

**California Regional Water Quality Control Board
Central Valley Region
Patrick Pulupa, Executive Officer**



**EXECUTIVE OFFICER’S REPORT
7/8 FEBRUARY 2019**

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SUCCESS STORIES

1. SITE CLEANUP – SUCCESSFULLY CLOSED – NO FURTHER ACTION REQUIRED

- **Capital Tank Lines Fuel Spill Cleanup, Highway 20, Yuba County**

On 7 September 2017, a truck hauling approximately 8,500 gallons of gasoline on the south side of Highway 20, approximately one-mile northeast of the northern edge of Marysville. The tanker released approximately 4,000 gallons which flowed into a ditch and through a culvert under Highway 20 and continued along approximately 3,000 feet of the ditch on the north side of the highway. Following the removal of the truck and remaining fuel in the tanker, approximately 725 tons of gasoline-impacted soil was excavated from the ditch. Approximately 36,000 gallons of product/water mixture and 77,900 gallons of additional impacted water were also recovered from the drainage ditch. Remedial activities removed contaminated soil and water to the extent practicable and the ditch was restored to irrigation and drainage use on 20 September 2017. Approximately 100 cubic yards of additional soil was removed from the crash site and from below the reinforced concrete apron of the culver under Highway 20.

A report was submitted documenting the remedial activities to clean up the spill and that recommended No Further Action. Based on the activities observed in the field, the documentation in the report, and discussions with the Yuba County Environmental Health Department, Central Valley Water Board staff found that the spill had been remediated to the extent practicable. A Public Notice was distributed to nearby property owners and interested parties. Comments were received from Caltrans concerning that they may incur costs to mitigate soil or water contamination during any future maintenance or replacement of highway drainage if residual contamination is encountered in the spill area. Central Valley Water Board staff responded that if Caltrans were to encounter previously undiscovered gasoline contamination in the spill area, the case could be reopened. A No Further Action determination letter was issued on 12 December 2018.

- **Louisiana Pacific Corporation – Red Bluff (VG Mill & Jamb Plant), Case 1855100, Tehama County**

Between 1945 and 1990, the former VG Mill and Jamb Plant was used for milling, storage, and drying of lumber products. In the 1960s, the facility installed a fungicide dip system consisting of an open-top, in-ground steel tank filled with solvent-based fungicide containing pentachlorophenol (PCP) and Stoddard solvent. A 1995 Phase I Environmental Site Assessment identified the fungicide dip system as an area of concern. Initial investigations identified soil and groundwater contamination. The Central Valley Water Board issued Cleanup and Abatement Order (CAO) 98-712 in April 1998. Subsequent site investigations showed impacted soil in the vicinity of the former dip system and that contaminants had diffused into the fine-grained unit separating the perched aquifer from the underlying partially confined aquifer. Groundwater monitoring conducted between 1996 and 2018 showed that the PCP plume within the perched zone has migrated approximately 650 feet downgradient of the source area and terminates where the perched zone pinches out to the east. Groundwater monitoring also showed that the partially confined aquifer is not impacted. Soil and groundwater remedies implemented between 1998 and 2013 removed approximately 1,670 kilograms of PCP which is about 86 percent of the estimated original PCP mass. Contaminants in soil have been removed to the extent reasonable; PCP concentrations in the upper ten feet of soil are less than the 1×10^{-6} risk level for industrial use. PCP concentrations in the perched zone exceed the Maximum Contaminant Level, but the plume is of limited extent and is not expected to migrate. Groundwater concentrations are expected to continue to decrease via in situ microbial degradation. Deed restrictions are in place to limit future land use to industrial/commercial use, address soil disturbance at depths greater than ten feet, and prevent drilling and well installation within the perched zone plume footprint. Remaining remedial infrastructure was decommissioned in November 2018. Staff closed the case and rescinded CAO 98-712 in December 2018.

2. UNDERGROUND STORAGE TANKS – SUCCESSFULLY CLOSED – NO FURTHER ACTION REQUIRED

Following are sites where Board staff concluded that residual hydrocarbons do not pose a threat to human health and safety or anticipated future beneficial uses of water. This decision is generally based on site-specific information provided by the responsible party and assumes that the information provided

was accurate and representative of site conditions. Most of these cases have been evaluated in accordance with criteria in the State Water Board's Low-Threat Underground Storage Tank (UST) Case Closure Policy (*Low-Threat Closure Policy*). Upon completion of corrective action, California Code of Regulations, title 23, section 2728(d)(2) requires public notification that corrective action has been completed and the regulatory agency does not intend to require additional investigation and cleanup. This document serves to provide public notification for the completion of corrective actions.

For more information regarding a site, the appropriate office personnel should be contacted: Fresno (559) 445-5116, Redding (530) 224-4845, and Sacramento (916) 464-3291.

a) **FRESNO OFFICE**

- **E.D. Tait, 916 South Main Street, Pixley, Tulare County**

In March 1999, E.D. Tait removed five gasoline and diesel USTs and associated piping and fuel pumps. E.D. Tait collected soil samples from below the USTs, which contained elevated concentrations of gasoline and diesel constituents. Beginning in February 2002, E.D. Tait conducted multiple phases of site investigations with oversight by the Tulare County Department of Environmental Health Services (Tulare County). High concentrations of petroleum constituents extended to 131 below ground surface, with only trace concentrations at further depths. E.D. Tait did not encounter groundwater during its investigations. E.D. Tait operated a soil vapor extraction (SVE) remediation system from November 2003 through September 2011 and from November 2016 through August 2017 which resulted in the cumulative destruction of approximately 245,000 pounds of volatile fuel constituents. The case was transferred to the Central Valley Water Board staff in June 2016 for regulatory oversight. Remaining petroleum hydrocarbons should continue to naturally attenuate and not adversely impact environmental quality, the beneficial uses of groundwater, or pose an unacceptable risk to human health. The case meets the criteria contained in the *Low-Threat Closure Policy* and was closed on 3 December 2018.

- **Orosi Mart & Deli, 12381 Avenue 416, Orosi, Tulare County**

In March 2003, Orosi Mart & Deli (OMD) detected petroleum hydrocarbons in soil samples during fuel dispenser and product piping replacement and reported an unauthorized release in April 2003. From August 2003 through May 2010, OMD conducted multiple phases of site investigation with oversight by Tulare County to assess the extent of petroleum hydrocarbons in soil and groundwater. OMD conducted SVE and air sparge (AS) remediation between November 2012 and March 2015, removing about 24,300 pounds of gasoline constituents, and groundwater extraction in February 2013. OMD installed three deep wells, which did not contain significant petroleum constituents during three monitoring events conducted from December 2016 through September 2017. Remaining petroleum hydrocarbons should continue to naturally attenuate and not adversely impact environmental quality, the beneficial uses of groundwater, or pose an unacceptable risk to human health. The case meets the criteria contained in the *Low-Threat Closure Policy* and was closed on 5 November 2018.

- **Former Rager Tire & Auto, 401 West Tulare Street, Dinuba, Tulare County**

A gasoline release was discovered during 1991 UST system removal activities. Tulare County issued an Unauthorized Release Report during January 1992 and requested a site investigation to evaluate the extent of the release in soil, and the threat to groundwater. Rager conducted several phases of investigation during 1992, 1993, 2015, and 2017. The case was referred to Central Valley Water Board staff in 2016. An SVE and AS system operated during 2015, and May 2016 through January 2017, and removed approximately 11,470 pounds of hydrocarbons. Groundwater monitoring was conducted from October 1993 until September 2017. The maximum extent of petroleum hydrocarbons in groundwater decreased from approximately 260 feet to less than 100 feet. Rager estimates approximately 10,000 pounds of gasoline constituents remain in soil. Hydrocarbons remaining in soil should continue to attenuate naturally, water quality objectives (WQOs) should be met and there should be no threat to human health or the environment. The case meets the criteria contained in the *Low-Threat Closure Policy* and was closed on 8 December 2018.

b) REDDING OFFICE

- **Castle Crags State Park, Case 450361, Shasta County**

Between 1960 and 2011, the California Department of Parks and Recreation (Discharger) dispensed gasoline to State Park vehicles at the maintenance shop area at Castle Crags State Park. In 1998, a gasoline release was discovered during removal of an underground storage tank (UST). The tank was in good condition with no obvious soil contamination; however, a sample of rainwater obtained from the bottom of the excavation contained total petroleum hydrocarbons as gasoline, benzene, and methyl tert butyl ether above water quality objectives (WQOs). Approximately 675 cubic yards of petroleum-impacted soil were removed during the tank removal. Shasta County Environmental Health Department referred the case to the Central Valley Water Board in 2013. The Discharger submitted an investigation work plan in May 2018. The June 2018 investigation determined that the extent of pollution is localized and does not present a threat to sensitive receptors. Staff closed the case in December 2018.

- **Jiffy Food Store #5, Case 520122, Tehama County**

The case is associated with an unauthorized release from a mini mart and gas station in Corning (Site). The Site dispensed gasoline and diesel fuel from three 8,000-gallon underground storage tanks (USTs) until their replacement by two new 15,000-gallon, double-walled USTs in 1998. The Discharger directed removal of an estimated 950 cubic yards of soil and collected soil samples during excavation of the USTs. Between September 2001 and August 2016, the Discharger performed soil and groundwater investigations and remedial activities. Central Valley Water Board staff estimate that the Discharger removed a total estimated mass of 750 pounds of petroleum by combined soil removal and in-situ chemical oxidation remedies. The Site meets the criteria of the State Water Resources Control Board's Low Threat Closure Policy. Staff closed the case in November 2018.

- **B&N Mini Mart (Case 2), Case 040246, Butte County**

B&N Mini Mart operated a service station with four underground storage tanks (USTs), one of which was removed in 1992 (Case 1). The three remaining USTs (10,000-gallon gasoline tank, 6,000-gallon gasoline tank, and 6,000-gallon diesel tank) remained in operation until 1998 and were removed in February 2000 (Case 2). Soil samples collected during tank removal activities showed elevated concentrations of total petroleum hydrocarbons as diesel, total petroleum hydrocarbons as gasoline, benzene, toluene, ethylbenzene, xylenes, and methyl tert butyl ether. Between 2000 and 2016, Butte County Division of Environmental Health and Central Valley Water Board staff made several attempts to have the Discharger implement a preliminary site assessment and provide the associated technical report. On 23 December 2016, the Executive Officer of the Central Valley Water Board issued Cleanup and Abatement Order (CAO) No. R5-2016-0715 to the Discharger requiring cleanup and abatement of the effects of pollution and nuisance originating at the site. On 25 May 2018, the CAO was amended in order to add a new owner. The new owner conducted a site investigation in May 2018. Results indicated there is no significant residual hydrocarbon mass remaining in soil or groundwater. In September 2018, Central Valley Water Board staff determined that closure under the Low-Threat Closure Policy was warranted. Staff closed the case in November 2018.

Leaking Underground Storage Tanks - Enforcement

- **Almanor Sports & Spirits, Case 320069, Plumas County**

In March 2010, two underground storage tanks (USTs) were removed from this former gasoline service station site. Soil samples collected from the UST basin indicated an unauthorized release had occurred. Grab groundwater samples collected during an October 2012 preliminary site assessment confirmed petroleum impacts in groundwater. Three monitoring wells were installed in October 2013. Methyl tert butyl ether was detected in all three monitoring wells, indicating the plume limits have not been defined. Additional responsible parties were named in May 2015. On 27 June 2018, the Executive Officer of the Central Valley Water Board sent the Discharger a draft Cleanup and Abatement Order (CAO), providing the Dischargers with an opportunity to submit comments on the draft order. On 29 August 2018, Central Valley Water Board staff met with the current and previous property owners to discuss recent site redevelopment activities, the draft CAO, and potential funding options for the remaining investigation and

cleanup activities. On 10 December 2018, the Executive Officer issued final CAO No. R5-2018-0711 to the Dischargers requiring cleanup and abatement of the effects of pollution and nuisance originating at the Site.

c) **SACRAMENTO OFFICE**

- **Dawley's Chevron, 701 5th Street, Arbuckle, Colusa County**

The Site is located on the southwest corner of Eddy and 5th Streets in an area of light commercial businesses and residences in Central Arbuckle. The Site currently has six unoccupied structures: a main building (1930s era gasoline station), and five smaller buildings used for storage, shop area, and a restroom. In 1999, Dawley's removed six USTs, pipelines, and dispensers from the Site. From 1999 through 2016, Dawley's conducted soil and groundwater investigations to assess the extent of the unauthorized release(s) of petroleum hydrocarbons in soil and groundwater. Dawley completed remedial efforts including removal of impacted soils, ozone sparging, and the operation of a dual phase extraction system (DPES). Active remediation at the site effectively reduced petroleum hydrocarbon concentrations in soil and groundwater. Dawley removed approximately 12,000 pounds of petroleum hydrocarbons from beneath the Site from operating the DPES. Dawley concluded the hydrocarbon plume is defined and is stable to slightly decreasing and will continue to naturally attenuate. Central Valley Water Board staff concluded that the residual subsurface petroleum hydrocarbon mass poses a low threat to human health, safety, and the environment, and closed the case in accordance with the *Low-Threat Closure Policy* on December 10, 2018.

- **Puba (former Arco and former Exxon), 1232 and 1240 Broadway Street, Placerville, El Dorado County**

The former Arco service station located at 1232 Broadway Street had two 3,000-gallon USTs, one 4,000-gallon UST, and one 550-gallon UST. The station was in operation prior to 1969 and was demolished around 1985. The former Exxon service station located at 1240 Broadway Street had at least one UST and was in operation prior to 1955 and was demolished in 1982. Puba discovered petroleum hydrocarbon impacts to soil and groundwater during a March 2010 Phase II investigation. A DPES removed approximately 300 pounds of petroleum hydrocarbons from the Site. The Site meets the general and site-specific criteria for case closure under the *Low-Threat Closure Policy*. WQOs are estimated to be met within 4 to 18 years. The case was closed on 7 November 2018.

- **Former Lawson Mechanical Yard, 58 Arden Way, Sacramento, Sacramento County**

In 1988, Lawson Mechanical (Lawson) removed one 5,000-gallon UST from the Site; the Central Valley Water Board's case file does not have additional information regarding this October 1988 UST removal. In 1990, Lawson removed one 1,000-gallon UST from the Site. Lawson began investigation of the Site in 1992 and the investigation indicated petroleum hydrocarbons and chlorinated solvents impacted the Site. There are numerous nearby and up-gradient properties that are known sources of chlorinated solvent releases in the area and there is no historic record of chlorinated solvent use at the Site. Additionally, existing soil and groundwater data indicate that the Site is not a likely source of solvents. The Site meets all the general and media-specific criteria for case closure under the *Low-Threat Closure Policy*. The case was closed on 6 November 2018.

