	D
CCGC_0515	26/Aug/2014	SpecificConductivity	1139	=	None
CCGC_0515	26/Aug/2014	Sulfate	96	=	None
CCGC_0515	26/Aug/2014	Total Dissolved Solids	677	=	None
Claire_D/I	22/Jan/2014	Alkalinity as CaCO3	240	=	None
Claire_D/I	22/Jan/2014	Bicarbonate	293	=	None
Claire_D/I	22/Jan/2014	Calcium	44	=	None
Claire_D/I	22/Jan/2014	Chloride	26	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
Claire_D/I	22/Jan/2014	Hardness as CaCO3	184	=	None
Claire_D/I	22/Jan/2014	Magnesium	18	=	None
Claire_D/I	22/Jan/2014	Nitrate + Nitrite as N	1.4	=	None
Claire_D/I	22/Jan/2014	Nitrate as NO3-N	0.9	=	None
Claire_D/I	22/Jan/2014	Nitrite as NO2-N	0.5	=	None
Claire_D/I	22/Jan/2014	Potassium	1.7	=	None
Claire_D/I	22/Jan/2014	QC Ratio TDS/SEC	0.58	=	None
Claire_D/I	22/Jan/2014	Sodium	52	=	None
Claire_D/I	22/Jan/2014	SpecificConductivity	611	=	None
Claire_D/I	22/Jan/2014	Sulfate	31	=	None
Claire_D/I	22/Jan/2014	Total Dissolved Solids	354	=	None
Claire_D/I	14/Jul/2014	Alkalinity as CaCO3	239	=	None
Claire_D/I	14/Jul/2014	Bicarbonate	292	=	None
Claire_D/I	14/Jul/2014	Calcium	45	=	D
Claire_D/I	14/Jul/2014	Chloride	26	=	None
Claire_D/I	14/Jul/2014	Hardness as CaCO3	191	=	None
Claire_D/I	14/Jul/2014	Magnesium	19	=	D
Claire_D/I	14/Jul/2014	Nitrate + Nitrite as N	0.7	=	None
Claire_D/I	14/Jul/2014	Nitrate as NO3-N	0.7	=	None
Claire_D/I	14/Jul/2014	Nitrite as NO2-N		ND	None
Claire_D/I	14/Jul/2014	Potassium	1.7	=	D
Claire_D/I	14/Jul/2014	QC Ratio TDS/SEC	0.58	=	None
Claire_D/I	14/Jul/2014	Sodium	55	=	D
Claire_D/I	14/Jul/2014	SpecificConductivity	596	=	None
Claire_D/I	14/Jul/2014	Sulfate	31	=	None
Claire_D/I	14/Jul/2014	Total Dissolved Solids	343	=	None
Ranch2_Dom	22/Jan/2014	Alkalinity as CaCO3	106	=	None
Ranch2_Dom	22/Jan/2014	Bicarbonate	129	=	None
Ranch2_Dom	22/Jan/2014	Calcium	43	=	None
Ranch2_Dom	22/Jan/2014	Chloride	45	=	None
Ranch2_Dom	22/Jan/2014	Hardness as CaCO3	260	=	None
Ranch2_Dom	22/Jan/2014	Magnesium	37	=	None
Ranch2_Dom	22/Jan/2014	Nitrate + Nitrite as N	28.6	=	None
Ranch2_Dom	22/Jan/2014	Nitrate as NO3-N	28.2	=	None
Ranch2_Dom	22/Jan/2014	Nitrite as NO2-N	0.3	=	None
Ranch2_Dom	22/Jan/2014	Potassium	1	=	None
Ranch2_Dom	22/Jan/2014	QC Ratio TDS/SEC	0.58	=	None
Ranch2_Dom	22/Jan/2014	Sodium	26	=	None
Ranch2_Dom	22/Jan/2014	SpecificConductivity	687	=	None
Ranch2_Dom	22/Jan/2014	Sulfate	44	=	None
Ranch2_Dom	22/Jan/2014	Total Dissolved Solids	397	=	None
Ranch2_Dom	14/Jul/2014	Alkalinity as CaCO3	114	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
Ranch2_Dom	14/Jul/2014	Bicarbonate	139	=	None
Ranch2_Dom	14/Jul/2014	Calcium	44	=	D
Ranch2_Dom	14/Jul/2014	Chloride	46	=	None
Ranch2_Dom	14/Jul/2014	Hardness as CaCO3	270	=	None
Ranch2_Dom	14/Jul/2014	Magnesium	39	=	D
Ranch2_Dom	14/Jul/2014	Nitrate + Nitrite as N	27.3	=	None
Ranch2_Dom	14/Jul/2014	Nitrate as NO3-N	27.3	=	None
Ranch2_Dom	14/Jul/2014	Nitrite as NO2-N		ND	None
Ranch2_Dom	14/Jul/2014	Potassium		ND	D
Ranch2_Dom	14/Jul/2014	QC Ratio TDS/SEC	0.61	=	None
Ranch2_Dom	14/Jul/2014	Sodium	27	=	D
Ranch2_Dom	14/Jul/2014	SpecificConductivity	675	=	None
Ranch2_Dom	14/Jul/2014	Sulfate	45	=	None
Ranch2_Dom	14/Jul/2014	Total Dissolved Solids	414	=	None
Ranch2_Irr	22/Jan/2014	Alkalinity as CaCO3	150	=	None
Ranch2_Irr	22/Jan/2014	Bicarbonate	183	=	None
Ranch2_Irr	22/Jan/2014	Calcium	46	=	None
Ranch2_Irr	22/Jan/2014	Chloride	14	=	None
Ranch2_Irr	22/Jan/2014	Hardness as CaCO3	214	=	None
Ranch2_Irr	22/Jan/2014	Magnesium	24	=	None
Ranch2_Irr	22/Jan/2014	Nitrate + Nitrite as N	14.8	=	None
Ranch2_Irr	22/Jan/2014	Nitrate as NO3-N	14.3	=	None

FieldPointName	SampleDate	AnalyteName	Result	ResQualCode	QACode
Ranch2_Irr	22/Jan/2014	Nitrite as NO2-N	0.5	=	None
Ranch2_Irr	22/Jan/2014	Potassium	0.9	=	None
Ranch2_Irr	22/Jan/2014	QC Ratio TDS/SEC	0.61	=	None
Ranch2_Irr	22/Jan/2014	Sodium	16	=	None
Ranch2_Irr	22/Jan/2014	SpecificConductivity	521	=	None
Ranch2_Irr	22/Jan/2014	Sulfate	30	=	None
Ranch2_Irr	22/Jan/2014	Total Dissolved Solids	320	=	None
Ranch2_Irr	14/Jul/2014	Alkalinity as CaCO3	149	=	None
Ranch2_Irr	14/Jul/2014	Bicarbonate	182	=	None
Ranch2_Irr	14/Jul/2014	Calcium	49	=	D
Ranch2_Irr	14/Jul/2014	Chloride	16	=	None
Ranch2_Irr	14/Jul/2014	Hardness as CaCO3	234	=	None
Ranch2_Irr	14/Jul/2014	Magnesium	27	=	D
Ranch2_Irr	14/Jul/2014	Nitrate + Nitrite as N	17.5	=	None
Ranch2_Irr	14/Jul/2014	Nitrate as NO3-N	17.5	=	None
Ranch2_Irr	14/Jul/2014	Nitrite as NO2-N		ND	None
Ranch2_Irr	14/Jul/2014	Potassium		ND	D
Ranch2_Irr	14/Jul/2014	QC Ratio TDS/SEC	0.60	=	None
Ranch2_Irr	14/Jul/2014	Sodium	17	=	D
Ranch2_Irr	14/Jul/2014	SpecificConductivity	539	=	None
Ranch2_Irr	14/Jul/2014	Sulfate	31	=	None
Ranch2_Irr	14/Jul/2014	Total Dissolved Solids	323	=	None

APPENDIX E

EXCEEDANCE NOTIFICATION FOLLOW-UP REPORT

The exceedance notification information is provided in the complete Northern Counties Groundwater Characterization Report.