- **City of Sacramento Colfax Yard, 2225 Colfax Street, Sacramento, Sacramento County**

In 1992, the City of Sacramento removed one 500-gallon and two 1,000-gallon USTs and in 1994, removed a waste oil UST from the Site. There are numerous, adjacent properties that are known sources of chlorinated solvent and petroleum hydrocarbon to groundwater in the area and there is no historic record of chlorinated solvent use at the Site. Additionally, existing soil and groundwater data indicate that the Site is not a likely source of solvents. The City of Sacramento began investigating the Colfax Yard in 1992, and the Central Valley Water Board issued a finding of No Further Action Required in 2000. Central Valley Water Board staff re-opened the Colfax Yard environmental case in 2007, when a regional soil gas survey, conducted by the Sacramento Housing and Redevelopment Agency (SHRA) as part of proposed development of the area, discovered elevated concentrations of benzene in soil gas samples collected in the vicinity of the Colfax Maintenance Yard. Benzene in soil vapor appeared to be from off-gassing from groundwater, and benzene in groundwater appeared to be from an off-site, up-

gradient source, and not due to activities on the Colfax Yard. Shallow soil samples collected on-Site did not contain petroleum hydrocarbons. Based on available data, the Site does not appear to be the source of petroleum hydrocarbons and chlorinated solvents that are detected in groundwater and soil gas. A Site-specific risk assessment demonstrated a risk to human health due to vapor intrusion under residential land use scenarios. A Land Use Covenant to limit land use to commercial use was recorded on 15 June 2017. As the Site is not the source of the release, and the Responsible Party is willing to restrict land use, staff recommended closure of this case. The Site meets the general and site-specific criteria for case closure under the *Low-Threat Closure Policy*. The case was closed on 3 July 2018.

- **J.M. Equipment Company, 1245 W. Charter Way, Stockton, San Joaquin County**

J.M. Equipment Company (JMEC) removed two 1,000-gallon gasoline USTs in the early 1980's. San Joaquin County filed an Unauthorized Release Report in February 1997 following initial environmental assessment. JMEC conducted multiple phases of investigation and remediation between 1995 and 2017 and between September 2011 and December 2016 injected approximately 20,000 gallons of dilute hydrogen peroxide solution into the subsurface, destroying approximately 220 pounds of hydrocarbons.

As of December 2017, the extent of hydrocarbon impact to groundwater is less than 100 feet in length, there is no free product in groundwater, and no water supply wells or surface water bodies are within 250 feet of the Site, meeting the *Low-Threat Closure Policy's* Groundwater-Specific criteria by Scenario 1. The Site meets the remaining general and media-specific criteria for closure, and the case was closed on 29 October 2018.

- **Robbins Mercantile, 4895 Del Monte Ave, Robbins, Sutter County**

Robbins Mercantile (Robbins) filed an Unauthorized Release Report in May 1990 following discrepancies with fuel inventory reconciliation records. In January 1991 Robbins removed two fuel USTs from the Site and disposed of an unknown volume of soil off-site. Robbins conducted multiple phases of investigation and remediation between 1991 and 2017. Total petroleum hydrocarbons as gasoline (TPHg), benzene, and methyl tert butyl ether (MTBE) concentrations in groundwater decreased from maximum concentrations of 98,000, 6,700, and 140 micrograms per liter (ug/L), respectively, to 6,600, 920, and 8.2 ug/L, respectively. As of April 2017, the extent of hydrocarbon impact to groundwater is less than 100 feet in length, and there is no free product in groundwater. While there are no water supply wells within 250 feet of the Site, a drainage canal is located approximately 85 feet west of the Site, though groundwater data from monitoring wells placed between the Site and the canal indicate that residual petroleum hydrocarbons in groundwater present a low risk to the canal. The Site meets the rest of the general and media-specific criteria for closure in accordance with the *Low-Threat Closure Policy*, and the case was closed on 29 October 2018.

- **Yosemite Title Company, 208 South Washington Street, Sonora, Tuolumne County**

The Site is currently occupied by the Yosemite Title Company near various commercial and county office buildings on South Washington Street in Sonora, Tuolumne County. In 2016, a 1,000-gallon UST used to supply fuel to a heating boiler was discovered. In February 2017 the UST was filled with concrete and closed in-place due to the proximity of the tank to the building. Groundwater and soil samples collected from beneath the UST indicated that an unauthorized release of petroleum hydrocarbons had occurred. Due to the presence of subsurface utilities and structures groundwater monitoring wells were unable to be installed. However, vaults and sumps that were used to convey or remove groundwater were accessible for sampling in the immediate vicinity of the UST. Petroleum hydrocarbons were not detected in water samples collected from the nearby vault and sump during two sampling events. While residual petroleum hydrocarbons remain beneath the Site, the remaining petroleum constituents are unlikely to pose a threat to human health or impact waters of the State as they attenuate and Central Valley Water Board staff concurs with Condor Environmental's recommendation for regulatory closure in accordance with the *Low-Threat Closure Policy*. This site was closed on 24 October 2018.

- **Tuolumne Chevron, 18848 Carter Street, Tuolumne, Tuolumne County**

The Site is currently a non-operating service station near various residential properties on Carter Street in Tuolumne, Tuolumne County. In September 1998, during the relining of existing USTs, American Geological Services, Inc. (AGS) detected petroleum hydrocarbons in a soil sample from excavated soil. AGS conducted additional investigation of soil and groundwater, which indicated an unauthorized release of petroleum hydrocarbons had occurred at the Site. E₂C, an environmental consulting firm, removed two 10,000-gallon gasoline USTs and one 10,000-gallon diesel UST from the Site in April 2015. Between October 2006 and April 2015, approximately 950 pounds (151 gallons) of petroleum hydrocarbons were from the subsurface were removed by excavations and a DPES. While residual petroleum hydrocarbons remain beneath the Site, the remaining petroleum constituents are unlikely to pose a threat to human health or impact waters of the State as they attenuate and Central Valley Water Board staff concurs with E₂C's recommendation for regulatory closure in accordance with the *Low-Threat Closure Policy*. This site was closed on 5 November 2018.

c) **Local Agency UST Closures with Concurrence of Board Staff**

- Sutter Memorial Hospital, Former Elec Generators & Day Tanks Area, 5105 F Street, Sacramento. This site was closed on 9 November 2018.

STAFF RECOGNITION

At the 6/7 December Board meeting, Executive Officer Pulupa presented the following Sustained Superior and Superior Accomplishment awards

SUSTAINED SUPERIOR ACCOMPLISHMENT AWARD

Employee: Anne Littlejohn
Unit: Planning Unit
Title: Senior Environmental Scientist
Supervisor: Meredith Howard

Anne Littlejohn is the Senior of the Planning Unit in our Rancho Cordova Office. Anne is a dedicated, hardworking scientist who is skilled at working with diverse stakeholder groups to develop innovative solutions to complicated water quality problems. Anne has led several contentious projects, including a project to develop salinity objectives for the San Joaquin River upstream of the Delta and a project to establish a basin-wide process for evaluating the MUN beneficial use in agriculturally-dominated water bodies. Throughout her work, Anne has demonstrated a dedication to stakeholder engagement, which has helped her staff propose clear, fair and pragmatic recommendations for the Board's consideration. Under Anne's leadership, the Central Valley Water Board adopted both the San Joaquin River salinity objectives and the MUN evaluation amendments by August 2017.

Following the Board's adoption of these two projects, Anne redirected her staff to support a proposed Central Valley-wide Salt and Nitrate Control Program. The Salt and Nitrate Control Program was a high-priority project that required navigating not only controversial issues associated with the main policy, but also many ancillary controversies related to several supporting policies, including a revised Variance and Exception Policy, a new Drought and Conservation Policy, a new Offsets Policy, and new policy affecting the application of Secondary Maximum Contaminant Levels. Anne's efforts helped advance a 12-year stakeholder process that will support the environmental and economic sustainability of the Central Valley.

Even while taking on these efforts, Anne has been serving as the Program Manager of the Central Valley's Surface Water Ambient Monitoring Program (SWAMP). Under Anne's direction, SWAMP has provided additional staff and laboratory resources to all three offices, streamlined the collection of ambient water quality samples, expanded the scope of the Safe-to-Swim monitoring project, and supported verification monitoring for cyanobacteria hazardous algae blooms. Anne and her staff

have also initiated community engagement efforts to address elevated indicator bacteria levels along the American River.

Anne brings a positive and genuine attitude to all her day-to-day activities, which makes her a key contributor to Board initiatives as well as a pleasure to have on any team effort.

SUPERIOR ACCOMPLISHMENT AWARDS:

Employee: Matt Scroggins
Unit: NPDES Unit
Title: Senior Water Resources Control Engineer
Supervisor: Scott Hatton

Matt has been an employee in the Fresno office for 19 years and is approaching 8 years as the Senior Water Resource Control Engineer for the NPDES Unit. Matt is receiving this award for his hard work at managing staff and spending extra time in the office to complete his numerous tasks. He has successfully reduced the backlog of expired NPDES permits, assisted with major revisions to the NPDES permit template, and responds to inquiries from the public in a timely manner. He handles issues with staff and dischargers with a calm demeanor. He consistently reports to the NPDES Program Manager about the status of Fresno projects and ensures staff meet expectations and are productive. In addition to his NPDES responsibilities, he also manages staff that handle stormwater and 401 certifications.

Matt has recently encountered several vacancies within his unit that he has managed to fill. Tasks included drafting vacancy announcements, scheduling and completing interviews, and working with the hiring team to identify the most qualified applicant. Matt was able to fill those vacancies and provide a seamless transition within the unit and has completed an outstanding job of "on-boarding" new staff. One of the vacancies was for a staff member within his unit that Matt had mentored to become a Senior.

Matt has an institutional history of our office and is a "go-to" person for a variety of questions. He has a good rapport with stakeholders and is an asset to the office. Matt is a reliable and professional staff member and is very deserving of this award.

Employee: Michael Parker
Unit: Cannabis Regulatory Unit
Title: Engineering Geologist
Supervisor: Griffin Perea

Michael Parker is an Engineering Geologist in the Redding Cannabis Regulatory and Enforcement Unit and is being recognized for his outstanding work performance. Michael joined the Central Valley Water Board in December 2016 and has worked in the Cannabis Program since.

In this short time, Michael has made considerable contributions to the Redding Cannabis Regulatory and Enforcement Unit and to the Central Valley Board's Cannabis Program as a whole. When initially hired Michael quickly dove into learning both permitting and enforcement aspects of the newly formed Cannabis Program, ultimately taking a lead role in reviewing and processing several hundred backlogged applications shortly after being hired. In addition to performing permitting actions in the Redding office, Michael concurrently worked as the lead on several enforcement actions and assisted with a long term water quality study with the California Department of Fish and Wildlife within his first year.

The Central Valley Cannabis program has grown substantially since Michael was first hired, and without hesitation Michael readily took on the training and mentoring of new staff both in the Redding office and the Rancho Cordova office, despite having a heavy workload of his own. Michael has quickly become a go to person in the Redding office and has continually been willing to assist other staff in whatever capacity he can. Michael has aided in the planning and implementation of two large scale enforcement efforts in the summers of 2017 and 2018, which required extensive coordination and the ability to work well with large groups of people, at which he excelled. In addition to his core work, Michael has recently

served as a lead non-point source representative for assessing damage and aiding in recovery efforts from the Carr Fire.

Michael is required to balance numerous priorities and time schedules in his position. He has an outstanding work ethic and attitude and has been an integral team member for the Central Valley Board's Cannabis Program and the Redding office as a whole. The Central Valley Water Board is very fortunate to have Michael as part of its staff and greatly appreciates his contributions.

SUPERIOR ACCOMPLISHMENT AWARD FOR THE POST FIRE RESPONSE TEAM

1. Rich Muhl, Senior Environmental Scientist
2. Jorge Beltran, Water Resources Control Engineer
3. Scott Perrou, Environmental Scientist
4. Jeff Tierney, Water Resources Control Engineer
5. Taranjot Sahota, Environmental Scientist
6. Steve Rosenbaum, Senior Engineering Geologist
7. Cindy Au Yeung, Environmental Scientist
8. Christine Joab, Environmental Scientist

On July 27, 2018, the largest wildfire in California history, the Mendocino Complex Fire, started in Lake County and burned over 459,000 acres. The fire burned extensive areas in watersheds that are tributaries to Clear Lake, a drinking water source for tens of thousands of residents in disadvantaged communities in Lake County. Watersheds impacted by wildfires often have increased post-fire runoff and erosion, which can degrade water quality through increase in turbidity, organic carbon, nutrients, and other constituents.

The Central Valley Regional Board's post-fire response team: conducted field assessments to identify areas that need stabilization; secured funding for installation of erosion and sediment controls; worked closely with local, federal, and state partners as well as neighboring tribes; and are continuing to work on securing funding for laboratory analysis of surface water samples. Staff worked long hours to assess watersheds and initiate an erosion and sediment control installation contract prior to the start of the rainy season.

EMPLOYEE OF THE MONTH RECIPIENTS FOR NOVEMBER AND DECEMBER

SACRAMENTO OFFICE NOVEMBER 2018

Employee: Gurbinder Dhaliwal
Unit: Irrigated Lands Compliance & Outreach
Title: Scientist
Supervisor: Bob Ditto

Gurbinder is being recognized for his contributions to the Irrigated Lands Regulatory Program. His hard work and dedication have shown through with his ability to reach out to the agricultural community and coalition groups to obtain compliance with the Irrigated Lands Program.

In 2017, Gurbinder sent over 287 reminder letters and followed up with 172 notices of violation to growers who had not submitted their Annual Reports. The annual reports include the Farm Evaluation Plans and Nitrogen Management Plan Summary Reports. These reports are crucial to the success of the program as they provide important information about what the growers are doing. Through phone calls, tracking down new contact information and using information provided by the Office of Enforcement, Gurbinder received all outstanding annual reports.

Gurbinder was one of the first staff to schedule on-farm inspections based on missing annual reports. This process worked very well as the growers selected for inspection turned in the reports and help deliver the message to the grower community that you have a high probability of being inspected if you don't turn in your annual reports on time.

In 2018, the same coalition had 70 missing annual reports. Gurbinder has again been very successful in obtaining reports and we are down to a handful of growers left to respond. He is following up with on-farm inspections in the near future to obtain the remaining reports

Employee: Mark Bare
Unit: Federal Cleanup
Title: Engineering Geologist
Supervisor: Marie McCrink

Mark Bare is an Engineering Geologist in the Site Cleanup Program (SCP), Department of Defense (DoD) unit. Mark transferred to Region 5 from Region 2 in March of 2016 and has over 20 years of experience working on environmental cleanup and water quality projects throughout the United States. Since joining the Region 5, DoD unit, Mark has provided strong technical leadership and regulatory oversight at over 30 complex DoD and private sector cleanup sites. He has also taken a leadership role in our emergency response network. Mark manages all the daily OES spill reports for the Rancho Cordova office and has transitioned numerous spills into remediation cost recovery cases, which he manages to closure. To keep track of these sites Mark has developed a weekly OES reporting log and spreadsheet that provides management with up to date project details and the current status of OES reports received each week. The reporting log also provides information about staff follow-up on earlier spills and a summary of each spill report and how it was handled.

In addition to managing his DoD, cost recovery and OES projects, Mark is also writing the Office Emergency Response Plan's (ERP), for the Rancho Cordova, Redding and Fresno offices. These plans contain a comprehensive guide and step by step checklist for actions to be taken during wild fire, flood, earth quake and all other emergency response actions that occur in our region. The document that Mark has prepared provides references for OES and federal emergency response documents, critical state federal and local emergency response contact information and forms that may be used to update emergency response field actions or to request the critical resources needed to address emergency's when they arise in each office area. Most noteworthy is the ERP quick reference guide that Mark developed to ensure that executive management and incident commanders are provided a step by step process to identify and activate the critical staff and information needed to respond to an emergency. The quick reference guide also provides the incident commander information needed to determine which section of the document to use in a specific emergency, its primary function, and exactly where it is located in the 190 plus page document.

Mark is highly organized, efficient, and always follows through on his assignments with a positive and helpful attitude. It is a genuine pleasure to have Mark in our team.

SACRAMENTO OFFICE DECEMBER 2018

Employee: Jonathan Meurer
Unit: NPDES/Timber Harvest
Title: Engineering Geologist
Supervisor: Xuan Luo

Jonathan Meurer is an Engineering Geologist in the NPDES/Forest Activities unit in the Compliance and Enforcement section. He has been with the Central Valley Regional Board for 1.5 years. Before that, he worked at Region 1 in Forestry Activities, the Department of Water Resources, the Bureau of Reclamation, and was a meteorologist in the Air Force. Since joining the staff of Central Valley Water Board, Jonathan's infectious enthusiasm is constantly lifting the spirits of the Rancho Cordova office.

Jonathan presides over the Employee Association (or EA) where:

- He and the EA team organized, decorated, and orchestrated the office Holiday Party, which included a photo booth, white elephant gift exchange, and lots of food and dessert.
- He and the EA team announced on December 21st, that they had purchased "18 shiny new forks and 12 new spoons."

Jonathan created the popular weekly email installments called "Know Your Co-Worker" where a co-worker is selected at random to answer ten fun questions, including "Where is your dream place to live?" and "What is your definition of a perfect day?" In December 2018, we "met" Paul Sanders (December 5th), Heidi Deneke (December 14th), Steve Meeks (December 18th), and Bob Chow (December 28th).

All this while still completing timber harvest facility enrollments, terminations, and attending Board of Forestry meetings, while smiling constantly.

For all this and more, Jonathan is very deserving of this award

Employee: Rich Muhl
Unit: Program Support
Title: Sr. Environmental Scientist
Supervisor: Andrew Altevogt

Rich Muhl is a Senior Environmental Scientist in the Compliance and Enforcement section. After 20 years in the building materials industry, he went back to school and got a master's degree and joined the Central Valley Regional Board. He has been working at the Board in stormwater for over 17 years.

- Rich conducts stormwater inspections, assists with post-fire efforts, and participates in stormwater training.
- In December 2018, Rich worked diligently to unite Sacramento City, the American River Flood Control agency, and Reclamation District 1000 to cleanup a trash-laden section of Steelhead Creek in Sacramento. The trash was clogging the stream and likely preventing steelhead trout and chinook salmon from spawning. The effort had many challenges with over 70 homeless camps located in this area, a recent court case making it difficult to require homeless people to move, nearby homeless shelters at capacity, and pit toilets adjacent to the creek.
- The cleanup took 4 days. Each day, dozens of inmates participating on the Sheriff's Work Crew worked to remove trash. The American River Flood Control and Reclamation District-1000 provided heavy equipment and paid for landfill tipping fees.
- At the end of the creek cleanup, a staggering 120,000 pounds of trash had been removed.
- This was an urgent effort, as it was important to remove the trash prior to significant rain, which would wash the trash into the watershed, through the American River, and eventually to the San Francisco Bay.
- For all this and more, Rich is deserving of Employee of the Month.

REDDING OFFICE NOVEMBER 2018

Employee: Kelly Hickcox
Unit: Cannabis Permitting and Compliance
Title: Engineering Geologist
Supervisor: Elizabeth Betancourt

Kelly is receiving this award for his exceptional work in the Cannabis Permitting and Compliance Unit in the Redding office. He is new both to California and to the Water Board as of February of this year and has adapted to both readily. Kelly has the remarkable ability to review regulatory materials and get to the heart of the issue; with a new general order/WDR to implement, this skill has been invaluable to his team and to the broader cannabis program.

Kelly is incredibly mobile and adaptive and seems to fit in wherever he goes; he works well and effectively with third parties and dischargers throughout our region. His pragmatic approach to protecting water quality is appreciated by all, and he shares his new or surprising regulatory experiences with everyone in the unit so that we can all learn together. This has the added benefits of helping to maintain unit cohesion as well as a consistent regulatory approach throughout the unit. He's a good link, as well, with staff in other offices and with the enforcement unit, as he both conveys and gets information easily from others, enhancing cross-pollination. Kelly is not intimidated by a tricky, sensitive, or difficult task or issue, and has

handled such situations tactfully and professionally. Kelly's approach and attitude toward his work – which includes a significant amount of customer service interaction with our dischargers – is consistently professional, engaged, and without assumptions. He is a boon to our program and to the Water Boards, and I am pleased to be able to recognize him for his efforts.

REDDING OFFICE DECEMBER- 2018

Employee: Justin LaNier
Unit: Forest Activities
Title: Engineering Geologist
Supervisor: Angela Wilson

Justin is receiving this award for his contributions to the Forest Activities unit and program, our Redding office, and the Board as a whole. Justin joined the Central Valley Water Board in 2016, he has come up to speed quickly in an ever-changing and challenging program and has proven himself a valuable employee and coworker.

Justin currently handles all timber harvest plan review and inspection in Butte, Glenn and Tehama counties as well as overseeing the development of a unique U.S. EPA Watershed Based Plan for Battle Creek. However, for this award, Justin is being specifically recognized for his willing participation in the CAL FIRE-lead Watershed Emergency Response Team (WERT) organized to address human health and safety hazards in the wake of the Camp Fire in Butte County over the Thanksgiving holiday. The deployment requires initial training, long days of intense and emotionally impactful field work in areas destroyed by the fire, followed by days of report writing and review. As a result of his efforts we will be invited to participate in future WERT assessments in post-fire areas of the region, providing the Board with a unique opportunity to evaluate and contribute to addressing water quality related issues early in the recovery process.

Justin's analytical thinking and willingness to take on new challenges benefit his unit, the Redding office, the Board's Forest Activities Program and our sister agencies. He is thoughtful, engaged and professional in his work, and we appreciate his willing participation in the Watershed Emergency Response Team for the Camp Fire.

FRESNO OFFICE-NOVEMBER 2018

Employee: Paul Dotson
Unit: Site Cleanup/DOD
Title: Engineering Geologist
Supervisor: Russell Walls

In the month of October, Paul completed the following work:

- Reviewed and commented on nine work plans for various phases of groundwater investigations or groundwater remediation systems at nine separate sites contaminated by either petroleum or cleaning solvents.
- Sent letters requesting site assessment work plans for two former petroleum sites.
- Completed a technical memorandum and closure letter for a bulk petroleum storage facility.
- Sent letters to four dischargers regarding site access or cost recovery issues.
- Attended a meeting and conducted an inspection at a former Department of Defense site.
- Met with dischargers regarding a historical crude oil leak.

Paul maintains a positive and professional demeanor. He willingly works on any project he is given and meets deadlines. Paul has completed a high volume of quality work since he began in November 2017.

His draft documents require minimal editing and his technical knowledge is excellent.

FRESNO OFFICE- DECEMBER 2018

Employee: Omar Mostafa
Unit: WDR Compliance & Enforcement Unit
Title: Water Resources Control Engineer
Supervisor: Warren Gross

Omar is receiving this award for his work in the WDR Compliance & Enforcement Unit. Omar has been consistently performing excellent work. He plans and completes inspections methodically and produces quality first drafts of inspection reports and staff/enforcement letters. He communicates well with his senior and with dischargers. Omar tracks his outputs through the review process and alerts his senior when something appears to have stalled, to keep the work moving forward. He has embraced new tasks outside his normal workflow, such as preparation of a letter of applicability for the small system general permit. His work is well organized, methodical, and good quality. For his consistent quality work and effort and excellent contribution to our mission, Omar is recognized as the December Employee of the Month for the Fresno Office.

ENFORCEMENT

Enforcement is a critical ingredient in creating deterrence needed to encourage the regulated community to anticipate, identify, and correct violations. Appropriate penalties and other consequences for violations offer some assurance of equity between those who choose to comply with requirements and those who violate them. It also improves public confidence when government is ready, willing, and able to back up its requirements with action. This section of the Executive Offer's Report (EO Report) is intended to inform the Board and the public on enforcement efforts since the last EO Report was issued. For this reporting period, the following sections provide: 1) a summary of enforcement orders issued; and, 2) a summary of *all* enforcement actions issued.

1. **Orders and Complaints Issued or Adopted** – Enforcement Table 1, included below, provides a summary of all of the Enforcement Orders (Cleanup and Abatement Orders; Cease and Desist Orders; 13267 Investigative Orders; and Administrative Civil Liability (ACL) Orders and Complaints) that have been issued by the Central Valley Regional Board or staff since the previous EO Report and that are recorded in the California Integrated Water Quality System (CIWQS) database.

Enforcement Table 1 – Region 5 Enforcement Orders (1 November 2018 through 3 January 2019)

Action Date	Agency	County	Notes
11/7/2018	Linda County Water District	Yuba	Expedited Payment Letter (EPL) R5-2018-0535 in the amount of \$3,000 addresses mandatory minimum penalties (MMPs) for effluent limitation violations that occurred between 1 May 2017 through 31 July 2018.
11/13/2018	Teng Vang	Shasta	Administrative Civil Liability Complaint (ACL Complaint) R5-2018-0528 issued in the amount of \$139,425 for violations of Cleanup and Abatement Order (CAO) R5-2017-0701.
11/13/2018	Alexandra Kensavath	Shasta	ACL Complaint R5-2018-0528 in the amount \$150,000 for violations of CAO R5-2016-0712.
11/13/2018	Allied Washoe Petroleum	Plumas	ACL Complaint R5-2018-0561 issued in the amount of \$660,521 for failure to submit Corrective Action Plan (CAP) and Quarterly Monitoring Reports.
11/16/2018	Dutra Farms, Inc.	San Joaquin	EPL R5-2018-0524 issued in the amount of \$6,000 for MMP effluent limitation violations that occurred between 1 July 2015 and 30 June 2018.
11/28/2018	Mountain House CSD	San Joaquin	EPL R5-2018-0536 issued in the amount of \$15,000 for MMP effluent limitation violations.
11/30/2018	City of Roseville	Placer	EPL R5-2018-0526 issued in the amount of \$9,000 for MMP effluent limitation violations that occurred between 1 January 2018 and 30 June 2018.
12/3/2018	Ameripride Services, Inc.	Sacramento	EPL R5-2018-0523 issued in the amount of \$3,000 to address an MMP violation for late reporting.
12/4/2018	Mr. and Mrs. Bobby E. Tharp	Plumas	CAO R5-2018-0711 issued to compel the responsible parties to assess and remediate subsurface contamination beneath the subject site.

Enforcement Table 1 (cont'd.)

Action Date	Agency	County	Notes
12/6/2018	Knife River Construction	San Joaquin	EPL R5-2018-0531 in the amount of \$3,000 to address an MMP effluent limitation violation that occurred between 1 April 2017 and 30 June 2017.
12/17/2018	Sterling Caviar, LLC.	Sacramento	EPL R5-2018-0527, issued in the amount of \$6,000, addresses MMP effluent limitation violations that occurred between 1 January 2015 and 31 July 2018.
12/17/2018	Donner Summit Public Utilities District	Nevada	EPL R5-2018-0527, issued in the amount of \$3,000, addresses MMP effluent limitation violations that occurred between 1 January 2018 and 30 June 2018.
12/24/2018	City of Tracy	San Joaquin	EPL R5-2018-0527, issued in the amount of \$6,000, addresses MMP effluent limitation violations that occurred between 1 June 2013 and 30 March 2018.
12/24/2018	California Department of Corrections & Rehabilitation	San Joaquin	EPL R5-2018-0525 issued in the amount of \$6,000 for effluent limitation violations that occurred between 1 January 2018 and 30 June 2018.

2) **Enforcement Update** – Enforcement Table 4, included below, summarizes the enforcement actions issued in all the Regions for the current fiscal year. From a statewide perspective, Region 5 is responsible for 50% of the enforcement actions tracked in CIWQS during this period including 57% of all NOV's and 48% of all ACL's.

Enforcement Table 2 – Statewide Enforcement Actions in CIWQS (1 November 2018 through 3 January 2019)

Region	VER	SEL	NOV	NNC	13267	TSO	CAO	EPL	ACL	Total
1	0	1	0	0	1	0	0	0	0	2
2	0	1	0	0	0	0	0	20	1	22
3	0	0	1	1	0	0	1	0	1	4
4	4	0	24	15	1	0	0	1	4	49
5F	3	1	6	0	0	0	0	0	0	10
5R	5	0	11	0	0	1	1	0	3	21
5S	10	0	24	151	0	0	0	3	7	195
RBS Total	18	1	41	151	0	1	1	3	10	226
6	2	5	2	14	0	0	0	0	0	23
7	0	0	2	0	0	0	0	0	2	4
8	10	9	0	62	0	0	0	1	1	83
9	2	27	2	0	0	0	0	8	2	41
Total	36	44	72	243	2	1	2	33	21	454
Enforcement Actions:										
VER = Verbal Communication					TSO = Time Schedule Order					
SEL = Staff Enforcement Letter					CAO = Cleanup and Abatement Order					
NOV = Notice of Violation					EPL = Expedited Payment Letter					
NNC = Notice of Non-Compliance					ACL = Administrative Civil Liability					
13267 = Water Code Section 13267 Investigative Order										

In addition to the above, the following enforcement actions were recorded in GeoTracker and not in CIWQS:

Enforcement Table 3 – Region 5 Enforcement Actions in GeoTracker (1 November 2018 through 3 January 2019)

Enforcement Actions	Count
NOV	9
13267 Order / NOV	2
CAO	1
TSO	1
Verbal Enforcement	1
Total	14

Finally, the Regional Board's Irrigated Lands Regulatory Program (ILRP) does not upload enforcement action data to the CIWQS or GeoTracker databases. A summary of those enforcement actions are included in Table 3, below.

Enforcement Table 4 – Region 5 ILRP Enforcement Actions (1 November 2018 through 3 January 2019)

Office	Water Code Section 13260 Letters/Directives for Failure to Enroll in ILRP	NOVs for Failure to Respond to 13260 Directives	NOVs for Failure to Submit 2017 Farm Evaluation and/or Nitrogen Management Plan Summary Report	Total
Fresno	61	0	0	61
Sacramento	0	15	220	235
Total	61	15	220	296

SANITARY SEWER OVERFLOWS AND COMPLAINTS

Sanitary Sewer Overflows (SSOs) in Excess of 50,000 gallons

There was one SSO event in excess of 50,000-gallons between October and November 2018.

City of Galt Sanitary Sewer Collection System, City of Galt, Sacramento County

On 29 November 2018, Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff were informed by the Wastewater Treatment Plant Operator (Operator) for the City of Galt (Discharger) about a Category 1 SSO spill that occurred on 28 and 29 November 2018 at Live Oak lift station and a manhole located on Life Oak Avenue about 600 feet from the Live Oak lift station. According to reports submitted by the Discharger, the spill was caused by a storm-related power outage which dropped off power and caused all four lift station's sewage pumps to be unavailable.

In addition, a failure in the call-out system or SCADA software prevented an automated phone call-out to the on-call person on duty. At the time of the spill the Operator estimated 1,000 gallons entered Dead Man Gultch waterway. On 30 November 2018, Central Valley Water Board staff requested a five-day report from the Discharger. On 3 December 2018, Board staff received the California Office of Emergency Services (Cal-OES) report #18-8098 and an updated spill volume, which had been increased to 301,000 gallons. On 20 December 2018, Central Valley Water Board staff issued a notice of violation letter for a violation of prohibitions of Sanitary Sewer Systems Waste Discharge Requirements (WDRs).

The following issues are being investigated by the City of Galt:

- determine the cause of the call-out failure;
- develop a redundancy to the call-out system;
- identify a method to prevent pump failure during power outages; and,
- develop new Standard Operating Procedures (SOPs) to reduce the potential for future incidents like this one.