APPENDIX F

RESPONSE TO SUBMITTAL OF ANCILLARY SAMPLING DATA

PO Box 828, Salinas, CA 93902
www.centralcoastgc.org

Phone: 831-585-1435

Fax: 831-422-0868

May 29, 2015

MEMORANDUM

TO: Angela Schroeter

FROM: Parry Klassen

SUBJECT: Response to Submittal of Ancillary Sampling Data

DATE: May 29, 2015

Pursuant your request for additional information regarding ancillary data (e.g., stable isotopes, pharmaceuticals, noble gases) outlined in the CCGC Work Plan, the CCGC hereby submits this response:

1. The CCGC is not submitting the ancillary sampling data outlined in the CCGC Work Plan for several substantive reasons relating to scientific defensibility. The CCGC has consulted with its hydrogeologist (Luhdorff and Scalmanini Consulting Engineers (LSCE)) with respect to what would be the most technically and scientifically sound approach for gathering and interpreting ancillary data. According to LSCE, to adequately interpret ancillary data, other additional data and information needs to be obtained. Specifically, additional data and analyses need to include:

- Well depths and well screen intervals;
- Mapping of potential nitrate sources;
- Water quality sampling (including ancillary constituents) in the unsaturated and saturated zones directly beneath various types of nitrate sources in each groundwater basin;
- Evaluation of groundwater flow paths including vertical flow and horizontal flow components; and,
- Development of a comprehensive hydrogeologic conceptual model (including, for example, evaluation of potential mixing of recharge waters from various sources such as streamflow percolation, precipitation recharge, irrigation recharge that may be derived from older water, underflow from adjacent groundwater basins or subbasins, etc.).

None of this additional work was undertaken, except as explained below. For a majority of wells sampled, members often attempted to estimate well depths, but in many cases reliable well depth data was not available. Further, the CCGC made an initial effort to obtain well logs, and use the well logs of member wells to determine well depth and well screen intervals. For well logs that were obtained, the effort to connect the well logs to a member well was both time-consuming and often unsuccessful.

2. The CCGC program emphasis was on collecting nitrate data from all domestic wells for its members as required in the approved Work Plan. As directed by Central Coast Regional Water Quality Control Board (CCRWQCB) staff in various communications, including a supplemental sheet prepared by CCRWQCB staff giving direction to the CCGC on its Monitoring and Reporting Program (Supplemental Sheet for Regular Meeting of May 22-23, 2014, page 3, final paragraph), the CCGC focused its efforts on the required elements of the Work Plan and did not spend further resources on obtaining additional data and analyses necessary for proper interpretation of other data not specifically required in that Work Plan.

In completing required elements of the approved Work Plan, the CCGC expended all its available resources obtaining the nitrate monitoring data, notifying its members of nitrate exceedances, conducting follow-up on member responses, and preparing the required technical reports.

3. Finally, inclusion of the raw ancillary data without the additional scientific information or analysis in this report or as a later addendum to the characterization report could result in misinterpretation and/or derivation of unsupported conclusions. Such a result is contrary to one of the CCGC's most important principles, which is that all data and information collected and/or prepared by the CCGC must be scientifically defensible.

The CCGC remains committed to providing the CCRWQCB with scientifically defensible information, and according to our expert consultants, the raw ancillary data without the additional data and analyses would not reach this threshold. Accordingly, the CCGC has determined that it is not appropriate, scientifically or technically, to report raw ancillary data with the Technical Memorandum.

APPENDIX E

DATA

PRECISION, ACCURACY, AND COMPLETENESS

DATA PRECISION, ACCURACY AND COMPLETENESS

All results from wells monitored by the CCGC in the Northern Counties are tabulated in Appendix D of each of the Technical Memos. The data are stored in a Microsoft Access database and have been loaded to GeoTracker. An assessment of precision, accuracy, and completeness has been performed on well monitoring data collected between October 2013 and August 2014 and all data are considered useable. In a few instances, some data quality objectives were not met, but this does not affect the usability of the environmental data.

COMPLETENESS

Field and Transport Completeness

The CCGC monitored 522 wells in the Northern Counties between October 2013 and August 2014. Table 1 includes the specific analyte, the expected number of environmental samples scheduled to be collected, the number of total samples collected, including environmental and field quality control samples, breakdown of the number and percentages of samples that were field blanks, field duplicates, and an overall assessment of completeness (number of expected samples to be collected versus number of samples collected).

There was 100% completeness for environmental samples collected for field analysis and water chemistry from the 522 wells where water was collected from. Some wells within the Northern Counties were monitored more than once based on individual monitoring requirements. Overall, field blanks and field duplicates comprised more than 12% of samples collected for each analyte (10% field QC requirement in QAPP).

Field parameter measurements, including DO, discharge, pH, SC, temperature, ORP and volume were recorded at each site for all sampling events (**Table 1**).

Analytical/Batch Completeness

All samples scheduled to be collected were collected, transported, preserved and analyzed, resulting in 100% completeness for environmental samples analyzed for water chemistry (**Table 2**). All chemistry batches were reviewed for Quality Assurance/Control (QA/QC) completeness. A complete batch must have a minimum of one lab blank, lab duplicate, LCS and MS. Overall, over 90% of the environmental samples collected met Data Quality Objectives (DQOs). One hundred percent of batches were analyzed with the appropriate QC samples. All data are considered acceptable or acceptable with minor deviations.

HOLD TIME COMPLIANCE

Hold times for all chemistry analyses were met in over 99.8% of the samples. There were four Nitrate as NO3-N samples and 16 TDS samples (one batch) that were analyzed outside of hold time (**Table 3**). The TDS samples were analyzed 3 days outside hold time. Two of the nitrate samples were analyzed outside of hold time due to dilutions and remained above the Maximum Contaminant Level (MCL). The remaining two nitrate samples analyzed outside of hold time were an environmental sample and an associated field duplicate that were reanalyzed. The reanalysis outside of hold time confirmed high nitrate concentrations above the MCL for both samples.

PRECISION AND ACCURACY

A review of the number of samples analyzed and the percentage per analyte that meets acceptability criteria are listed in the **Tables 4 through 10**. A brief overview is provided to assess overall precision and accuracy per analyte; if less than 90% of lab QA samples met acceptability criteria, then further explanation of why data are acceptable is provided. Batches are approved by evaluating all measures of precision and accuracy such that although a single quality control sample may be outside of acceptability criteria, the entire batch may be accepted due to the other quality control samples within that batch meeting acceptability criteria. Overall, precision and accuracy criteria were met for more than 90% of the samples for all criteria; all data are considered usable and have been loaded to GeoTracker.

The only quality control samples (by analyte) that did not have more than 90% of the sample meet QC requirements were field blanks. Field blanks analyzed for calcium and Nitrite as NO2-N had less than 90% of the samples with detections less than the Reporting Limit (RL). Of the four calcium field blank samples detected above the RL of 1 mg/L, one was equal to the RL and three had calcium concentrations of 2 mg/L. All eight nitrite samples had concentrations equal to the RL.

CORRECTIVE ACTIONS

Corrective actions for QA/QC results that did not meet acceptance criteria were performed by MBAS as outlined in the Quality Assurance Project Plan (QAPP).

Table 1. Environmental field measurement sample counts and completeness percentages.
Samples collected from October 2013 through August 2014, sorted by analyte.

Analyte	method	Wells Visited (#)	ENV. SAMPLES COLLECTED (#)	Field and Transport Completeness (%)	Environmental Samples Analyzed (#)	Env. Sample Completeness (%)
Oxidation-Reduction Potential	Field Measurement	522	522	100.0%	522	100.0%
Oxygen, Dissolved	Field Measurement	522	522	100.0%	522	100.0%
pH	Field Measurement	522	522	100.0%	522	100.0%
Specific Conductivity	Field Measurement	522	522	100.0%	522	100.0%
Temperature	Field Measurement	522	522	100.0%	522	100.0%
Volume	Field Measurement	522	522	100.0%	522	100.0%
TOTAL		**2610**	**2610**	**100.0%**	**2610**	**100.0%**

Table 2. Environmental sample, field quality, and field parameter counts and percentages.
Samples collected from October 2013 through August 2014, sorted by analyte.