For this reporting period, there were **249** total SSO spills: **21** Category 1, **6** Category 2, and **222** Category 3 spills. Relevant data from all the spills occurring during this reporting period is included as **Attachment A**.

Additional Information on SSOs

Additional information regarding SSOs—including the current Monitoring and Reporting Program (MRP)—can be found at the State Water Board's webpage at:

http://www.waterboards.ca.gov/water_issues/programs/sso/index.shtml. Sewage Collection Agencies report SSOs on-line at the State Water Board's CIWQS database pursuant to the requirements of State Water Board Order No. 2006-0003-DWQ (*General Statewide Waste Discharge Requirements for Sewage Collection Agencies*).

COMPLAINTS AND OTHER WATER QUALITY THREATS OR IMPACTS

Complaints

Central Valley Regional Board staff are responsible for responding to complaints related to water quality within the Central Valley Region as they are received. Since implementing a new tracking system in December of 2016, Central Valley Water Board staff have logged **403** complaints from phone calls, emails, and from the CalEPA Complaint database

(<https://calepacomplaints.secure.force.com/complaints/>). To date, **355 (88%)** complaints have been investigated and closed or referred to another environmental enforcement agency. Investigations for the remaining **48** complaints remain ongoing.

Performance Targets

Performance measurement and reporting is an important component of a complete system of performance management needed to demonstrate how well programs or strategies are working and why. Information obtained through better performance measurement and program evaluation provides insight that enables us to understand and replicate successes, and continuously improve programs. To this end, the Water Boards establish annual performance targets for key output measures. In effect, these targets are goals that establish measurable levels of performance to be achieved within a specified time period. The Water Board has a systematic target setting approach for several of its programs. Using this new method, performance targets are based on available resources and uniform cost factors for key workload outputs. This target setting approach is described in the link below and was used to develop the FY 2018-2019 performance targets http://www.waterboards.ca.gov/about_us/docs/resource_alignment_report.pdf.

Region 5 Performance Measurement Summary from 1 July 2018 through 3 January 2019						
Programs	Original Target	* Actuals: Permits or Facilities Inspected	% Complete = Actuals/Original Target	Revised Target	** Total # of Inspections Performed	Comments
NPDES Wastewater						
Major Individual Permits Issued, Revised, and Renewed	8	3	38%	n/a	n/a	
Major Individual Facilities Inspected	24	11	46%	n/a	12	
Minor Individual Permits Issued, Revised, and Renewed	12	4	33%	n/a	n/a	
Minor Individual Facilities Inspected	17	9	53%	n/a	9	
Minor General Enrollees Facilities Inspected	0	1	N/A	n/a	1	
Waste Discharge to Land – Wastewater						
Municipal Waste, Industrial Waste, and All Other Facilities - Permits Past Review Date Updated	26	8	31%	n/a	n/a	
Municipal Waste, Industrial Waste, and All Other Facilities - Number of Inspections	161	77	52%	n/a	84	
Land Disposal						
Landfills Permits Issued, Revised, and Renewed	13	6	46%	n/a	n/a	
Landfill Inspections	111	35	52%	n/a	58	
All Other Permits Issued, Revised, and Renewed	2	2	100%	1	n/a	
All Other Inspections	30	31	117%	n/a	35	
NPDES Storm Water						
Stormwater Construction Inspections	385	156	48%	n/a	186	
Stormwater Industrial Inspections	195	100	53%	n/a	103	
Stormwater Municipal Inspections	0	1	N/A	n/a	1	
Other Programs						
Forest Activities Inspections	166	123	77%	n/a	128	
Confined Animal Facility Inspections	275	113	42%	n/a	115	
Clean Up						
New DoD Sites Into Active Remediation	6	33	550%	n/a	n/a	A McClellan Finding Of Suitability For Early Transfer (FOSET) which was expected in FY17/18 was completed in FY18/19.
New SCP Sites Into Active Remediation	50	16	32%	n/a	n/a	
Cleanup Program Sites Closed	60	27	45%	n/a	n/a	
New UST Sites Into Active Remediation	23	13	57%	n/a	n/a	
Underground Storage Tank Sites Closed	68	52	76%	n/a	n/a	
* Actuals: Number of facilities inspected or permits issued.						
** Total #: Number of inspections completed including all reinspections.						

DELTA ACTIVITIES

1. Delta Mercury Exposure Reduction Program

The Delta Mercury Exposure Reduction Program (MERP) is a collaborative effort of the Central Valley Water Board, the California Department of Water Resources (DWR), the Delta Conservancy, and the Office of Environmental Health Hazard Assessment (OEHHA). It is supported by funds from the Cleanup and Abatement Account and Delta dischargers subject to the Delta Mercury Control Program. The goal of the Delta MERP is to protect public health by reducing exposure to methylmercury in fish caught in the Delta.

In November, MERP staff approved a proposal from a non-profit community organization for outreach and education activities in Fiscal Year (FY) 2018-19. This Community Grant recipient, Rio Vista C.A.R.E.S. works closely with First 5 and the Women, Infant, and Children Program (WIC). Rio Vista C.A.R.E.S. provides a variety of programs and services for children prenatal through age 5 and their families to optimize early childhood development. Collaboration with WIC staff to incorporate the MERP fish consumption advisory message into existing programs for children and their families will be a sustainable opportunity to continue educating the public how to reduce mercury exposure through fish consumption. This is the fourth grant MERP has funded this fiscal year.

On December 18, The Mercury Exposure Reduction Program staff posted four additional fish consumption advisory signs in the Central and South Delta Advisory region. Consumption advisory signs were posted at sites with public fishing access. Staff is continuing to coordinate with local entities and planning for additional posting sites in 2019.

2. Delta Regional Monitoring Program (Delta RMP)

In October 2018 the RMP Steering Committee (SC) allocated funding to develop a Contaminants of Emerging Concern (CEC) Quality Assurance Program Plan (QAPP) and begin the planning phase for monitoring CECs in the Central Valley. On 11 December 2018, the CEC subcommittee met to discuss cost estimates and scoping for a monitoring plan. The subcommittee also discussed the scope and timeline for the Proposition 1 Grant Proposal that the Aquatic Science Center (ASC) submitted for CEC funding. Monitoring is scheduled to begin in FY 2019-20.

Delta RMP mercury sampling for water and fish tissue for FY 2018-19 has commenced. The SC previously approved additional winter water sampling events to support seasonal and annual mass balance estimates. The Mercury Subcommittee met to forecast mercury monitoring budgets for future mercury data needs beyond the planned 2022 Delta Mercury TMDL update. The Delta RMP Mercury Subcommittee also discussed how to coordinate with and support a separate USGS Delta Mercury Study that will provide relevant information to both mercury studies.

Presenters at the Society of Environmental Toxicology and Chemistry's (SETAC) 39th Annual Meeting mentioned and/or referenced the Delta RMP several times during the international conference held from 4–8 November 2018 in Sacramento. It is a major accomplishment for the Delta RMP to be recognized and discussed on an international platform such as SETAC. Prior to that, in September the Delta RMP presented a poster at the Bay-Delta Science Conference where several scientific talks discussed Delta RMP data.

In November, Board staff met with Surface Water and Ambient Monitoring Program (SWAMP) and ASC staff to identify next steps to finalize the draft Delta RMP QAPP for FY 2018-19 monitoring and in December the QAPP was sent to reviewers for signatures. To ensure adequate time for planning future monitoring efforts, the SC is starting a new Multi-Year Planning Process for the FY 2020-21 workplan that includes a Summer 2019 long-term planning workshop.

The Delta high-frequency nutrients monitoring team completed a fall 2018 three-day sampling event covering most of the major Delta waterways. The Nutrient Subcommittee met jointly with the Delta

Nutrient Stakeholder & Technical Advisory Group to discuss project proposals under development for the Science Action Plan.

On 19 December, the RMP conducted its first of six pesticides and toxicity sampling events of the year, targeting the first major storm event expected to bring runoff into the Delta. The focus of the sampling was along the Sacramento River and the Yolo Bypass-Cache Slough subregions at six randomly selected locations and at two fixed sites. For each sample, 172 different pesticides will be analyzed along with a five-species toxicity test. The Pesticide Subcommittee held a teleconference with Deltares to discuss which datasets will be included in their report titled, "Analysis and Interpretation of Pesticides and Toxicity Monitoring Data in the Sacramento and San Joaquin Delta". Deltares is the contractor that is preparing the report to be completed in spring 2019.

3. Delta Nutrient Research Plan

Following the Central Valley Water Board's approval of the Delta Nutrient Research Plan on 2 August 2018, staff and stakeholders have been working on implementation. The final Delta Nutrient Research Plan, meeting information, and supporting documents can be found at: https://www.waterboards.ca.gov/centralvalley/water_issues/delta_water_quality/delta_nutrient_research_plan/

Stakeholder Involvement. The Delta Nutrient Research Plan Stakeholder and Technical Advisory Group (STAG) and the Delta Regional Monitoring Program's Nutrient Subcommittee met jointly five times between March and November 2018. The two groups merged to improve participants' meeting efficiency and avoid duplication of efforts. During the 26 November nutrients stakeholder meeting, participants discussed possible outcomes of a future nutrients workshop and identified possible projects to be funded by the Delta RMP. The next Delta nutrients stakeholder meeting is 14 January.

Water Board Implementation Efforts. The status of projects that are funded by or significantly involve Water Board staff are described below.

- Staff is working with California Department of Fish and Wildlife (CDFW) to develop an interagency grant agreement for a project to monitor cyanobacteria toxins (microcystins) in water and clams for 2 years at selected locations in the Delta. With an external research team, Central Valley Water Board staff applied for and was awarded grant funding for the project. The funds were available through Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Prop 1). After execution of the agreement with CDFW, contracts between the Water Boards and external partners for sample collection and laboratory analyses will be needed. On 6 December 2018, the Central Valley Water Board adopted Resolution R5-2018-0078 authorizing acceptance of the grant funds.
- Staff has begun collecting data on nutrients and cyanobacteria blooms in Discovery Bay. A representative of the Discovery Bay Community Foundation is assisting with sample collection.
- A contract between the Water Boards and the San Francisco Estuary Institute to continue development of a biogeochemical model for nutrient cycling and phytoplankton growth has been executed. Work begins with a kick-off meeting between project staff in January.

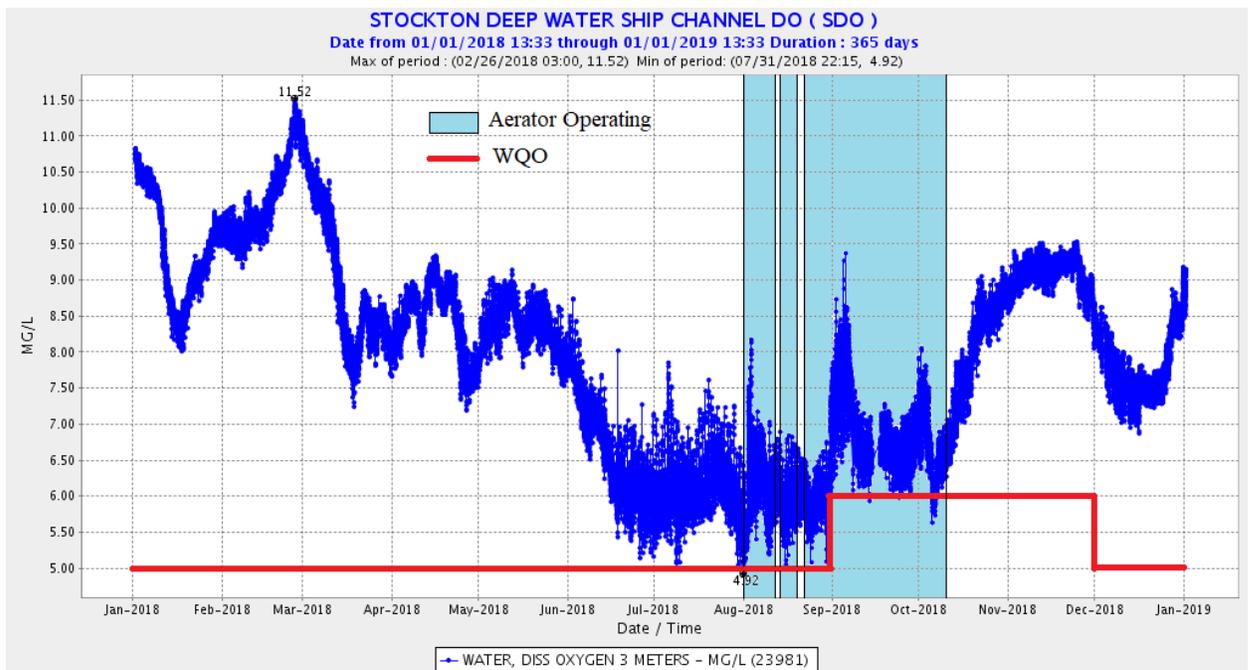
4. San Joaquin River Dissolved Oxygen TMDL Implementation - Aeration Facility 2018 Summary

Dissolved oxygen and other water quality parameters in the Stockton Deep Water Ship Channel (DWSC) (dredged portion of the San Joaquin River) are measured at three depths below the surface (1-meter, 3-meters and 6-meters) at the Department of Water Resources Rough and Ready Island water quality monitoring station. The DWSC historically had a low dissolved oxygen impairment, and a TMDL control program was adopted in 2005. Since 2011, when dissolved oxygen concentrations are expected to fall below the dissolved oxygen water quality objective, the Port of Stockton operates an aeration device located on Rough & Ready Island that increases dissolved oxygen concentrations in the river. Stakeholders of the San Joaquin River Dissolved Oxygen TMDL Control Program operate the aeration

device under a voluntary aeration agreement. The current agreement will expire May 31, 2019. A new agreement will need to be executed before that date to continue funding operations.

For determining when to operate the aerator, the Port of Stockton evaluates numerous factors such as the flow in the river, upstream water quality conditions, weather conditions, and current dissolved oxygen measurements in the channel. In 2018, there were three extended periods during which the aerator was operated to increase Dissolved Oxygen concentrations. The aeration facility was operated from August 2-14, August 16-21, and August 24-October 10 for a total of 67 days.

The figure below shows the dissolved oxygen concentrations measured every 15 minutes at the 3-meter depth station at Rough and Ready Island January through December. The water quality objective is 5 mg/L December through August and 6 mg/L September through November.



For more information on the San Joaquin River/DWSC dissolved oxygen TMDL Control Program:

https://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/san_joaquin_oxygen/index.shtml

TMDL BASIN PLANNING

1. Pesticide Basin Planning/TMDLs

Central Valley Pyrethroids Basin Plan Amendment and TMDL

On 8 June 2017 the Board adopted the Basin Plan Amendment for the Control of Pyrethroid Pesticide Discharges. The State Water Board approved the Basin Plan Amendment on 10 July 2018. The amendment still needs to be approved by the Office of Administrative Law (OAL) and US EPA before becoming fully effective. OAL's approval decision is expected in February 2019, and EPA's decision by approximately May 2019. It is possible that the EPA review may be impacted by the federal government shutdown.

On 5 December, Jessica Mullane and Danny McClure, along with State Water Board, Environmental Laboratory Accreditation Program (ELAP) and Office of Information Management and Assessment (OIMA) staff, participated in the second meeting of an Environmental Laboratory Technical Advisory Committee (ELTAC) Pyrethroid Workgroup. This workgroup, which consists of representatives from laboratories around the state, will be coordinating an effort to validate methods for pyrethroid chemical analysis with lower detection and quantification/reporting limits to support control program monitoring requirements. Once a method is validated, laboratories will be able to be accredited by ELAP to run those methods.