Analyte	method	Wells Visited (#)	ENV. SAMPLES COLLECTED (#)	Field and Transport Completeness (%)	Environmental Samples Analyzed (#)	Env. Sample Completeness (%)	Field Blanks (#)	Field Duplicates (#)	Field Blank (%)	Field Duplicate (%)	Total Field QC (%)	Field QC Required Frequency (%)
Alkalinity as CaCO3	SM2320 B	524	522	99.6%	522	100.0%	32	32	6.1 %	6.1%	12.3 %	10.0%
Bicarbonate	SM2320 B	524	522	99.6%	522	100.0%	32	32	6.1 %	6.1%	12.3 %	10.0%
Calcium	EPA200.7	524	522	99.6%	522	100.0%	32	32	6.1 %	6.1%	12.3 %	10.0%
Chloride	EPA300.0	524	522	99.6%	522	100.0%	32	32	6.1 %	6.1%	12.3 %	10.0%
Hardness as CaCO3	SM2340 B	524	522	99.6%	522	100.0%	32	32	6.1 %	6.1%	12.3 %	10.0%
Magnesium	EPA200.7	524	522	99.6%	522	100.0%	32	32	6.1 %	6.1%	12.3 %	10.0%
Nitrate + Nitrite as N	EPA300.0	524	522	99.6%	522	100.0%	32	32	6.1 %	6.1%	12.3 %	10.0%
Nitrate as NO3	EPA300.0	524	522	99.6%	522	100.0%	32	32	6.1 %	6.1%	12.3 %	10.0%
Nitrate as NO3-N	EPA300.0	524	522	99.6%	522	100.0%	32	32	6.1 %	6.1%	12.3 %	10.0%
Nitrite as NO2-N	EPA300.0	524	522	99.6%	522	100.0%	32	32	6.1 %	6.1%	12.3 %	10.0%
Potassium	EPA200.7	524	522	99.6%	522	100.0%	32	32	6.1 %	6.1%	12.3 %	10.0%
QC Ratio TDS/SEC	Calculation	524	522	99.6%	522	100.0%	32	32	6.1 %	6.1%	12.3 %	10.0%
Sodium	EPA200.	524	522	99.6%	522	100.0%	32	32	6.1	6.1%	12.3	10.0%

Analyte	**method**	**Wells Visited (#)**	**ENV. SAMPLES COLLECTED (#)**	**Field and Transport Completeness (%)**	**Environmental Samples Analyzed (#)**	**Env. Sample Completeness (%)**	**Field Blanks (#)**	**Field Duplicates (#)**	**Field Blank (%)**	**Field Duplicate (%)**	**Total Field QC (%)**	**Field QC Required Frequency (%)**
	7								%		%	
Specific Conductivity	SM2510B	524	522	99.6%	522	100.0%	32	32	6.1%	6.1%	12.3%	10.0%
Sulfate	EPA300.0	524	522	99.6%	522	100.0%	32	32	6.1%	6.1%	12.3%	10.0%
Total Dissolved Solids	SM2540C	524	522	99.6%	522	100.0%	32	32	6.1%	6.1%	12.3%	10.0%
TOTAL		**8384**	**8352**	**99.6%**	**8352**	**100.0%**	**512**	**512**	**6.1%**	**6.1%**	**12.3%**	**10.0%**

Table 3. Summary of holding time evaluations for environmental, field blank and field duplicate.
Samples collected from October 2013 through August 2014, sorted by analyte.

Analyte	Method	Data Quality Objective	Number of Samples	Samples Within Control Limits	Percent Samples Acceptable
Alkalinity as CaCO3	SM2320B	14 days	586	586	100.0%
Bicarbonate	SM2320B	NA	NA	NA	NA
Calcium	EPA200.7	6 months	586	586	100.0%
Chloride	EPA300.0	28 days	586	586	100.0%
Hardness as CaCO3	SM2340B	NA	NA	NA	NA
Magnesium	EPA200.7	6 months	586	586	100.0%
Nitrate + Nitrite as N	EPA300.0	48 hours	586	586	100.0%
Nitrate as NO3	EPA300.0	48 hours	586	586	100.0%
Nitrate as NO3-N	EPA300.0	48 hours	586	582	99.3%
Nitrite as NO2-N	EPA300.0	48 hours	586	586	100.0%
Potassium	EPA200.7	6 months	586	586	100.0%
QC Ratio TDS/SEC	Calculation	NA	NA	NA	NA
Sodium	EPA200.7	6 months	586	586	100.0%
Specific Conductivity	SM2510B	NA	NA	NA	NA
Sulfate	EPA300.0	28 days	586	586	100.0%
Total Dissolved Solids	SM2540C	7 days	586	570	97.3%
TOTAL			**9376**	**9356**	**99.8%**

NA- Not applicable

Table 4. Summary of field blank quality control sample evaluations.
Samples collected from October 2013 through August 2014, sorted by analyte.

Analyte	Method	Data Quality Objective	Number of Samples	Samples Within Control Limits	Percent Samples Acceptable
Alkalinity as CaCO3	SM2320B	<2	32	29	90.6%
Bicarbonate	SM2320B	NA	NA	NA	NA
Calcium	EPA200.7	<1	32	28	87.5%
Chloride	EPA300.0	<1	32	32	100.0%
Hardness as CaCO3	SM2340B	NA	NA	NA	NA
Magnesium	EPA200.7	<1	32	32	100.0%
Nitrate + Nitrite as N	EPA300.0	NA	NA	NA	NA
Nitrate as NO3	EPA300.0	<1	32	30	93.8%
Nitrate as NO3-N	EPA300.0	<1	32	30	93.8%
Nitrite as NO2-N	EPA300.0	<0.1	32	24	75.0%
Potassium	EPA200.7	<1	32	29	90.6%
QC Ratio TDS/SEC	Calculation	NA	NA	NA	NA
Sodium	EPA200.7	<1	32	31	96.9%
Specific Conductivity	SM2510B	NA	NA	NA	NA
Sulfate	EPA300.0	<1	32	29	90.6%
Total Dissolved Solids	SM2540C	<10	32	32	100.0%
TOTAL			**384**	**345**	**89.8%**

NA- Not applicable

Table 5. Summary of field duplicate quality control sample evaluations.
Samples collected from October 2013 through August 2014, sorted by analyte.

Analyte	Method	Data Quality Objective	Number of Samples	Samples Within Control Limits	Percent Samples Acceptable
Alkalinity as CaCO3	SM2320B	RPD ≤ 25	32	32	100.0%
Bicarbonate	SM2320B	RPD ≤ 25	32	32	100.0%
Calcium	EPA200.7	RPD ≤ 25	32	32	100.0%
Chloride	EPA300.0	RPD ≤ 25	32	31	96.9%
Hardness as CaCO3	SM2340B	RPD ≤ 25	32	32	100.0%
Magnesium	EPA200.7	RPD ≤ 25	32	32	100.0%
Nitrate + Nitrite as N	EPA300.0	RPD ≤ 25	32	32	100.0%
Nitrate as NO3	EPA300.0	RPD ≤ 25	32	32	100.0%
Nitrate as NO3-N	EPA300.0	RPD ≤ 25	32	32	100.0%
Nitrite as NO2-N	EPA300.0	RPD ≤ 25	32	31	96.9%
Potassium	EPA200.7	RPD ≤ 25	32	32	100.0%
QC Ratio TDS/SEC	Calculation	RPD ≤ 25	32	32	100.0%
Sodium	EPA200.7	RPD ≤ 25	32	32	100.0%
Specific Conductivity	SM2510B	RPD ≤ 25	32	32	100.0%
Sulfate	EPA300.0	RPD ≤ 25	32	32	100.0%
Total Dissolved Solids	SM2540C	RPD ≤ 25	32	32	100.0%
TOTAL			**512**	**510**	**99.6%**

Table 6. Summary of method blank quality control sample evaluations.
Samples analyzed in batches with samples collected from October 2013 through August 2014, sorted by analyte.

Analyte	**Method**	**Data Quality Objective**	**Number of Samples**	**Samples Within Control Limits**	**Percent Samples Acceptable**
Alkalinity as CaCO3	SM2320B	<2	35	35	100.0%
Bicarbonate	SM2320B	NA	NA	NA	NA
Calcium	EPA200.7	<1	12	12	100.0%
Chloride	EPA300.0	<1	33	33	100.0%
Hardness as CaCO3	SM2340B	NA	NA	NA	NA
Magnesium	EPA200.7	<1	12	12	100.0%
Nitrate + Nitrite as N	EPA300.0	NA	NA	NA	NA
Nitrate as NO3	EPA300.0	<1	11	11	100.0%
Nitrate as NO3-N	EPA300.0	<1	31	31	100.0%
Nitrite as NO2-N	EPA300.0	<0.1	30	30	100.0%
Potassium	EPA200.7	<1	12	12	100.0%
QC Ratio TDS/SEC	Calculation	NA	NA	NA	NA
Sodium	EPA200.7	<1	12	12	100.0%
Specific Conductivity	SM2510B	NA	18	18	100.0%
Sulfate	EPA300.0	<1	36	36	100.0%
Total Dissolved Solids	SM2540C	<10	31	31	100.0%
TOTAL			**273**	**273**	**100.0%**

NA- Not applicable

Table 7. Summary of lab control spike quality control sample evaluations.
Laboratory control spikes and laboratory control spike duplicates analyzed in batches with samples collected from October 2013 through August 2014, sorted by analyte.

Analyte	Method	Data Quality Objective	Number of Samples	Samples Within Control Limits	Percent Samples Acceptable
Alkalinity as CaCO3	SM2320B	PR 95-105	60	59	98.3%
Bicarbonate	SM2320B	NA	NA	NA	NA
Calcium	EPA200.7	PR 85-115	104	103	99.0%
Chloride	EPA300.0	PR 90-110	123	121	98.4%
Hardness as CaCO3	SM2340B	NA	NA	NA	NA
Magnesium	EPA200.7	PR 85-115	105	105	100.0%
Nitrate + Nitrite as N	EPA300.0	NA	NA	NA	NA
Nitrate as NO3	EPA300.0	PR 90-110	45	42	93.3%
Nitrate as NO3-N	EPA300.0	PR 90-110	119	118	99.2%
Nitrite as NO2-N	EPA300.0	PR 90-110	115	114	99.1%
Potassium	EPA200.7	PR 85-115	113	113	100.0%
QC Ratio TDS/SEC	Calculation	NA	NA	NA	NA
Sodium	EPA200.7	PR 85-115	108	107	99.1%
Specific Conductivity	SM2510B	NA	NA	NA	NA
Sulfate	EPA300.0	PR 90-110	128	127	99.2%
Total Dissolved Solids	SM2540C	PR 80-120	39	39	100.0%
TOTAL			**1059**	**1048**	**99.0%**

NA- Not applicable

Table 8. Summary of matrix spike quality control sample evaluations.
Matrix spikes and matrix spike duplicates collected from October 2013 through August 2014. Non-project matrix spikes are included for batch Quality Assurance completeness purposes. Evaluations are sorted by analyte.

Analyte	**Method**	**Data Quality Objective**	**Number of Samples**	**Samples Within Control Limits**	**Percent Samples Acceptable**
Alkalinity as CaCO3	SM2320B	NA	NA	NA	NA
Bicarbonate	SM2320B	NA	NA	NA	NA
Calcium	EPA200.7	PR 70-130	228	222	97.4%
Chloride	EPA300.0	PR 80-120	190	186	97.9%
Hardness as CaCO3	SM2340B	NA	NA	NA	NA
Magnesium	EPA200.7	PR 70-130	228	226	99.1%
Nitrate + Nitrite as N	EPA300.0	NA	NA	NA	NA
Nitrate as NO3	EPA300.0	PR 80-120	70	65	92.9%
Nitrate as NO3-N	EPA300.0	PR 80-120	186	174	93.5%
Nitrite as NO2-N	EPA300.0	PR 80-120	184	183	99.5%
Potassium	EPA200.7	PR 70-130	228	226	99.1%
QC Ratio TDS/SEC	Calculation	NA	NA	NA	NA
Sodium	EPA200.7	PR 70-130	228	216	94.7%
Specific Conductivity	SM2510B	NA	NA	NA	NA
Sulfate	EPA300.0	PR 80-120	196	182	92.9%
Total Dissolved Solids	SM2540C	NA	NA	NA	NA
TOTAL			**1738**	**1680**	**96.7%**

NA- Not applicable

Table 9. Summary of matrix spike duplicate quality control sample evaluations.
Matrix spike duplicates collected from October 2013 through August 2014. Non project matrix spikes are included for batch Quality Assurance completeness purposes. Evaluations are sorted by analyte.

Analyte	Method	Data Quality Objective	Number of Pairs	Pairs Within Control Limits	Percent Samples Acceptable
Alkalinity as CaCO3	SM2320B	NA	NA	NA	NA
Bicarbonate	SM2320B	NA	NA	NA	NA
Calcium	EPA200.7	RPD ≤ 25	114	114	100.0%
Chloride	EPA300.0	RPD ≤ 25	95	95	100.0%
Hardness as CaCO3	SM2340B	NA	NA	NA	NA
Magnesium	EPA200.7	RPD ≤ 25	114	114	100.0%
Nitrate as NO3	EPA300.0	RPD ≤ 25	35	35	100.0%
Nitrate as NO3-N	EPA300.0	RPD ≤ 25	93	93	100.0%
Nitrite as NO2-N	EPA300.0	RPD ≤ 25	92	92	100.0%
Potassium	EPA200.7	RPD ≤ 25	114	114	100%
QC Ratio TDS/SEC	Calculation	NA	NA	NA	NA
Sodium	EPA200.7	RPD ≤ 25	114	114	100.0%
Specific Conductivity	SM2510B	NA	NA	NA	NA
Sulfate	EPA300.0	RPD ≤ 25	98	98	100.0%
Total Dissolved Solids	SM2540C	NA	NA	NA	NA
TOTAL			**869**	**869**	**100.0%**

NA- Not applicable

Table 10. Summary of lab duplicate quality control sample evaluations.
Lab duplicates were analyzed in batches with samples collected October 2013 through August 2014. Non project samples are included for batch Quality Assurance completeness purposes. Evaluations sorted by analyte.

Analyte	Method	Data Quality Objective	Number of Samples	Samples Within Control Limits	Percent Samples Acceptable
Alkalinity as CaCO3	SM2320B	RPD ≤ 25	103	103	100.0%
Bicarbonate	SM2320B	NA	NA	NA	NA
Calcium	EPA200.7	NA	NA	NA	NA
Chloride	EPA300.0	NA	NA	NA	NA
Hardness as CaCO3	SM2340B	NA	NA	NA	NA
Magnesium	EPA200.7	NA	NA	NA	NA
Nitrate + Nitrite as N	EPA300.0	NA	NA	NA	NA
Nitrate as NO3	EPA300.0	NA	NA	NA	NA
Nitrate as NO3-N	EPA300.0	NA	NA	NA	NA
Nitrite as NO2-N	EPA300.0	NA	NA	NA	NA
Potassium	EPA200.7	NA	NA	NA	NA
QC Ratio TDS/SEC	Calculation	NA	NA	NA	NA
Sodium	EPA200.7	NA	NA	NA	NA
Specific Conductivity	SM2510B	NA	8	8	100.0%
Sulfate	EPA300.0	NA	NA	NA	NA
Total Dissolved Solids	SM2540C	RPD ≤ 25	63	63	100.0%
TOTAL			**174**	**174**	**100.0%**

NA- Not applicable

APPENDIX F

EXCEEDANCE REPORT

Table 1. CCGC Expanded Exceedance Follow Up Report for domestic wells with nitrate exceedances (nitrate concentrations greater than 45 mg/L) in the Northern Counties sampled through August 2014. "Not Applicable" is applied in place of User Notification Date and Primary Manner of Notification when there are no tenants/users to notify or if the tenants were previously notified with information regarding a previous nitrate exceedance. If the Action Report is "Not Used", the Date Action Initiated is recorded as "Not Applicable".

Table sorted by Sample Date.