In December 2018, a contract was finalized with UC Davis to fund research into pyrethroid partition coefficients (factors which can be used to estimate pyrethroid "bioavailability", or the amount of pyrethroids in a sample that are likely to contribute to toxicity). Work on the contract will go through January 31, 2021.

Staff will be scheduling meetings with stakeholders in early 2019 to discuss progress and get feedback on implementation and begin working on development of the Pyrethroid Research Plan.

2. Delta Mercury Control Program

During Phase 1 of the Delta Mercury Control Program (DMCP), the Central Valley Regional Water Quality Control Board (Board) required entities responsible for reducing methylmercury in the Delta to participate in studies to develop and evaluate ways to manage methylmercury. In 2012 an independent, technical advisory committee was formed to review methylmercury control study workplans and provide advice to the Board and entities to ensure effective studies. Control Studies focused on different methylmercury source types by means of monitoring, pilot testing, or modeling. Most dischargers submitted their control study final reports in October 2018. The DMCP requires reconvening of an advisory committee to review the final reports. The Board will consider the findings and recommendations of the advisory committee as part of its reconsideration of the entire DMCP.

In December 2018 the Delta Stewardship Council agreed to fund and convene an independent scientific peer review and advisory panel to review the methylmercury control study final reports, conclusions, and the effectiveness of control actions proposed by the dischargers subject to the DMCP. In addition, after identifying data and information gaps that still need to be addressed for mercury and methylmercury controls, the advisory panel will be asked to provide recommendations for further studies, implementation plans, and advise on the criteria to prioritize proposed recommendations. Board and Delta Stewardship Council staff and stakeholders are currently developing a scope of work for the panel.

SALINITY AND CV SALTS

1. **Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS)**

The CV-SALTS Central Valley-wide Salt and Nitrate Management Plan (SNMP) was completed and submitted to the Board on 12 January 2017. A resolution acknowledging receipt of the SNMP and directing staff to begin basin plan amendment work to implement the SNMP as appropriate was adopted at a 9 March 2017 hearing. Final copies of the SNMP and related policy documents can be found at:

https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/salt_nitrate_mgtplan/

The Basin Plan Amendment (Salt and Nitrate Control Program BPA) with supporting Staff Report and Substitute Environmental Documentation was adopted on 31 May 2018 (Resolution R5-2018-0034). The amendments must be approved by the State Water Resources Control Board, Office of Administrative Law and for those portions subject to the Clean Water Act, by the USEPA. The Adoption Resolution with the final Staff Report and Basin Plan Amendment language can be found at the following location:

https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/#saltnitrate_cp_bpa

As staff work to bring the amendments to the State Water Board for consideration, focused stakeholder meetings are continuing through the CV-SALTS Public Education and Outreach Committee and a Clean-up and Abatement Account grant to initiate pilot studies for working with local dischargers and agencies to identify and provide safe drinking water to users with elevated nitrate in groundwater supplies and to frame the workplan for the salinity Prioritization and Optimization Study.

2. **Lower San Joaquin River Salt and Boron Water Quality Objectives (WQOs)**

On 9 June 2017, the Board adopted the proposed Basin Plan Amendment (BPA) and supporting draft Staff Report to establish salinity WQOs on the Lower San Joaquin River. A State Board hearing was held on 9 January 2018 and the BPA was unanimously approved by the State Board members. The amendment was then approved by the Office of Administrative Law on 19 April 2018. The final step of the basin planning process was completed with U.S. EPA's approval on 17 December 2018. The approved BPA establishes an effective date of 1 January 2020 for the new salinity WQOs in the Lower San Joaquin River.

Information on this basin plan amendment and supporting projects can be found at:

http://www.waterboards.ca.gov/centralvalley/water_issues/salinity/upstream_salt_boron/index.shtml

3. **Evaluation of Municipal and Domestic Supply (MUN) Beneficial Use in Ag Dominated Surface Water Bodies**

On 11 August 2017, the Board adopted the proposed Basin Plan Amendment to develop a region-wide MUN evaluation process in Ag dominated surface water bodies. A State Board hearing to consider approval of the Basin Plan Amendment was held on 10 July 2018. State Board members deferred their decision on the amendments to a future date. Central Valley Water Board staff are continuing to work with State Board staff to address questions and concerns that were raised during the 10 July hearing and identify next steps.

More information on the project can be found at:

http://www.waterboards.ca.gov/centralvalley/water_issues/salinity/mun_beneficial_use/index.shtml

4. **CV-SALTS Meeting Participation**

On 15 November 2018 and 10 January 2019, Patrick Pulupa, Anne Littlejohn and Walter Plachta participated in the CV-SALTS Executive Committee meetings. Discussions focused the Basin Plan Amendment Approval process, program implementation planning, and grant activities relating to the development of early Management Zone evaluations, the Salinity Prioritization and Optimization Study work plan and other Salt and Nitrate Control Program outreach activities.

On 4 December 2018 and 8 January 2019, Anne Littlejohn and Walter Plachta participated in the CV-SALTS Public Outreach and Education Committee conference call meetings. The meetings focused on outreach tracking, the workshops for public outreach held in Modesto and Tulare on 12/13 December 2018, and the 2019 Communication Plan.

On 12 December 2018, Anne Littlejohn, Meredith Howard and Sue McConnell attended the CV-SALTS public workshop held in Modesto. On 13 December 2018, Clay Rodgers attended the CV-SALTS public workshop held in Tulare. The workshops provided stakeholders with a general overview of the Nitrate Control Program, including the management zone permitting approach. The workshops also included a Q&A session with panel members representing different sectors such as agriculture, dairies and municipalities.

5. **United States Bureau of Reclamation (USBR)—Management Agency Agreement (MAA)**

An MAA meeting with Central Valley Water Board staff (Anne Littlejohn and James Brownell) and representatives for USBR, the Westside San Joaquin River Watershed Coalition, and the Grassland Water District was held on 3 December 2018. The discussion centered around activities supporting the San Joaquin River Real Time Management Program activities (RTMP). The next quarterly MAA meeting is scheduled for 18 March 2019.

SURFACE WATER AMBIENT MONITORING PROGRAM (SWAMP)

1. **Lower American River Beneficial Use Assessment**

The Lower American River has been listed as impaired due to indicator bacteria on California's 303(d) List. SWAMP is coordinating with local agencies to develop a source identification and pathogen monitoring plan in 2019 for this portion of the river. To keep the public and local agency partners informed about current conditions, SWAMP is collecting weekly *E. coli* samples in the Lower American River and Steelhead Creek and posting results to an [online map](#).

2. **Post-fire Monitoring in the Butte Creek Watershed**

SWAMP is coordinating with other regional board programs and state agencies on post-fire monitoring in areas impacted by the November 2018 Camp Fire in Paradise, CA. Current monitoring efforts are focused on assessing conditions during and after winter storm events using water quality samples collected from streams and creeks in the Upper Butte Creek Watershed near the town of Paradise.

More information on the Central Valley Water Board's SWAMP program can be found at: https://www.waterboards.ca.gov/centralvalley/water_issues/swamp/

NPDES

General Orders

The Central Valley Water Board has issued several NPDES general orders to streamline the permitting process for similar-type discharges. Where existing NPDES permittees meet the eligibility requirements of the general orders staff seek to enroll the permittees under the general orders to streamline the permitting process. NPDES Table 1, below, summarizes the Notices of Applicability that were issued between 1 July 2018 and 31 December 2018.

NPDES Table 1

Facility	General NPDES Permit Number	General Permit Name
Patterson Sand and Gravel Facility Dewatering Project	R5-2016-0076-045	General Waste Discharge Requirements/NPDES Permit for Limited Threat Discharges to Surface Waters
Ralston Afterbay Dam Low Level Outlet Project	R5-2016-0076-042	
Kiefer Landfill Groundwater and Extraction and Treatment Plant	R5-2016-0076-033	
Southport Levee Improvement Project	R5-2016-0076-046	
Balsam Meadows Hydroelectric Project/Eastwood Powerhouse Facility	R5-2016-0076-047	
IPT Tracy Building II Construction Dewatering Project	R5-2016-0076-048	
Gopher Hill Landfill Leachate Disposal (amended NOA)	R5-2016-0076-022	
DWR Hyatt Waterline Project	R5-2016-0076-050	
El Dorado Irrigation District El Dorado Hills Wastewater Treatment Plant, El Dorado County	R5-2017-0085-002	Municipal Wastewater Dischargers That Meet Objectives/Criteria at the Point of Discharge to Surface Water

Storm Water

San Francisco Bay Water Board Municipal Separate Storm Sewer System (MS4) Permit for Eastern Contra Costa County Municipalities

The Cities of Antioch, Brentwood, and Oakley, Contra Costa County, and the Contra Costa County Flood Control and Water Conservation District (eastern Contra Costa municipalities) are members of the Contra Costa Clean Water Program (CCCWP), a countywide organization that assists municipalities with coordinated storm water permitting and compliance. The CCCWP implements required pollution prevention activities and public outreach. Contra Costa County is split between the jurisdictions of the San Francisco Bay and Central Valley Water Boards. Therefore, storm water permits have been issued to the eastern Contra Costa municipalities from both Regional Boards. Since the CCCWP serves municipalities under the jurisdiction of both Regional Boards, in Fall of 2016 the eastern Contra Costa municipalities submitted requests seeking designation of a single Regional Water Board to regulate permitting of MS4 discharges located within eastern Contra Costa County.

In January 2017, the Executive Officers of the Central Valley Water Board and San Francisco Bay Water Board agreed to designate the San Francisco Bay Water Board to regulate MS4 discharges from the eastern Contra Costa municipalities, including those areas located within the Central Valley Water Board's geographic jurisdiction.

The San Francisco Bay Water Board is scheduled to amend its Regionwide MS4 permit, Order R2-2015-0049, at its February 2019 board meeting to incorporate the eastern Contra Costa municipalities.

401 Certifications/Dredging

Programmatic 401 Water Quality Certification for South Sacramento Habitat Conservation Plan

The County of Sacramento is developing a Habitat Conservation Plan (HCP) that will service the south Sacramento area. The 50-year plan will allow for projects to address habitat conservation for mitigation proposed by development projects in the service area. The United States Army Corps of Engineers (USACOE), Sacramento District has been coordinating with plan partners since 2004 to implement a streamlined approach to permitting. The USACOE and Central Valley Water Board staff have begun discussions to create a programmatic water quality certification under section 401 and programmatic permit through section 404 of the Clean Water Act. Using a programmatic approach to the HCP will be the first of its kind in the state of California and could potentially allow for a guide for future HCP permitting approaches. The certification will be presented to the Central Valley Water Board for adoption during Fiscal Year 2018/19.

Dredging

In March 2018, Nicholas White, James Marshall, David Lancaster, and Adam Laputz began work toward drafting a Memorandum of Understanding between the United States Army Corps of Engineers (USACOE), San Francisco District, and the Central Valley Water Board that addressed operations and maintenance dredging activities occurring within the Stockton and Sacramento Deep Water Ship Channels (DWSC).

On 17 May 2018, an interim MOU to cover 2018 activities was signed by both agencies. A Turbidity Monitoring Plan and 2018 Dredging Timeline was submitted by the USACOE for review in June 2018 that identified actions specific to the 2018 maintenance dredging period.

In early 2019, coordination between the USACOE and Central Valley Water Board staff will continue toward a permanent MOU for ongoing operation and maintenance dredging activities with the Stockton and Sacramento DWSC. Discussions on the permanent MOU are ongoing between USACOE and Central Valley Water Board staff.

DAIRIES/CONFINED ANIMAL FACILITIES

Dairy Inspections

The Confined Animal Facilities Program's FY2018/2019 performance target for dairy facility inspections is 275. Staff have completed 110 inspections to date. With the increase in inspections that occurs during wet weather season, the Program is on track to meet the performance target. During inspections, staff review the facility's nitrogen management plan, mortality management plan, and evaluate production area and ponds for compliance with the Dairy General Order requirements.

Dairy Annual Reports

Staff recently issued notices of violation to several dairies that had failed to submit Annual Reports for 2017 (which were due by July 1, 2018). Staff will pursue formal enforcement for those dairies that do not submit the required Annual Report following receipt of their NOV. The overall compliance rate for annual report submittal was greater than 95%.

Bovine Feedlot General Order Enrollment

Staff has received approximately 250 Notices of Intent for coverage under the Bovine Feedlot General Order and is in the process of reviewing them for completeness and adequacy prior to issuing Notices of Applicability. In addition, staff has received approximately 90 requests to merge a bovine feedlot with a dairy enrolled under the Dairy General Order, which is allowed by the Bovine General Order. These merger requests have been evaluated and some have been approved while others have received preliminary rejection notices and a request for additional information.

Staff recently issued directives under California Water Code 13260 to feedlots that did not submit a notice of intent for coverage under the Bovine Feedlot General Order but appear to be operating above the thresholds in the Order (greater than five animal units in confinement for more than 45 days per year). Failure to comply with a California Water Code 13260 directive could result in formal enforcement, including assessment of civil liability penalties.

OIL FIELDS

1. Waste Water Surface Ponds

Central Valley Water Board staff has issued Notices of Applicability (NOAs) for coverage under General Orders for discharges of produced wastewater into ponds at: Aera Energy LLC's Lockwood Dehydration Plant in the Midway-Sunset Oil Field; McLennan's Oil Company's Section 32 Lease in the Midway-Sunset Oil Field; LDD Energy, LLC's Webber Lease in the Midway Sunset Oil Field; Berry Petroleum Company, LLC's Berry and Ewing Lease in the Midway-Sunset Oil Field; and Central Pacific Resources' USL Lease in the Cymric Oil Field. An NOI for CMO, Inc.'s ponds in the Chico Martinez Oil Field was reviewed and a letter identifying deficiencies was sent. Notices of Intent (NOIs) submitted by several Operators are under review and issuance of NOAs is expected.

Staff have completed pond closure plan reviews for: E & B Natural Resources Management Corporation's Section 5 Lease in the Poso Creek Oil Field, E & B Natural Resources Management Corporation's Laymance Lease in the McKittrick Oil Field, Pyramid Oil Company's Mitchell Lease in the McDonald Anticline Oil Field; and, California Resources Production Corporation Layman A Lease in the McDonald Anticline Oil Field. Staff are reviewing several closure plans for other ponds and expect to issue approvals/comments in the next month.

Staff continues to inspect facilities to ensure compliance with the General Orders and to verify the condition of facilities that will be closed. Staff continues to review monitoring reports required by Waste Discharge Requirements and technical reports that request rescission of groundwater monitoring requirements from recently issued Revised Monitoring and Reporting Programs.

Staff has prepared tentative waste discharge requirements for a new project that will store produced wastewater in four unlined reservoirs and reuse it for irrigation. The tentative waste discharge requirements were posted for public comment in October and will be presented at a future meeting of the Central Valley Water Board.

2. Spill Response

Central Valley Water Board staff responds to oil field spills and upsets reported to the Office of Emergency Services (OES). Board staff were notified of seven events in November and December.