Global ID / Field Point Name	Field Point Class	Sample Date	Nitrate as NO3 (mg/L)	CCGC Notification Sent Date	CCGC Notification Date[1]	User Notification Date	Primary Manner of Notification[2]	Action Reported	Date Action Initiated	Date Action Reported
CCGC_0054	PRIW	21/Oct/2013	94	26-Nov-13	11/27/2013	12/17/2013	CCGC Template Letter	Not Used	Not Applicable	4/2/2014
CCGC_0035	PRIW	21/Oct/2013	65	26-Nov-13	11/27/2013	12/3/2014	CCGC Template Letter	RO Unit	None Reported	3/17/2014
CCGC_0018	PRIW	21/Oct/2013	346	26-Nov-13	11/27/2013	11/30/2013	Meeting	Bottled Water	None Reported	7/24/2014
CCGC_0017	PRIW	21/Oct/2013	607	26-Nov-13	11/27/2013	12/2/2013	CCGC Template Letter	Not Used	Not Applicable	3/7/2014
CCGC_0007	PRIW	21/Oct/2013	72	26-Nov-13	11/27/2013	12/6/2013	Custom Letter	RO Unit	None Reported	3/21/2014
CCGC_0010	PRIW	21/Oct/2013	69	26-Nov-13	11/27/2013	12/6/2013	Custom Letter	Bottled Water	None Reported	3/21/2014
CCGC_0043	PRIW	22/Oct/2013	142	26-Nov-13	12/2/2013	12/5/2013	CCGC Template Letter	RO Unit	1/1/2014	3/20/2014
CCGC_0044	PRIW	22/Oct/2013	379	26-Nov-13	12/2/2013	12/5/2013	CCGC Template Letter	RO Unit	1/1/2014	3/20/2014
CCGC_0016	PRIW	22/Oct/2013	73	26-Nov-13	11/27/2013	11/26/2013[5]	CCGC Template Letter	Bottled Water	None Reported	3/18/2014
CCGC_0008	PRIW	22/Oct/2013	278	26-Nov-13	11/27/2013	12/6/2013	Custom Letter	RO Unit	None Reported	3/21/2014
CCGC_0065	PRIW	22/Oct/2013	61	26-Nov-13	11/27/2013	12/2/2013	CCGC Template Letter	Not Used	Not Applicable	4/9/2014
CCGC_0061	PRIW	23/Oct/2013	237	26-Nov-13	11/27/2013	11/28/2013	CCGC Template Letter	Bottled Water	Years Ago	3/18/2014
CCGC_0057	PRIW	23/Oct/2013	70	26-Nov-13	11/27/2013	12/4/2013	CCGC Template Letter	Bottled Water	None Reported	3/17/2014
CCGC_0063	PRIW	23/Oct/2013	113	26-Nov-13	11/27/2013	11/28/2013	CCGC Template Letter	Bottled Water	Years Ago	3/18/2014
CCGC_0053	PRIW	23/Oct/2013	304	26-Nov-13	11/27/2013	12/2/2013	CCGC Template Letter	Not Used	Not Applicable	3/18/2014
CCGC_0052	PRIW	23/Oct/2013	128	26-Nov-13	11/27/2013	12/2/2013	CCGC Template Letter	RO Unit	None Reported	3/18/2014
CCGC_0074	PRIW	23/Oct/2013	156	26-Nov-13	11/27/2013	12/4/2013	CCGC Template Letter	RO Unit	5/1/2014	3/24/2014
CCGC_0049	PRIW	23/Oct/2013	57	26-Nov-13	12/2/2013	12/5/2013	CCGC Template Letter	RO Unit	1/1/2014	3/20/2014
CCGC_0075	PRIW	23/Oct/2013	92	26-Nov-13	11/27/2013	12/4/2013	CCGC Template Letter	RO Unit	5/1/2014	3/24/2014
CCGC_0055	PRIW	23/Oct/2013	131	26-Nov-13	11/27/2013	12/4/2013	CCGC Template Letter	Bottled Water	None Reported	3/17/2014
CCGC_0014	PRIW	23/Oct/2013	143	26-Nov-13	11/27/2013	11/26/2013[5]	CCGC Template Letter	Not Used	Not Applicable	3/18/2014
CCGC_0003	PRIW	24/Oct/2013	296	26-Nov-13	11/29/2013	12/4/2013	CCGC Template Letter	Bottled Water	12/4/2013	4/9/2014
CCGC_0028	PRIW	24/Oct/2013	106	26-Nov-13	11/27/2013	11/15/2013[5]	CCGC Template Letter	Bottled Water	None Reported	3/25/2014
CCGC_0040	PRIW	24/Oct/2013	50	26-Nov-13	11/27/2013	12/1/2013	Verbal	Bottled Water	12/1/2013	8/29/2014
CCGC_0002	PRIW	24/Oct/2013	97	26-Nov-13	11/29/2013	12/4/2013	CCGC Template Letter	Bottled Water	12/4/2013	4/9/2014
CCGC_0006	PRIW	25/Oct/2013	237	26-Nov-13	11/27/2013	12/6/2013	Custom Letter	RO Unit	None Reported	3/21/2014
CCGC_0058	PRIW	25/Oct/2013	52	26-Nov-13	11/27/2013	11/26/2013[5]	CCGC Template Letter	Bottled Water	None Reported	3/18/2014

Global ID / Field Point Name	Field Point Class	Sample Date	Nitrate as NO3 (mg/L)	CCGC Notification Sent Date	CCGC Notification Date[1]	User Notification Date	Primary Manner of Notification[2]	Action Reported	Date Action Initiated	Date Action Reported
CCGC_0011	PRIW	25/Oct/2013	108	26-Nov-13	11/27/2013	12/6/2013	Custom Letter	RO Unit	None Reported	3/21/2014
CCGC_0015	PRIW	25/Oct/2013	239	26-Nov-13	11/27/2013	11/26/2013[5]	CCGC Template Letter	Bottled Water	None Reported	3/18/2014
CCGC_0032	PRIW	25/Oct/2013	174	26-Nov-13	11/27/2013	12/3/2014	CCGC Template Letter	Not Used	Not Applicable	3/17/2014
AGL020007409	PRIW	22/Jan/2014	125	11-Mar-14	3/12/2014	3/13/2014	Verbal	Bottled Water	3/14/2014	4/28/2014
AGL020005100	PRIW	23/Jan/2014	109	11-Mar-14	3/13/2014	3/21/2014	CCGC Template Letter	Not Used	3/21/2014	3/31/2014
CCGC_0078	PRIW	18/Feb/2014	221	28-Mar-14	3/31/2014	4/12/2014	CCGC Template Letter	Not Used	Not Applicable	4/12/2014
CCGC_0082	PRIW	19/Feb/2014	142	28-Mar-14	3/31/2014	3/27/2014[5]	Verbal	RO Unit	House: 1995, Field drinking water: 2003	4/18/2014
CCGC_0102	PRIW	19/Feb/2014	118	28-Mar-14	3/31/2014	4/28/2014	Letter	RO Unit	Over 20 Years	3/31/2014
CCGC_0104	PRIW	20/Feb/2014	290	28-Mar-14	3/31/2014	5/29/2014	CCGC Template Letter	Not Used	Not Applicable	5/21/2014
CCGC_0105	PRIW	20/Feb/2014	266	28-Mar-14	3/31/2014	5/27/2014	CCGC Template Letter	Not Used	Not Applicable	5/21/2014
CCGC_0106	PRIW	20/Feb/2014	299	28-Mar-14	3/31/2014	5/29/2014	CCGC Template Letter	Not Used	Not Applicable	5/21/2014
CCGC_0090	PRIW	20/Feb/2014	258	28-Mar-14	3/31/2014	4/7/2014	Verbal	Not Used	Not Applicable	5/14/2014
CCGC_0107	PRIW	10/Mar/2014	486	02-May-14	5/5/2014	5/7/2014	CCGC Template Letter	RO Unit	5/27/2014	5/15/2014
CCGC_0143	PRIW	10/Mar/2014	92	02-May-14	5/5/2014	5/7/2014	CCGC Template Letter	RO Unit	7/2/1905	5/15/2014
CCGC_0164	PRIW	11/Mar/2014	221	02-May-14	5/3/2014	5/8/2014	CCGC Template Letter	Bottled Water	8/1/2011	5/20/2014
CCGC_0157	PRIW	11/Mar/2014	106	02-May-14	5/3/2014	5/8/2014	CCGC Template Letter	Bottled Water	8/1/2011	5/20/2014
CCGC_0156	PRIW	11/Mar/2014	182	02-May-14	5/3/2014	5/7/2014	CCGC Template Letter	Bottled Water	8/1/2011	5/20/2014
CCGC_0155	PRIW	11/Mar/2014	76	02-May-14	5/3/2014	5/8/2014, 5/12/14[3]	CCGC Template Letter	Bottled Water	8/1/2011	5/20/2014
CCGC_0153	PRIW	11/Mar/2014	239	02-May-14	5/3/2014	6/10/2014	CCGC Template Letter	Bottled Water	At least a year	5/20/2014
CCGC_0163	PRIW	11/Mar/2014	482	02-May-14	5/3/2014	5/1/2014[5]	CCGC Template Letter	Bottled Water	Pre-existing	7/31/2014
CCGC_0116	PRIW	11/Mar/2014	174	02-May-14	5/5/2014	5/13/2014	CCGC Template Letter	Bottled Water	5/13/2014	5/20/2014
CCGC_0115	PRIW	11/Mar/2014	172	02-May-14	5/5/2014	5/13/2014	CCGC Template Letter	Bottled Water	5/13/2014	5/20/2014
CCGC_0158	PRIW	11/Mar/2014	62	02-May-14	5/3/2014	5/12/2014	CCGC Template Letter	Bottled Water	7/30/2014	7/30/2014
CCGC_0162	PRIW	11/Mar/2014	46	02-May-14	5/3/2014	5/8/2014	CCGC Template Letter	Bottled Water	8/1/2011	5/20/2014
CCGC_0165	PRIW	12/Mar/2014	97	02-May-14	5/3/2014	5/8/2014	CCGC Template Letter	Bottled Water	8/1/2011	5/20/2014
CCGC_0161	PRIW	12/Mar/2014	112	02-May-14	5/3/2014	5/9/2014	CCGC Template Letter	Bottled Water	5/9/2014	7/30/2014
CCGC_0179	PRIW	12/Mar/2014	105	02-May-14	5/5/2014	5/7/2014	CCGC Template Letter	RO Unit	5/12/2013	6/4/2014
CCGC_0122	PRIW	12/Mar/2014	106	02-May-14	5/5/2014	4/16/2014[5]	CCGC Template Letter	Bottled Water	4/25/2014	4/25/2014
CCGC_0121	PRIW	12/Mar/2014	209	02-May-14	5/5/2014	4/16/2014[5]	CCGC Template Letter	Bottled Water	4/16/2014	4/25/2014