- A spill of crude oil and oil field produced wastewater occurred on the Conoco Lease operated by E&B Natural Resources Management Corporation (E&B), in the Poso Creek Oil Field on 8 November 2018. According to OES report No. 18-7574, a valve failure on an oil well caused the discharge of approximately 15 barrels (bbls) of oil and 5 bbls of wastewater into a production pad. According to E&B staff, all the discharged fluids were contained within a production pad and no natural drainages or dry stream beds were affected. E&B staff also stated that cleanup of the spill site was completed.
- A spill of crude oil and oil field produced wastewater affected a section of a blue line dry stream bed in Section 22G Water Plant operated by Chevron USA, Inc. (Chevron), in the Midway Sunset Oil Field on 20 November 2018. According to OES report No. 18-7868, a leak in a group line operated by Aera Energy, LLC. (Aera) caused the discharge of approximately 72 bbls of crude oil and 719 bbls of wastewater into the affected stream bed. Staff of the California Department of Fish and Wildlife Office of Spill Prevention and Response (OSPR) inspected the spill site on 21 November 2018. Aera, the spill responsible party led cleanup activities of the affected areas including the affected stream bed. On 30 November 2018, Board staff and staff of OSPR conducted a post-cleanup inspection of the affected areas. During the 30 November 2018 inspection, Board staff observed that the affected areas appeared to be generally clean, and cleanup personnel conducted additional cleanup work of areas of concern.
- A spill of crude oil and oil field produced wastewater occurred on the SOGO 44 AWT Facility operated by Aera Energy, LLC (Aera), in the Lost Hills Oil Field on 22 November 2018. According to OES report No.18-7939, a pipeline leak caused the discharge of approximately 38 bbls of crude oil and 268 bbls of wastewater into land. According to Aera staff, the discharged fluids affected production areas and flat areas containing habitat “green zone area.” Aera staff notified Board staff once cleanup of the affected areas was complete, and Board staff conducted a post-cleanup inspection of the affected areas on 30 November 2018. Board staff observed that the affected areas appeared to be generally clean.
- A spill of softened oil field produced wastewater occurred on the Severini Generation Facility operated by Berry Petroleum, LLC (Berry), in the Midway Sunset Oil Field on 24 November 2018. According to OES report No.18-7966, a pipeline leak caused the discharge of approximately 27 bbls of softened wastewater into land. According to Berry staff, the discharged fluids affected flat areas and a culvert. Berry staff said that all free-standing fluids were recovered from the affected areas.
- A spill of crude oil, oil field produced wastewater, and liquid concrete occurred on the Section 23A Lease operated by Crimson Resource Management, in the McKittrick Oil Field on 29 November 2018. According to OES report No.18-8119, the spill occurred while pumping liquid concrete down a an abandoned well. The OES report stated that the discharged fluids affected a well pad.
- A spill of crude oil and oil field produced wastewater occurred on a facility near Chevron Gate 20 at Midoil Road in Fellows operated by Chevron USA, Inc. (Chevron), in the Midway Sunset Oil Field on 3 December 2018. According to OES report No. 18-8219, a production line failure caused the discharge of approximately 4.9 bbls of crude oil. Chevron staff later said that approximately 27.3 bbls of oil field produced wastewater were also discharged as a result of the spill. Chevron staff added that a portion of the discharged fluids affected a 0.5-mile section of a blue line dry stream bed. Board staff and OSPR staff inspected the spill site on 14 December 2018 to ascertain the post cleanup conditions of the affected section of the stream bed. Board staff observed that the affected

section of the stream bed appeared to be mostly clean, except for small spots of what appeared to be oil at sporadic locations. Chevron conducted additional cleanup work within the affected section of the stream bed and OSPR staff signed-off on the cleanup.

- A spill of oil and oil field produced wastewater occurred on the Pan Fee Lease operated by Berry Petroleum, LLC. (Berry), in the Midway Sunset Oil Field on 3 December 2018. According to OES report No. 18-8206, approximately 7 bbls of crude oil and 3 bbls of wastewater were discharged from a production well stuffing box due to packing failure. Berry staff reported that the discharged fluids affected flat areas within a production pad and no dry stream beds or natural drainages were affected. Berry staff said that cleanup of the affected areas was expected to be complete by 4 December 2018.
- A spill of oil and oil field produced wastewater occurred on the Conoco Lease operated by E&B Natural Resources Management Corporation (E&B), in the Poso Creek Oil Field on 10 December 2018. According to OES report No. 18-8394, a well head leak caused the discharge of approximately 10 bbls of crude oil and 240 bbls of wastewater into soil. E&B staff said that the discharged fluids affected areas on a production pad and no natural drainages or dry stream beds were affected. E&B staff added that Patriot Environmental Services was conducting cleanup of the affected areas.
- A spill of oil and oil field produced wastewater occurred on the Enas Lease operated by E&B Natural Resources Management Corporation (E&B), in the Poso Creek Oil Field on 13 December 2018. According to OES report No. 18-8477, a mechanical failure on a production well caused the discharge of approximately 5 bbls of crude oil and 300 bbls of wastewater into soil. E&B staff said that the discharged fluids affected areas on a production pad and no natural drainages or dry stream beds were affected. E&B staff added that E&B crews were conducting cleanup of the affected areas.
- A spill of oil and oil field produced wastewater occurred on the McKittrick Unit #2 Lease operated by Sentinel Peak Resources California (Sentinel), in the McKittrick Oil Field on 17 December 2018. According to OES report No. 18-8559, a valve mechanical failure caused the discharge of approximately 1.5 bbls of crude oil and 2 bbls of wastewater into a secondary containment and a portion of the discharged fluids affected habitat. Sentinel staff said the extent of the affected areas is limited and no natural drainages or dry stream beds were affected. Sentinel staff added that cleanup of the affected areas is expected to complete on 17 December 2018.
- A spill of oil and oil field produced wastewater occurred on the Conoco Lease operated by E&B Natural Resources Management Corporation (E&B), in the Poso Creek Oil Field on 25 December 2018. According to OES report No. 18-8729, a valve failure on a pumping unit caused the discharge of approximately 18 bbls of crude oil and 50 bbls of wastewater into soil. E&B staff said that the discharged fluids affected areas on a production pad and no natural drainages or dry stream beds were affected. E&B staff added that E&B crews were conducting cleanup of the affected areas.
- A spill of oil and oil field produced wastewater occurred on the Ethel D Lease operated by Berry Petroleum, LLC. (Berry), in the Midway Sunset Oil Field on 26 December 2018. According to OES report No. 18-8741, approximately 1 bbl of crude oil and 1,000 bbls of wastewater were discharged from a tank due to a pump failure into the secondary containment of the tank. Berry staff said that the discharged fluids were completely contained within the secondary containment of the source tank and no dry stream beds or natural drainages were affected. Berry staff added that the affected secondary containment will be cleaned.

Staff will conduct appropriate follow-up activities and consider appropriate enforcement for the spills.

3. UIC Program

Aquifer Exemptions

During the period from 1 November 2018 through 8 January 2019, Central Valley Water Board staff of the Underground Injection Control Unit (UIC) performed the following aquifer exemption activities:

Kern River Aquifer Exemption - Staff attended meetings with the State Water Resources Control Board (State Board) and the Division of Oil, Gas, and Geothermal Resources (Division) staff to discuss supplemental information provided for the Kern River Aquifer Exemption application package. Discussions centered on aquifer parameters/conditions to be used in capture zone analyses for domestic wells. Subsequent to these discussions, staff provided its concerns with the proposed approach to State Board.

Midway-Sunset Aquifer Exemption (Tulare) - Staff received and has reviewed the Division's responses to staff's and State Board's questions regarding the Midway Sunset Aquifer Exemption for the Tulare Formation. Meetings with State Board have been held to discuss potential approaches to the issues/concerns that remain unresolved following the Division's responses.

Deer Creek Aquifer Exemption – Staff received the Division's and Operator's responses to Staff's/State Board's initial questions regarding the aquifer exemption. The response provided a revised/new version of the aquifer exemption along with revised figures and tables. Staff are currently review the new submittals.

UIC Project Reviews

Staff completed reviews and issued no objection letters to the Division for three UIC projects located in the Round Mountain, Raisin City, and Cymric Oil Fields. Staff additionally conducted a review and issued a no-comment letter for a UIC project that proposed injection into a portion of the Midway-Sunset Oil Field.

Staff received requests from the Division to review revised Project Approval Letters (PAL) for UIC projects in the Midway-Sunset, and Cymric Oil Fields. After reviewing the PAL changes, staff issued no objection letters to the Division for both projects.

4. Senate Bill 4 (SB-4) Program

Since the last Executive Officer's Report, staff have completed a total of eleven SB4 Well Stimulation Treatment (WST) Application package reviews and submitted written comments to the State Water Board. Two Application packages were for the Aera Energy LLC, South Belridge Oil Field. Seven Application packages were for the California Resources Elk Hills, LLC Buena Vista Nose Area. One Application package was for the Berry Petroleum, LLC, South Belridge Oil Field. One Application package was for Breitburn Operating LP's North and South Belridge Oil Fields. Seven WST Application packages are under review.

Central Valley Water Board staff are currently reviewing six groundwater monitoring plan addendums and one groundwater monitoring exclusion request. Staff are also reviewing groundwater monitoring reports that present groundwater sampling results associated with well stimulations conducted in nine oil fields

5. Food Safety

Regional Board Staff have been working on a draft outline of the white paper for the Food Safety project. The white paper, when complete, is expected to summarize research and data compiled as a part of the Food Safety project. It will also discuss data gaps, propose future work, and include recommendations from the Food Safety Expert Panel (Panel). A draft of the white paper outline has been distributed to the Panel.

On 8 November 2018, Staff hosted a working meeting of the Panel that was not open to the public. During the meeting, Staff discussed new Food Safety related discharges being proposed. Staff of GSI Environmental, Inc., discussed progress on MOU Tasks 1-2 and shared a list of constituents. The Panel discussed crop sampling and what should be considered in future crop sampling events. The Panel also reviewed and discussed the draft white paper outline and gave comments to Central Valley Water Board staff.

In addition, Central Valley Water Board staff have been preparing for the next Food Safety Meeting, which will take place in the Board Room on 24 January 2019. This meeting will be open to the general public and webcast.

IRRIGATED LANDS REGULATORY PROGRAM (ILRP)

Quarterly Stakeholder Meetings

Central Valley Water Board staff holds quarterly ILRP stakeholder meetings to provide an open forum for communication between staff, agricultural coalitions, environmental justice groups, and other interested parties in Central Valley Region. The January 9th meeting, held in Merced, focused on providing an update on implementation of one of the new requirements from the State Water Board's East San Joaquin Petition Order – development of the drinking water monitoring program for nitrogen. More information regarding the stakeholder meetings can be found on the Central Valley Water Board ILRP website:

http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/regulatory_information/stakeholder_advisory_workgroup/index.shtml

Proposed Changes to ILRP WDRs Orders

The Central Valley Water Board released proposed revisions on 6 November 2018 for seven General Orders for Growers within the Central Valley that are Members of a Third-Party Group. The board will consider adoption of the revisions at the 7/8 February 2019 Board Meeting. Written comments were received by 21 December 2018. Orders with proposed revisions include: Sacramento River Watershed, Sacramento Valley Rice Growers, San Joaquin County and Delta, Western San Joaquin River Watershed, Grasslands Drainage Area, Western Tulare Lake Basin, and Tulare Lake Basin.

ILRP Compliance, Outreach & Enforcement

Drinking Water Well Monitoring Outreach

Beginning 1 January 2019 East San Joaquin Water Quality Coalition members must monitor drinking water wells that are located on their enrolled parcels for nitrate and nitrite as nitrogen. ILRP staff sent out 3171 outreach packages to all current members. The outreach package included an introductory letter, a quick guide for growers, a Drinking Water Well Member Information Form, Notification template and an information trifold. Information regarding the drinking water well monitoring requirements can be found on the Central Valley Water Board ILRP website:

https://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/drinking_water/

Agricultural Parcel Inspections

The purpose of these inspections is to determine if the parcels are commercial irrigated lands and require coverage under the Irrigated Lands Regulatory Program. Data gathered during these inspections will be used to focus and prioritize the issuance of 13260 directives to commercial irrigated lands that are not covered by the ILRP. Growers may obtain coverage by joining an agricultural water quality coalition and enrolling in the associated ILRP general order or enrolling in the ILRP individual general order. The table below presents parcel inspections conducted for each coalition area. Coalition areas not shown had no inspections during the reporting period.

Coalition Area	Parcel Inspections Nov 1 – Dec 31
Kings River	63
Kern River	75
Total	138

On-Farm Inspections for General Order Compliance

The purpose of on-farm inspections is for Board staff to visit coalition-enrolled farms and discuss water quality-related issues with growers. These inspections include staff review of the farm evaluations, nitrogen management plans and sediment and erosion control plans; and inspection of site conditions, including potential discharge points to surface waters, pollution management practices, chemical storage and handling areas, and wellhead protection practices.

Coalition Area	On Farm Inspections Nov 1- Dec 31
East San Joaquin, San Joaquin Co & Delta, Sacramento Valley, & Western San Joaquin River	5
Total	5

Water Code Section 13260 Directives

Staff has added an additional step in the outreach process to growers. Staff now sends an outreach letter after parcel inspections and prior to the issuance of directives. These directives are sent to owners of commercial irrigated lands identified through staff inspections of agricultural-zoned parcels who don't respond adequately to outreach letters. The recipients are required to submit a Notice of Intent to obtain either group or individual regulatory coverage within 15 days of receipt of the directive. Coalition areas not shown had no directives mailed during the reporting period.

Coalition Area	Directives Mailed Nov 2 – Dec 31
East San Joaquin, San Joaquin Co & Delta, Sacramento Valley, & Western San Joaquin River	0
Kings River	28
Kern River	33
Total	61

Notices of Violation for failure to respond to 13260 Directive

Between 2 November 2018 and 31 December 2018, 15 Notices of Violation (NOVs) were sent to Coalition members within the Sacramento Valley Watershed Area for their failure to respond to a 13260 Directive letter. Failure to respond to the NOV subjects the discharger to further enforcement actions which may include an administrative civil liability order.

Notices of Violation for Failure to Submit Farm Evaluations or Nitrogen Management Plan Summary Reports

Between 2 November 2018 and 31 December 2018, 221 Notices of Violation (NOVs) were sent to Coalition members within the East San Joaquin Watershed Area for their failure to submit Nitrogen Management Plan Summary Reports by the Board-approved deadline of 1 March 2018. The NOVs urge the members to promptly provide their reports to the Coalition or potentially face monetary penalties.

Coalition Enrollment Summary

The tables below provide the latest coalition enrollment data based on coalition member lists submitted annually to comply with the ILRP General Order requirements, subsequent voluntary updates to member lists, and Central Valley Water Board staff identified additional enrollment data. The ILRP General Orders require coalitions to provide enrollment data each July, and Water Board staff requests a voluntary update in December to ensure accurate information for annual billing. Executive Officer Reports produced in months when coalitions

are not required to provide member and participant information are updated using Water Board staff enrollment information.

Table 1 of 2. Coalition Enrollment Information Summary in the Sacramento, Delta, East and Western San Joaquin River Watersheds*							
Coalition Group	CA Rice* Comm.	East San Joaquin	Grasslands Drainage Area	Sacramento Valley	San Joaquin Co. & Delta	Western San Joaquin R.	Totals
Participating Growers							
Number of Growers, Pre-Order	2,500	2,225	N/A	7,888	3,256	2,450	18,319
Number of Growers, Participant List (2018)*	2,500	3,336	98	7,982	3,458	1,893	19,267
Number of Growers Enrolling Land Due to Directive/eNOI Nov 2, 2018- Dec 31, 2018)***		2		3	1		6
Enrolled Acreage							
Number of Acres, Pre-Order	544,468	535,653	N/A	1,183,491	348,200	467,625	3,079,437
Number of Acres, Participant List (2018)*	436,000****	700,099	83,693	1,319,710	512,036	423,216	3,474,755
Number of Acres, Annual Fees (2017-2018)**	436,000****	705,683	83,913	1,332,327	516,357	432,505	3,506,785
Number of Acres added due to Directive/eNOI (Nov 2, 2018- Dec 31, 2018)***		173		29	158		360

* Grower participant lists are updated yearly by the Coalition Group on 31 July. Staff calculates the number of acres and participants based on data provided in the participant lists.

** Grower annual fees are submitted yearly by the Coalition Group in Jan-Feb for the fiscal year. Annual Fees only report irrigated acres and do not report participants.

*** Growers and acres calculated by staff on 8 January 2018.

****Per the Order, the CA Rice Commission is not required to submit a participant list and the acreages are updated annually for fees. Annual fees for are generated through USDA/NASS harvested rice acreages.

Table 2 of 2. Coalition Enrollment Information Summary for the Tulare Lake and Western Tulare Lake Basins

Coalition Group	Buena Vista	Cawelo	Kaweah Basin	Kern River	Kings River	Tule Basin	Westside	Westlands	Total
Participating Growers									
Number of Growers, Pre-Order	3,794 (Southern San Joaquin Water Quality Coalition)							1,070	4,864
Number of Growers, Current Participant List (2018)*	56	88	1,242	755	4,223	967	43	1,215	8,589
Number of Growers Enrolling Land Due to Directive/eNOI (Nov 2, 2018 – Dec 31, 2018)***					2				2
Enrolled Acreage									
Number of Acres, Pre-Order	957,362 (Southern San Joaquin Water Quality Coalition)							507,489	1,464,851
Number of Acres, Current Participant List (2018)*	33,383	34,454	160,380	528,340	779,978	259,563	106,079	492,072	2,394,249
Number of Acres, Previous Annual Fees (2018)**	34,090	33,818	158,842	528,687	761,479	224,596	98,136	487,526	2,327,174
Number of Acres added due to Directive/eNOI (Nov 2, 2018 – Dec 31, 2018)***					59				59

* Grower participant lists are updated yearly by the Coalition Group on 31 July.

** Grower annual fees are submitted yearly by the Coalition Group in Jan-Feb for the fiscal year. Annual Fees only report irrigated acres and do not report participants.

*** Growers and acres calculated by staff on 4 January 2019

Sacramento River Watershed Coalition Groups

California Rice Commission

Surface water monitoring for the 2018 sampling season concluded on 2 July. The 2018 Annual Monitoring Report for monitoring conducted in 2018 was submitted on 20 December 2018. The 2018 Annual Monitoring Report is currently under staff review.

Sacramento Valley Water Quality Coalition

On 5 December, the North Eastern California Water Association submitted a revised Reduced Monitoring/Management Practices Verification Plan for the Pit River Subwatershed. This is currently under staff review.

Placer-Nevada-South Sutter-North Sacramento Subwatershed Group

On 31 December 2018, the Placer-Nevada-South Sutter-North Sacramento Subwatershed Group (PNSSNS) submitted a letter regarding their application for a Notice of Applicability to become a Third-party entity under the Sacramento Valley Watershed General Order R5-2014-0030. In their letter, PNSSNS stated they wish to continue pursuing the NOA, but would like to wait until after adoption of Order revisions in the February 2019 Board Hearing. Staff agreed to hold a meeting with PNSSNS after the board meeting to discuss PNSSNS's application.

San Joaquin River Watershed Coalition Groups

East San Joaquin Water Quality Coalition

On 19 November, the Executive Officer approved the Coalition's revised Management Practice Implementation Report (MPIR) template. The MPIR template was submitted to meet the requirements in in State Board Order WQ 2018-0002 and Section VII.G of the General Order R5- 2012-0116-R4.

On 27 November, the Executive Officer approved the Coalition's request to designate Westport Drain at Vivian Rd as a rotating Zone 2 Core site and Prairie Flower Drain at Crows Landing Rd as a Represented site.

On 3 December, staff received the Coalition's Quarterly Monitoring Data Report for the period April 1 through June 30, 2018.

San Joaquin County and Delta Water Quality Coalition

On 16 November, the Coalition submitted a management plan completion request for seven site/constituents. Staff is reviewing the report.

On 30 November, the Coalition submitted its Nitrogen Management Plan Summary Analysis Report for the 2017 crop year. Staff is reviewing the report.

On 3 December, the Coalition submitted its December 2018 Quarterly Monitoring Report. The report contains electronic data, field sheets, site photos, and laboratory reports for the Quarterly Monitoring Report (April through June 2018).

Westside San Joaquin River Watershed Coalition

On 30 November 2018, the Coalition submitted its Nitrogen Management Plan Summary Report Analysis and Farm Evaluation Summary Report, both for the 2017 growing season. The reports are under staff review.

On 7 December, the Coalition submitted a request to move both Orestimba Creek monitoring sites upstream from the original locations. The request is under staff review.

On 15 December, the Coalition submitted its Monitoring Plan Update for monitoring to be conducted 1 March 2019 through 28 February 2020. The plan is currently under staff review.

Grassland Drainage Area Coalition

On 4 September, the Grassland Drainage Area Coalition's Groundwater Quality Trend Monitoring Workplan and Addendum were conditionally approved by the Executive Officer. The conditions include the timing of results reporting, on-going evaluation of the sufficiency of the monitoring network, and consideration of network

expansion in areas with lesser coverage. Groundwater quality trend monitoring commenced in the fall of 2018. The results of monitoring will be reported in the 2018 Annual Monitoring Report due 30 April 2019.

Tulare Lake Basin Coalition Groups

Buena Vista Coalition

On 27 November 2018, board staff completed a review of the Buena Vista Coalition's Revised Surface Water Monitoring Plan (Revised Plan). The Revised Plan needs additional revision to provide adequate rationale for the sampling schedule and demonstrate the representativeness of the proposed monitoring sites. Staff advised that additional monitoring sites be considered, such as irrigation supply canals, to effectively monitor waters of the State. The 2nd revision is to include changes addressing staff concerns.

Cawelo Water District Coalition

On 14 November 2018, board staff completed a review of the Cawelo Water District Coalition's Revised Surface Water Monitoring Plan (Revised Plan). In general, the Revised Plan did not provide sufficient monitoring for all waters of the State within the coalition boundaries which may receive agricultural waste. A revision of sampling strategy for monitoring sites is required to be addressed in a 2nd revision. The 2nd revision is to address issues identified in the staff memorandum.

On 21 December 2018, the Executive Officer issued an approval of the Coalition's 2019 pesticide monitoring plan. The plan was developed according to guidance provided in the 2016 Pesticide Evaluation Protocol.

Kaweah Basin Water Quality Association

On 28 November 2018, the Executive Officer conditionally approved the Kaweah Basin Water Quality Association Comprehensive Groundwater Quality Management Plan- Second Revision. The Coalition was required to amend its outreach plans to encompass a goal of 100% of its members to implement known protective practices of water quality.

Kings River Watershed Coalition Authority

On 14 December 2018 staff met with representatives of the Kings River Water Quality Coalition to discuss the Coalition's development of a revised Surface Water Monitoring Plan. The discussion emphasized the need to clearly delineate the areas and waterways represented by any proposed monitoring sites, and to develop a monitoring network adequate to characterize waters of the state that are receiving agricultural waste discharges.

On 26 December 2018, the Executive Officer issued a conditional approval of the Coalition's 2019 pesticide monitoring plan. Final approval is anticipated after the Coalition revises the monitoring periods of a few pesticides.

Westlands Water Quality Coalition

On 6 December 2018, staff met with the Westlands Coalition to discuss related to their Surface Water Monitoring Plan. Based on the discussion, the Westlands Coalition subsequently submitted a revised plan to address the issues raised. Staff is in the process of reviewing the revised plan.

Other Projects

Data Management

The Data Management Team (DMT) has submitted all current and backlogged data deliverables to SWAMP. The DMT conducted a final quality check and SWAMP subsequently pushed the electronic data deliverables (EDDs) to CEDEN.

The Data Management Team continues to route water quality monitoring data through SWAMP for transfer to CEDEN and is current with its CEDEN loads. CEDEN transfers occur approximately once per month. After ILRP staff performs a completeness check, SWAMP staff loads the monitoring data to CEDEN. Three coalitions send its data directly to the Central Valley Regional Data Center for transfer to CEDEN in May each year. Processed ILRP data notes the available data date ranges in the table below. Staff will continue to report on this effort.

On 30 October, staff received the Grasslands Bypass Project electronic data deliverable, covering the period Jan – June 2018. Staff submitted the data to SWAMP.

On 1 December, staff received the Sacramento Valley Water Quality Coalition’s electronic data deliverable, covering the period April – June 2018. Staff is processing the EDD.

On 31 December, staff received the California Rice Commission’s electronic data deliverable, covering the period November 2017 – October 2018. Staff is processing the EDD.

Available Data for Each Coalition in CEDEN	Date Range
California Rice Commission	Jul 2004 - Jul 2016
Westside San Joaquin River Water Quality Coalition	Sep 2008 - Aug 2017
Sacramento Valley Water Quality Coalition	Jul 2004 - Jun 2017
Grasslands Bypass Project	Oct 1995 - Jun 2017
East San Joaquin Water Quality Coalition	Jul 2004 - Sep 2017
San Joaquin County and Delta Water Quality Coalition	Aug 2004 - Sep 2017
Westlands Storm Water Coalition	Nov 2008 - May 2017

Grassland Bypass Project

On 26 October 2018, the Pesticide Monitoring Plan – 2018 Update for the Grassland Bypass Project was approved by the Executive Officer. The Plan outlines the schedule and constituents for pesticide monitoring in surface water in the Grassland Drainage Area from 1 January through 31 December 2019. The results of the prior year’s pesticide monitoring, and other monitoring conducted under Order R5-2015-0094, will be reported in the 2018 Annual Monitoring Report due 30 April.

Rice Pesticides Program

The 2018 Annual Rice Pesticides Program stakeholder meeting was held on 7 November in the Central Valley Water Board office in Rancho Cordova, CA. Results from the 2018 monitoring season were discussed at the meeting.

Thiobencarb monitoring for the 2018 sampling season concluded on 3 July 2018. The results of monitoring were submitted in the 2018 Annual Monitoring Report on 20 December 2018. The 2018 Annual Monitoring Report is currently under staff review.

CANNABIS PROGRAM

General Order Enrollment and Developments

Approximately 718 cannabis cultivators had coverage under General Order No. R5-2015-0113 (Regional General Order) when the Statewide General Order went into effect on January 1, 2018. Staff have received, to date, 68 transfer applications to the Statewide General order, and have reviewed and approved 64 of those applications. Additionally, staff have reviewed and approved 189 Notice of Termination requests from the Regional General Order, largely from Calaveras county which enacted a commercial cannabis cultivation ban in the spring of 2018. Table 1 provides a summary of the active enrollments to date in the Regional General Order.

Table 1

County	Tier 1 Enrollment	Tier 2 Enrollment	Tier 3 Enrollment	Total Active Enrollments
Calaveras	144	183	43	370
Yolo	14	20	5	39
Lake	30	23	2	55
Nevada	12	1	-	13
Sierra	4	1	-	5
Plumas	1	-	-	1
Mariposa	1	-	-	1
Total	206	228	50	484

Staff have been actively reviewing and processing enrollments under the Statewide General Order and have begun outreach to ensure Region General Order enrollees' transition to the Statewide General Order in a timely manner. Staff have also begun to reach out to enrollees to ensure required reporting is submitted prior to the 90-day post application due date. To date staff have received approximately 467 Statewide General Order applications, 406 with payment, and have approved and enrolled approximately 385 dischargers under the Statewide General Order. Table 2 provides a summary of the Statewide General Order enrollments in the Central Valley Region to date.

Table 2

County	CE*	Tier 1L	Tier 1M	Tier 1H	Tier 2L	Tier 2M	Tier 2H	Total Active Enrollments
Calaveras	1	4	-	-	1	1	-	7
Fresno	3	-	-	-	-	-	-	3
Lake	5	41	1	-	31	1	-	79
Merced	4	-	-	-	-	-	-	4
Nevada	8	107	2	-	-	-	1	118
Sacramento	101	-	-	-	-	-	-	101
Shasta	4	-	-	-	-	-	-	4
Siskiyou	2	-	-	-	-	-	-	2
Solano	2	-	-	-	-	-	-	2
Stanislaus	10	4	-	-	-	-	-	14
Yuba	1	-	-	-	-	-	-	1
Yolo	-	12	-	-	38	-	-	50
Total	141	168	3	0	70	2	1	385

*CE: Conditionally exempt, enrolled in the Statewide Cannabis Waiver of Waste Discharge Requirements.

Outreach

On November 1, staff met with the planning department in Lake County to discuss the counties cannabis program and coordination.

On November 19, staff conducted an enrollment outreach event in Yolo County alongside county officials, Water Rights, CDFW, and CalCannabis. The event resulted in 24 application transfers from the Regional Order.

On December 15 and 16, staff attended the Emerald Cup in Santa Rosa alongside Division of Water Rights and North Coast Regional Water Board staff. Staff had an informational booth where they were available for questions and provided handouts to cultivators interested in enrolling. Staff spoke with over 100 cultivators over two days, with Central Valley Region cultivators attending mainly from Lake and Nevada counties.

Compliance and Enforcement

Compliance

On November 14, staff performed one permit compliance inspection alongside Water Rights and one follow up inspection in Lake County.

On November 19, staff performed one follow up inspection in Yolo County.

On November 28 and 29, staff performed three permit compliance inspections and two follow up inspections in Nevada County alongside county officials and Lahontan Regional Water Board staff.

Enforcement

On November 13, two Administrative Civil Liability Complaints were issued for non-compliance with Cleanup and Abatement Orders. The hearings are scheduled for the February 7/8, 2019 Central Valley Water Board meeting at the Board's Rancho Cordova office.

On November 20, staff performed one follow up enforcement inspection in Shasta County.

NON-POINT SOURCE (NPS) PROGRAM

Clear Lake Nutrient Control Program Update

Staff is working with TMDL identified responsible parties to obtain information regarding compliance with phosphorus load allocations, as a follow-up to the 18 July 2018 Board workshop. Staff is in the process of drafting and sending 13267 Orders to each responsible party to obtain this information. On 9 January 2019, a 13267 Order was issued to the Irrigated Agriculture responsible party. Staff will continue to send Orders to the other responsible parties throughout early 2019.

Staff has experienced delays in achieving milestones, including sending and obtaining information from responsible parties, due to the Mendocino Complex fire, which affected much of Lake County. Post-fire monitoring activities and meetings have been attended by staff to stay updated on erosion control management practices and potential impacts to the lake.

On 20 December, Jennifer LaBay and Taran Sahota attended the second Blue Ribbon Committee for the Rehabilitation of Clear Lake in Upper Lake, Lake County. The 20 December meeting was split into two sections: a field tour and a formal meeting. The field tour included an overview of the Middle Creek Upper Watershed, a tour of sites that will be monitored for current research by UC Davis, the Middle Creek

Restoration Project site, and important historical and cultural tribal sites in the Middle Creek area. The formal meeting focused on the process for the Committee moving forward, updates on current water and socioeconomic research by UC Davis, post-fire management updates from the U.S. Forest Service and U.S. Bureau of Land Management, an update from Jennifer LaBay regarding the Central Valley Water Board's role in post-fire monitoring, and Committee schedules and charter review.