Global ID / Field Point Name	Field Point Class	Sample Date	Nitrate as NO3 (mg/L)	CCGC Notification Sent Date	CCGC Notification Date[1]	User Notification Date	Primary Manner of Notification[2]	Action Reported	Date Action Initiated	Date Action Reported
CCGC_0125	PRIW	12/Mar/2014	177	02-May-14	5/5/2014	4/16/2014[5]	CCGC Template Letter	Bottled Water	4/30/2014	4/25/2014
CCGC_0124	PRIW	12/Mar/2014	114	02-May-14	5/5/2014	4/16/2014[5]	CCGC Template Letter	Bottled Water	5/5/2014	4/25/2014
CCGC_0123	PRIW	12/Mar/2014	249	02-May-14	5/5/2014	4/16/2014[5]	CCGC Template Letter	Bottled Water	4/25/2014	4/25/2014
CCGC_0160	PRIW	12/Mar/2014	205	02-May-14	5/3/2014	5/8/2014	CCGC Template Letter	Bottled Water	8/1/2011	5/20/2014
CCGC_0131	PRIW	13/Mar/2014	79	02-May-14	5/6/2014	5/5/2014[5]	CCGC Template Letter	RO Unit	5/15/2014	5/20/2014
CCGC_0167	PRIW	13/Mar/2014	178	02-May-14	5/3/2014	5/8/2014	CCGC Template Letter	Bottled Water	1/1/1997	5/13/2014
CCGC_0168	PRIW	13/Mar/2014	111	02-May-14	5/3/2014	5/8/2014	CCGC Template Letter	RO Unit	7/1/1905	5/13/2014
CCGC_0170	PRIW	13/Mar/2014	230	02-May-14	5/3/2014	5/8/2014	CCGC Template Letter	Bottled Water	5/14/2014	5/14/2014
CCGC_0171	PRIW	13/Mar/2014	146	02-May-14	5/3/2014	7/29/2013[5]	CCGC Template Letter	Not Used	Not Applicable	5/13/2014
CCGC_0186	PRIW	14/Mar/2014	52	02-May-14	5/3/2014	5/12/2014	CCGC Template Letter	RO Unit	5/12/2013	5/22/2014
CCGC_0187	PRIW	14/Mar/2014	257	02-May-14	5/3/2014	5/8/2014	CCGC Template Letter	Not Used	5/8/2014	5/22/2014
CCGC_0177	PRIW	14/Mar/2014	90	02-May-14	5/3/2014	5/12/2014	CCGC Template Letter	RO Unit	5/12/2014	5/22/2014
CCGC_0175	PRIW	14/Mar/2014	168	02-May-14	5/3/2014	5/8/2014	CCGC Template Letter	Not Used	5/8/2014	5/22/2014
CCGC_0139	PRIW	14/Mar/2014	191	02-May-14	5/5/2014	5/14/2014	CCGC Template Letter	Bottled Water	7/1/2013	5/14/2014
CCGC_0174	PRIW	14/Mar/2014	78	02-May-14	5/3/2014	5/8/2014	CCGC Template Letter	Not Used	5/8/2014	5/22/2014
CCGC_0173	PRIW	14/Mar/2014	166	02-May-14	5/3/2014	5/8/2014	CCGC Template Letter	Not Used	5/8/2014	5/22/2014
CCGC_0176	PRIW	14/Mar/2014	179	02-May-14	5/3/2014	5/20/2014	CCGC Template Letter	Not Used	Not Applicable	6/4/2014
CCGC_0195	PRIW	19/Mar/2014	308	03-Jun-14	6/4/2014	6/16/2014	CCGC Template Letter	Bottled Water	7/1/2014	7/31/2014
CCGC_0207	PRIW	19/Mar/2014	87	03-Jun-14	6/4/2014	6/16/2014	CCGC Template Letter	Bottled Water	7/1/2014	7/31/2014
CCGC_0206	PRIW	19/Mar/2014	162	03-Jun-14	6/4/2014	6/16/2014	CCGC Template Letter	Bottled Water	7/1/2014	7/31/2014
CCGC_0198	PRIW	19/Mar/2014	73	03-Jun-14	6/4/2014	6/13/2014	CCGC Template Letter	Bottled Water	6/21/2014	7/3/2014
CCGC_0188	PRIW	19/Mar/2014	102	03-Jun-14	6/4/2014	6/12/2014	CCGC Template Letter	Bottled Water	None Reported	7/3/2014
CCGC_0196	PRIW	19/Mar/2014	74	03-Jun-14	6/4/2014	6/14/2014	CCGC Template Letter	Bottled Water	7/3/1905	7/3/2014
CCGC_0194	PRIW	19/Mar/2014	454	03-Jun-14	6/4/2014	6/13/2014	CCGC Template Letter	RO Unit	pre-sample date	7/17/2014
CCGC_0193	PRIW	19/Mar/2014	202	03-Jun-14	6/4/2014	6/23/2014	CCGC Template Letter	Replacement Water Refused by User	None Reported	7/3/2014
CCGC_0191	PRIW	19/Mar/2014	188	03-Jun-14	6/4/2014	6/12/2014	CCGC Template Letter	Bottled Water	None Reported	7/3/2014
CCGC_0197	PRIW	19/Mar/2014	64	03-Jun-14	6/4/2014	6/17/2014	CCGC Template Letter	Bottled Water	7/1/2014	7/17/2014
CCGC_0201	PRIW	20/Mar/2014	146	03-Jun-14	6/4/2014	6/10/2014	CCGC Template Letter	RO Unit	6/1/2014	6/16/2014

Global ID / Field Point Name	Field Point Class	Sample Date	Nitrate as NO3 (mg/L)	CCGC Notification Sent Date	CCGC Notification Date[1]	User Notification Date	Primary Manner of Notification[2]	Action Reported	Date Action Initiated	Date Action Reported
CCGC_0203	PRIW	20/Mar/2014	174	03-Jun-14	6/4/2014	6/10/2014	CCGC Template Letter	RO Unit	6/1/2014	6/16/2014
CCGC_0204	PRIW	20/Mar/2014	202	03-Jun-14	6/4/2014	6/10/2014	CCGC Template Letter	RO Unit	6/1/2014	6/16/2014
CCGC_0251	PRIW	24/Mar/2014	47	03-Jun-14	6/4/2014	6/5/2014	CCGC Template Letter	RO Unit	6/10/2014	7/25/2014
CCGC_0209	PRIW	24/Mar/2014	66	03-Jun-14	6/4/2014	6/6/2014	CCGC Template Letter	RO Unit	Within 2 weeks	6/6/2014
CCGC_0254	PRIW	24/Mar/2014	94	03-Jun-14	6/4/2014	6/5/2014	CCGC Template Letter	RO Unit	6/10/2014	7/25/2014
CCGC_0288	PRIW	24/Mar/2014	171	03-Jun-14	6/4/2014	6/12/2014	CCGC Template Letter	Bottled Water	20 Years Ago	7/17/2014
CCGC_0297	PRIW	24/Mar/2014	52	03-Jun-14	6/4/2014	6/12/2014	CCGC Template Letter	Bottled Water	pre-sampling	7/17/2014
CCGC_0287	PRIW	24/Mar/2014	102	03-Jun-14	6/4/2014	6/9/2014	CCGC Template Letter	Bottled Water	pre-sampling	7/17/2014
CCGC_0286	PRIW	24/Mar/2014	84	03-Jun-14	6/4/2014	6/9/2014	CCGC Template Letter	Bottled Water	pre-sampling	7/17/2014
CCGC_0261	PRIW	25/Mar/2014	204	03-Jun-14	6/4/2014	6/4/2014	Meeting	Not Used	Not Applicable	6/9/2014
CCGC_0307	PRIW	25/Mar/2014	109	03-Jun-14	6/4/2014	6/13/2014	CCGC Template Letter	Not Used	Not Applicable	7/9/2014
CCGC_0264	PRIW	25/Mar/2014	63	03-Jun-14	6/9/2014	6/16/2014	CCGC Template Letter	RO Unit	10/1/2012	7/3/2014
CCGC_0263	PRIW	25/Mar/2014	47	03-Jun-14	6/4/2014	6/12/2014	CCGC Template Letter	RO Unit	10/1/2014	6/16/2014
CCGC_0291	PRIW	25/Mar/2014	54	03-Jun-14	6/4/2014	6/9/2014	CCGC Template Letter	Not Used	Not Applicable	7/17/2014
CCGC_0302	PRIW	26/Mar/2014	68	06-Jun-14	6/9/2014	6/15/2014	CCGC Template Letter	RO Unit	forthcoming	7/16/2014
CCGC_0314	PRIW	26/Mar/2014	143	03-Jun-14	6/4/2014	6/14/2014	CCGC Template Letter	Bottled Water	6/14/2014	7/19/2014
CCGC_0306	PRIW	26/Mar/2014	180	06-Jun-14	6/9/2014	6/7/2014[5]	CCGC Template Letter	RO Unit	forthcoming	7/16/2014
CCGC_0305	PRIW	26/Mar/2014	88	06-Jun-14	6/9/2014	6/7/2014[5]	CCGC Template Letter	RO Unit	forthcoming	7/16/2014
CCGC_0304	PRIW	26/Mar/2014	59	06-Jun-14	6/9/2014	6/15/2014	CCGC Template Letter	RO Unit	forthcoming	7/16/2014
CCGC_0228	PRIW	26/Mar/2014	50	04-Jun-14	6/5/2014	6/12/2014	CCGC Template Letter	Bottled Water	6/28/2014	7/19/2014
CCGC_0239	PRIW	27/Mar/2014	50	03-Jun-14	6/4/2014	6/14/2014	CCGC Template Letter	Bottled Water	Pre-sample date	7/17/2014
CCGC_0321	PRIW	27/Mar/2014	59	03-Jun-14	6/4/2014	6/17/2014	CCGC Template Letter	Bottled Water	None Reported	6/17/2014
CCGC_0277	PRIW	27/Mar/2014	110	03-Jun-14	6/4/2014	6/28/2014	Letter	Bottled Water	pre-sampling	6/28/2014
CCGC_0316	PRIW	27/Mar/2014	108	03-Jun-14	6/4/2014	6/12/2014	CCGC Template Letter	RO Unit	6/20/2014	7/11/2014
CCGC_0238	PRIW	27/Mar/2014	52	03-Jun-14	6/4/2014	6/12/2014	CCGC Template Letter	Not Used	Not Applicable	6/16/2014
CCGC_0240	PRIW	27/Mar/2014	189	03-Jun-14	6/4/2014	6/13/2014	CCGC Template Letter	Bottled Water	6/18/2014	7/3/2014
CCGC_0281	PRIW	28/Mar/2014	87	03-Jun-14	6/5/2014	6/3/2014[5]	CCGC Template Letter	Bottled Water	Years Ago	6/3/2014
CCGC_0365	PRIW	29/Apr/2014	59	24-Jun-14	6/25/2014	7/3/2014	CCGC Template Letter	Bottled Water	7/3/2014	7/15/2014
CCGC_0364	PRIW	29/Apr/2014	108	24-Jun-14	6/25/2014	6/25/2014	Meeting	Bottled Water	6/25/2014	7/11/2014

Global ID / Field Point Name	Field Point Class	Sample Date	Nitrate as NO3 (mg/L)	CCGC Notification Sent Date	CCGC Notification Date[1]	User Notification Date	Primary Manner of Notification[2]	Action Reported	Date Action Initiated	Date Action Reported
CCGC_0327	PRIW	29/Apr/2014	835[4]	24-Jun-14	6/25/2014	7/30/2014	Meeting	Bottled Water	3 Years Ago	8/7/2014
CCGC_0326	PRIW	29/Apr/2014	76	24-Jun-14	6/25/2014	7/30/2014	Meeting	Bottled Water	Pre-existing	8/7/2014
CCGC_0324	PRIW	29/Apr/2014	119	24-Jun-14	6/25/2014	8/7/2014	Meeting	Bottled Water	Pre-existing	8/7/2014
CCGC_0367	PRIW	30/Apr/2014	121	24-Jun-14	6/25/2014	2/25/2014[5]	Letter	Bottled Water	4 years	7/3/2014
CCGC_0377	PRIW	30/Apr/2014	81	24-Jun-14	6/25/2014	5/20/2014[5]	Letter	Bottled Water	4 years	7/3/2014
CCGC_0337	PRIW	30/Apr/2014	64	24-Jun-14	6/25/2014	7/30/2014	Meeting	Bottled Water	Pre-existing	8/7/2014
CCGC_0373	PRIW	30/Apr/2014	116	24-Jun-14	6/25/2014	2/25/2014[5]	Letter	Bottled Water	4 years	7/3/2014
CCGC_0370	PRIW	30/Apr/2014	66	24-Jun-14	6/25/2014	4/7/2014[5]	Letter	Bottled Water	4 years	7/3/2014
CCGC_0323	PRIW	30/Apr/2014	118	24-Jun-14	6/25/2014	7/24/2014	Meeting	Bottled Water	5+ years	8/7/2014
CCGC_0368	PRIW	30/Apr/2014	121	24-Jun-14	6/25/2014	4/20/2014[5]	Letter	Bottled Water	4 years	7/3/2014
CCGC_0369	PRIW	30/Apr/2014	128	24-Jun-14	6/25/2014	4/7/2014[5]	Letter	Bottled Water	4 years	7/3/2014
CCGC_0380	PRIW	01/May/2014	117	24-Jun-14	6/25/2014	7/4/2014	CCGC Template Letter	Bottled Water	Pre-existing	7/15/2014
CCGC_0339	PRIW	01/May/2014	214	24-Jun-14	6/25/2014	6/26/2014	CCGC Template Letter	Bottled Water	Historic	7/3/2014
CCGC_0340	PRIW	01/May/2014	184	24-Jun-14	6/25/2014	6/26/2014	CCGC Template Letter	RO Unit	Bottled Water used historically	7/3/2014
AGL020007409	PRIW	14/Jul/2014	121	17-Oct-14	1/2/1900	1/2/1900	Not Applicable	Bottled Water	3/14/2014	12/15/2014
AGL020005100	PRIW	16/Jul/2014	91	17-Oct-14	1/2/1900	1/2/1900	CCGC Template Letter	Not Used	12/2014	2/23/2015
CCGC_0395	PRIW	06/Aug/2014	487	15-Nov-14	11/17/2014	12/6/2014	CCGC Template Letter	Bottled Water	12/6/2014	12/17/2014
CCGC_0392	PRIW	06/Aug/2014	313	15-Nov-14	11/17/2014	11/20/2014	Letter	Not Used	Not Applicable	11/20/2014
CCGC_0393	PRIW	06/Aug/2014	122	15-Nov-14	11/17/2014	11/20/2014	Letter	Not Used	Not Applicable	11/20/2014
CCGC_0394	PRIW	06/Aug/2014	362	15-Nov-14	11/17/2014	12/6/2014	CCGC Template Letter	Bottled Water	12/6/2014	12/17/2014
CCGC_0390	PRIW	06/Aug/2014	62	15-Nov-14	11/17/2014	11/24/2014	Letter	Bottled Water	11/24/2014	12/15/2014
CCGC_0396	PRIW	06/Aug/2014	144	15-Nov-14	11/17/2014	12/6/2014	CCGC Template Letter	Bottled Water	12/6/2014	12/17/2014
CCGC_0391	PRIW	06/Aug/2014	228	18-Nov-14	11/19/2014	12/1/2014	CCGC Template Letter	RO Unit	2 Years Ago	12/15/2014
CCGC_0397	PRIW	07/Aug/2014	218	15-Nov-14	11/17/2014	Not Applicable	Not Applicable	Not Used	Not Applicable	12/15/2014
CCGC_0398	PRIW	07/Aug/2014	149	15-Nov-14	11/17/2014	11/24/2014	Letter	Bottled Water	11/24/2014	12/15/2014
CCGC_0402	PRIW	07/Aug/2014	248	18-Nov-14	11/15/2014	11/21/2014	CCGC Template Letter	Bottled Water	7/30/2013	11/21/2014
CCGC_0403	PRIW	07/Aug/2014	98	18-Nov-14	11/15/2014	11/21/2014	CCGC Template Letter	Bottled Water	7/30/2013	11/21/2014
CCGC_0404	PRIW	07/Aug/2014	171	15-Nov-14	11/17/2014					
CCGC_0411	PRIW	07/Aug/2014	113	18-Nov-14	11/19/2014	12/1/2014	Letter	Not Used	12/1/2014	1/6/2014

Global ID / Field Point Name	Field Point Class	Sample Date	Nitrate as NO3 (mg/L)	CCGC Notification Sent Date	CCGC Notification Date[1]	User Notification Date	Primary Manner of Notification[2]	Action Reported	Date Action Initiated	Date Action Reported
CCGC_0419	PRIW	07/Aug/2014	50	15-Nov-14	11/17/2014	11/24/2014	CCGC Template Letter	Not Used	Not Applicable	12/1/2014
CCGC_0421	PRIW	07/Aug/2014	80	18-Nov-14	11/19/2014	12/7/2014	CCGC Template Letter	Not Used	Not Applicable	12/15/2014
CCGC_0432	PRIW	08/Aug/2014	235	14-Nov-14	11/17/2014	11/21/2014	CCGC Template Letter	Not Used	Not Applicable	12/4/2014
CCGC_0433	PRIW	08/Aug/2014	159	14-Nov-14	11/17/2014	11/21/2014	CCGC Template Letter	Bottled Water	Historic	12/4/2014
CCGC_0431	PRIW	08/Aug/2014	156	14-Nov-14	11/17/2014	11/21/2014	CCGC Template Letter	RO Unit	Historic	12/4/2014
CCGC_0327	PRIW	08/Aug/2014	279	15-Nov-14	11/17/2014	Not Applicable	CCGC Template Letter	Bottled Water	Pre-existing	1/15/2015
CCGC_0430	PRIW	08/Aug/2014	47	14-Nov-14	11/17/2014	11/21/2014	CCGC Template Letter	Bottled Water	9/1/2012	12/4/2014
CCGC_0097	PRIW	15/Aug/2014	63	18-Nov-14	11/19/2014	11/18/2014[5]	CCGC Template Letter	Bottled Water	1/1/1990	12/15/2014
CCGC_0337	PRIW	21/Aug/2014	61	15-Nov-14	11/17/2014	11/26/2014	CCGC Template Letter	Bottled Water	8/1/14	1/15/2015
CCGC_0326	PRIW	21/Aug/2014	85	15-Nov-14	11/17/2014	11/26/2014	CCGC Template Letter	Bottled Water	3 Years Ago	1/15/2015
CCGC_0326	PRIW	21/Aug/2014	85	15-Nov-14	11/17/2014	11/26/2014	Custom Letter	Bottled Water	3 Years Ago	1/15/2015
CCGC_0452	PRIW	22/Aug/2014	70	15-Nov-14	11/17/2014	11/26/2014	CCGC Template Letter	Not Used	Not Applicable	1/15/2015
CCGC_0449	PRIW	22/Aug/2014	165	15-Nov-14	11/17/2014	11/26/2014	CCGC Template Letter	Replacement Water Refused by User	Not Applicable	1/15/2015
CCGC_0455	PRIW	25/Aug/2014	94	15-Nov-14	11/19/2014					
CCGC_0458	PRIW	25/Aug/2014	62	15-Nov-14	11/17/2014	11/17/2014	CCGC Template Letter	Bottled Water	None Reported	12/15/2014
CCGC_0460	PRIW	25/Aug/2014	194	18-Nov-14	11/19/2014	11/15/2013[5]	CCGC Template Letter	RO Unit	11/27/2013	12/15/2014
CCGC_0468	PRIW	26/Aug/2014	75	18-Nov-14	11/19/2014	12/16/2014	CCGC Template Letter	Bottled Water	12/1/2013	12/16/2014
CCGC_0512	PRIW	26/Aug/2014	93	18-Nov-14	11/19/2014	11/19/2014	CCGC Template Letter	Bottled Water	6/30/1905	11/19/2014
CCGC_0487	PRIW	26/Aug/2014	85	15-Nov-14	11/17/2014	11/18/2014	CCGC Template Letter	Not Used	Not Applicable	12/15/2014
CCGC_0467	PRIW	26/Aug/2014	127	18-Nov-14	11/19/2014	12/16/2014	CCGC Template Letter	Bottled Water	12/1/2013	12/16/2014
CCGC_0491	PRIW	27/Aug/2014	398	20-Nov-14	11/21/2014	11/28/2014	CCGC Template Letter	Bottled Water	11/28/2014	12/15/2014
CCGC_0513	PRIW	27/Aug/2014	47	15-Nov-14	11/17/2014	Not Applicable	Not Applicable	Not Used	Not Applicable	11/18/2014
CCGC_0511	PRIW	27/Aug/2014	198	18-Nov-14	11/19/2014	12/1/2014	CCGC Template Letter	Not Used	Not Applicable	1/5/2014
CCGC_0493	PRIW	27/Aug/2014	511	20-Nov-14	11/21/2014	11/28/2014	CCGC Template Letter	Bottled Water	Over 5 Years Ago	12/15/2014
CCGC_0492	PRIW	27/Aug/2014	95	20-Nov-14	11/21/2014	11/28/2014	CCGC Template Letter	Bottled Water	2 Years Ago	12/15/2014
CCGC_0489	PRIW	27/Aug/2014	239	15-Nov-14	11/17/2014	11/18/2014	CCGC Template Letter	Not Used	Not Applicable	11/18/2014
CCGC_0484	PRIW	27/Aug/2014	46	18-Nov-14	11/19/2014	11/19/2014	Not Applicable	Bottled Water	1975	2/4/2015
CCGC_0471	PRIW	27/Aug/2014	249	15-Nov-14	11/17/2014	11/23/2014	CCGC Template Letter	Bottled Water	11/24/2014	1/5/2014

Global ID / Field Point Name	Field Point Class	Sample Date	Nitrate as NO3 (mg/L)	CCGC Notification Sent Date	CCGC Notification Date[1]	User Notification Date	Primary Manner of Notification[2]	Action Reported	Date Action Initiated	Date Action Reported
CCGC_0473	PRIW	27/Aug/2014	48	15-Nov-14	11/17/2014	11/26/2014	CCGC Template Letter	RO Unit	1/1/2000	1/15/2015
CCGC_0474	PRIW	27/Aug/2014	72	15-Nov-14	11/17/2014	11/26/2015	CCGC Template Letter	Bottled Water	1/1/2012	1/15/2015
CCGC_0490	PRIW	27/Aug/2014	116	15-Nov-14	11/17/2014	11/18/2014	CCGC Template Letter	Not Used	Not Applicable	11/18/2014
CCGC_0505	PRIW	28/Aug/2014	186	15-Nov-14	11/17/2014	11/24/2014	CCGC Template Letter	None Supplied	Not Applicable	1/5/2015
CCGC_0514	PRIW	28/Aug/2014	343	15-Nov-14	11/17/2014	11/24/2014	CCGC Template Letter	None Supplied	Not Applicable	1/5/2015
CCGC_0476	PRIW	28/Aug/2014	614	18-Nov-14	11/19/2014	11/25/2014	CCGC Template Letter	Bottled Water	12/1/14	1/5/2014
CCGC_0059	PRIW	28/Aug/2014	83	18-Nov-14	11/20/2014	11/22/2014	Custom Letter	RO Unit	pending	1/6/2014
CCGC_0507	PRIW	28/Aug/2014	346	15-Nov-14	11/17/2014	11/24/2014	CCGC Template Letter	None Supplied	Not Applicable	1/5/2015
CCGC_0503	PRIW	28/Aug/2014	286	15-Nov-14	11/17/2014	11/24/2014	CCGC Template Letter	None Supplied	Not Applicable	1/5/2015
CCGC_0502	PRIW	28/Aug/2014	84	15-Nov-14	11/17/2014	11/24/2014	CCGC Template Letter	None Supplied	Not Applicable	1/5/2015
CCGC_0500	PRIW	28/Aug/2014	256	15-Nov-14	11/17/2014	11/24/2014	CCGC Template Letter	None Supplied	Not Applicable	1/5/2015
CCGC_0498	PRIW	28/Aug/2014	51	18-Nov-14	11/19/2014	12/1/2014	CCGC Template Letter	Not Used	Not Applicable	1/5/2014
CCGC_0509	PRIW	28/Aug/2014	144	15-Nov-14	11/17/2014	11/24/2014	CCGC Template Letter	None Supplied	Not Applicable	1/5/2015

[1] Refers to date that CCGC received confirmation that the member received notification.

[2] For Manner of Notifications that indicated verbal or meeting only, the CCGC is currently conducting follow up and requiring retroactive written notification to users.

[3] Landowner notified by user at later date.

[4] Resampled by CCGC at the wellhead on 8/8/14 (original sample was collected at a spigot away from the wellhead); wellhead sample had a nitrate concentration of 1 mg/L.

[5] Responded to earlier CCGC notice sent prior to FedEx Delivery.