The next Committee meeting is tentatively scheduled for 13 March 2019. Meeting details will be publicly noticed by the California Natural Resources Agency. More information regarding the Committee can be found on the Natural Resources Agency's [Blue Ribbon Committee website](#).

More information about the Clear Lake Nutrient Control Program can be found at: http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/clear_lake_nutrients/index.shtml

CYANOBACTERIA BLOOMS UPDATE

Cyanobacteria and harmful algal blooms (cyanoHABs) are a common occurrence in water bodies across the state. Numerous reports of cyanoHABs were reported on the state's [HAB Portal](#) in 2018.

Calendar Year 2018 – Central Valley CyanoHAB Response Summary

In 2018, staff recorded 116 reports of suspected cyanoHABs occurring within Central Valley water bodies (Table 1). Not all the reports occurred in distinct water bodies as several reports came from monthly monitoring within the same water body (e.g., Clear Lake and San Luis Reservoir).

Table 1. Cyanobacteria Bloom Summary for Calendar Year 2018

Number of Suspected Blooms Investigated:	116
Number of Confirmed Blooms:	66
Number of Distinct Water Bodies with Confirmed Blooms:	29
Number of Human Illnesses Reported:	9
Number of Animal Impacts Reported:	3

Calendar Year 2019 CyanoHAB Reports

Currently in 2019, there is only one report of a continued cyanobacteria bloom (Table 2), which is occurring in Hensley Lake (Madera County). This bloom has been active since August 2018.

Table 2. Cyanobacteria Bloom Summary: January 2019*

Number of new Bloom Reports since previous EO Report:	0
Number of Continuing Blooms from previous EO Report:	1
Number of Distinct Water Bodies with Blooms:	1
Number of Human Illnesses Reported:	0
Number of Animal Impacts Reported:	0

* This summary only represents the first 7 days of January 2019.

GRANTS

Clean Water Act §319(h) Nonpoint Source Grant Solicitation

Approximately \$4 million is available for the 2019 solicitation through a grant from the USEPA 319(h) Program. The purpose of the program is to provide funds to restore and protect the beneficial uses of water throughout the State through the control of nonpoint source pollution consistent with completed TMDLs or TMDLs under substantial development. In addition, approximately \$1 million from the Timber Regulation and Forest Restoration Fund. To address post-fire recovery needs in areas affected by fire, as indicated in the emergency proclamations by the Governor, the 2019 Nonpoint Source Program Preferences include post-fire recovery projects.

For more information, please visit the NPS website:

https://www.waterboards.ca.gov/water_issues/programs/nps/319grants.shtml.

Clean Water Act §319(h) Nonpoint Source on-going grants:

Implementation of Agricultural Best Management Practices (BMPs) in Alfalfa, Almonds, and Cotton that Aid in Restoration of the San Joaquin River Watershed (\$749,997) – The Sustainable Cotton Project is engaging more farmers of alfalfa, cotton, almonds and more acres in the Lower San Joaquin River watershed to implement proven BMPs. This grant works to reduce or eliminate farmers' use of diazinon and chlorpyrifos and will address the chlorpyrifos and diazinon TMDL for this watershed. (end date 6/30/19)

Eightmile Valley Sediment Reduction and Habitat Enhancement Project (\$749,992) – The Bureau of Land Management will reduce the volume of sediment delivered to Clear Lake by realigning a severely eroded stream channel, establishing a prescriptive treatment for erosion control, installing grade control structures and engineering bank revetment using hardscape, bioengineering and revegetation. (end date 4/30/2021)

Mendocino Complex Fire Pollutant Mitigation Project (\$605,000) – The Lake County RCD will assess fire-damaged properties within the Clear Lake Watershed and will implement BMPs that may include replacing or repairing burned or damaged culverts, cleaning culverts, reshaping roads, contour, ripping and installing log erosion barriers, revegetating with native plants, installing instream protections (3/31/2019).

Timber Regulation and Forest Restoration Fund On-going Grants:

Ponderosa Way Road Assessment and Sediment Reduction Plan (Phase 1) (\$300,000) – The Resource Conservation District of Tehama County will prepare an Action Plan to reduce sedimentation from two miles of Ponderosa Way and another eight miles of roads upslope and/or downslope of Ponderosa Way within the Battle Creek Watershed, implement one project to reduce sediment inputs to Battle Creek and prepare CEQA document for future road fixes. (Closing 4/30/2019)

Ponderosa Way Road Assessment and Sediment Reduction Plan Phase II) (\$500,000) – The Resource Conservation District of Tehama County will conduct a road-related sediment survey on Ponderosa Way in Eastern Tehama County between State route 36E and State Route 32E (Project Area). This project will result in a sediment reduction plan for the Project Area with one or more demonstration projects in the Project Area. (Closing 3/31/2020)

Battle Creek Watershed Based Plan (\$492,438) – The Battle Creek Watershed Conservancy will develop a Watershed-Based Plan and implement a sediment reduction demonstration project in the Battle Creek Watershed. (Closing 10/31/2018)

Post-Fire Response to Forest Management (\$329,519) – California Department of Forestry and Fire Protection will quantify the effects of post-fire management practices such as logging, ripping, and

herbicide application on stormwater runoff rates, sediment delivery, organic matter transport, and soil properties in the Boggs Mountain Demonstration State Forest. (Closing 05/31/2020)

Roadside Fuel Reduction (\$370,000) – Yuba County will construct 185 acres of shaded fuel breaks along 30 miles of roadways in the Yuba foothill state recreation area. This project will result in enhanced fire safety and prevent water quality degradation from wildfires. (Closing 4/30/2019)

Battle Creek Watershed Road Sediment Reduction Program Phase 1 & 2 (\$406,350) – The Western Shasta Resource Conservation District will prepare a prioritized erosion prevention plan to identify and reduce road-related sediment inputs to North Fork Battle Creek. The project will include a road assessment on approximately 23 miles of county roads, a training workshop to provide road crews with techniques to perform an effective implementation project along Rock Creek Road, and the preparation of CEQA documents. (Closing 9/30/2021)

North Butte County Road Inventory and Improvement Project (\$375,000) – The Resource Conservation District of Butte County will conduct a road inventory and prepare an Action Plan to reduce sedimentation from native surface roads located within the Butte Creek and Big Chico Creek watersheds (67 miles), prepare a CEQA document, implement road upgrades along four (4) miles of Powellton Road within the Butte Creek watershed, and hold two public workshops.

Deer Creek North Yuba River Watershed Assessment and Sediment Reduction Plan (\$255,100) – The Tahoe National Forest will prepare an Action Plan to reduce sedimentation from native surface roads located within the Deer Creek and North Yuba watersheds, prepare a CEQA document, implement road upgrades within the Deer Creek watershed, and provide public outreach.

American (\$757,000) – The American River Conservancy is planning to thin approximately 200 acres of merchantable timber under a CAL FIRE Prevention Pilot Project Exemption and associated road maintenance.

GROUND WATER STRATEGY

Action 6.4.1 Develop a Salt and Nitrate Management Plan for the Central Valley. The initiative is a collaborative stakeholder effort that includes the Central Valley Water Board as a stakeholder. CVSALTS completed a Salt and Nitrate Management Plan in December 2016. The SNMP was discussed at a 9 March 2016 Board hearing, where the Board adopted a resolution to acknowledge receipt of the SNMP and directed Board staff to develop basin plan amendments to implement appropriate recommendations from the SNMP. Board staff and other CV- SALTS stakeholders are currently developing a proposed Basin Plan Amendment for a Central Valley Salt and Nitrate Control Program based on recommendations from the submitted SNMP and comments received from interested parties. A workshop to discuss the proposed Basin Plan Amendment was held on 19 January in Rancho Cordova. More details on CV- SALTS activities can be found in the Salinity and CV-SALTS section of this EO report. The amendments were adopted by the Central Valley Water Board during their May 31 Board meeting. The amendments were transmitted to the State Water Board for their consideration. The State Board released the proposed amendments for public comment; that period ended on 13 August 2018. Region 5 staff is working with State Board staff to move the amendments through the process, with a hearing date tentatively expected for April 2019. If approved by the State Board, the amendments would be forwarded to the Office of Administrative Law (OAL), and US EPA for consideration. The groundwater portions of the amendments require State Water Board and OAL approval before they could go into effect. The surface water portions of the amendments require US EPA approval before those portions could go into effect. Information is also available at: <http://cvssalinity.org/>

Action 6.4.2 Implement consistent and scientifically sound groundwater quality monitoring program. To implement this action a Groundwater Monitoring Advisory Workgroup (GMAW) composed of groundwater experts, which includes representatives from State and Regional Water Boards, USGS, academia, and private consultants was formed. The GMAW has identified several technical issues related to groundwater monitoring. The volunteer GMAW is tasked with development of white papers for each of the technical issues. Two on-going efforts are working on related issues, a statewide committee is reviewing the Antidegradation Policy and guidance on its implementation with respects to groundwater, and CV-SALTS is looking at policy issues related to assimilative capacity. The results of these two efforts may impact the approach or guidance that would be outlined in the GMAW white papers. Therefore, to avoid duplication of efforts, staff is engaged with both. Discussions are taking place to determine how best to coordinate the GMAW and CV-SALTS Technical Advisory Committee.

GMAW meeting information can be found at:

http://www.waterboards.ca.gov/centralvalley/water_issues/groundwater_quality/index.shtml

Information on the State Water Resources Control Board review of the Antidegradation Policy application to Groundwater can be found at:

http://www.waterboards.ca.gov/plans_policies/antidegradation.shtml

Action 6.4.3 Implement Groundwater Quality Protection Programs through the Integrated Regional Water Management Plan Groups. The goal of this action is to leverage and expand groundwater quality program coverage through improved coordination and partnering with local regional groups that receive State funds through the Integrated Regional Water Management (IRWM) process. Efforts continue to encourage Regional Water Management Groups outreach to Disadvantaged Communities. Education on Supplemental Environmental Project funding sources that may be available for IRWM plan projects, specifically those that benefit disadvantaged communities, continues with the distribution of a factsheet that is available at:

http://www.waterboards.ca.gov/centralvalley/water_issues/enforcement/sep_apr2015_fact_sheet.pdf

On-going staff participation in IRWM groups (or Regional Water Management Groups) is included under the Public Outreach section of this EO report.

Action 6.4.5 Well Design and Destruction (Abandonment) Program. Staff has reviewed and evaluated county well ordinances. Personnel at county agencies (health departments) have been contacted to determine the specific methods currently used to oversee and enforce well standards. Staff has completed a draft report, currently under management review, that summarizes those tools and methods of well standards enforcement and addresses potential issues with some of the current well standards.

Action 6.5.1(b) Develop General Order for Poultry, Cattle, or Other Confined Animal Facilities. The goal of this action is to protect groundwater from waste associated with the operation of confined animal facilities including poultry raising and egg laying facilities, bovine feedlots (heifer ranches, beef cattle yards, etc.), and other types of confined animal facilities not covered by the Dairy General Order. A General Order for poultry facilities was considered and adopted by the Central Valley Water Board at its December 2016 meeting. A General Order for Confined Bovine Feeding Operations was considered and adopted by the Central Valley Water Board at its June 2017 meeting. Approximately 200 poultry facilities have submitted Notices of Intent to comply with the Poultry General Order. The deadline to submit a Notice of Intent for the Bovine Feedlot Order was July 1, 2018. Approximately 300 feedlots have submitted Notices of Intent or requests to merge their feedlot with a dairy and are being processed. Staff will continue outreach to ensure the appropriate facilities get enrolled in the program.

Action 6.5.2(a) Implementation of the Long-Term Irrigated Lands Regulatory Program (ILRP). The goal identified in the roadmap was to implement a program that establishes a groundwater protection program for wastes associated with irrigated agricultural practices. More detail on the Long term ILRP development and implementation can be found under the Irrigated Lands Regulatory Program section of this EO Report or found at:

http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/index.shtml

Action 6.5.2(b) Coordinate with California Department of Food and Agriculture (CDFA) to identify methods to enhance outreach, education, and research through CDFA's fertilizer research and education program. The goal of this action is to reduce groundwater quality impacts from use of nitrogen based fertilizing materials in agricultural, commercial, and residential applications. ILRP staff continues to coordinate with CDFA on the nitrogen management certification training for Certified Crop Advisors and individual growers and the development of nitrogen removed calculators for use by the agricultural coalitions. Staff is also coordinating with CDFA to augment the irrigation element of the nitrogen management certification training and develop training for continued education credits.

Action 6.5.3(a) Reduce Site Cleanup backlog. The goal of this action is to reduce the number of inactive cases (i.e., the case backlog) in the Site Cleanup Program, which originally had 791 backlog cases. During the 2018/2019 fiscal year, 14 open, inactive cases have been reviewed. Of these, 12 were eliminated from the backlog. Of the cases reviewed, 4 need additional staff time and effort on the responsible party's part to resolve. Since the backlog reduction project began, all 791 backlog cases have been initially reviewed with 621 being eliminated from the backlog, and 173 identified as requiring additional resources. Of these remaining 170 Open Inactive Cleanup Program Sites, 49 cases have been assigned to staff who are working on activating the cases.

Action 6.5.4(c) Develop methods to reduce backlog and increase facilities regulated. Staff are continuing to enroll dischargers into the state-wide Small Volume Domestic Order and include rescissions of old WDRs into regular Central Valley Water Board meeting agendas. The State Water Board updated the state-wide general order for water recycling in June 2016. Regional Water Board staff has notified the individuals enrolled in the previous, 2014 general order and enrolled them in the new order. The new general order is a useful tool to encourage water recycling.

State Water Board staff have targeted two additional general orders for consideration (a Winery General Order and an Aggregate General Order). Central Valley Water Board staff are involved with the development of these general orders, which are expected to reduce the number of backlogged applications and are expected to speed up the processing of applications for WDRs from new or expanding facilities. Board staff are also beginning the process of developing general orders for large domestic wastewater treatment facilities that discharge to land, nut hulling facilities, and canned and frozen food processors. Board staff are committed to working with industry representatives, municipalities, and stakeholders during the development of these general orders.

Action 6.15 Onsite Wastewater Treatment Systems (OWTS) Policy Implementation; Local Agency Management Program (LAMP) Reviews. The OWTS Policy gives Local Agencies, mostly county environmental health departments, an option to propose Local Agency Management Programs (LAMPs). The goal of these programs is to demonstrate adequacy of local codes and ordinances to meet new minimum standards both for human health and water quality protection. Draft LAMPs were due to Central Valley Water Board staff by 13 May 2016. Staff received 29 of 30 LAMPs by the submittal deadline, and one late submittal from Tulare County. The Redding, Rancho Cordova, and Fresno Offices coordinated reviews in detail, and resolved most issues with local environmental health directors. Prior to public noticing and recommendations to the Central Valley Water Board for consideration, staff requested directors

to gain their Board of Supervisors' approvals, and related new code adoptions. Following this procedure, the Water Board has to date approved 29 LAMPs. One LAMP remains incomplete, from Lake County; staff are working closely with the director, Board of Supervisors, and interested parties on a revised draft.

Staff have also worked with 22 cities that have OWTS within incorporated boundaries. Most will allow County oversight. However, the Cities of Clovis and Fresno, Fresno County, Los Banos, Merced County, and Visalia, Tulare County, have likely opted for Tier 1. Staff are also responsible for the review of 8 LAMPs that fall primarily under other Regional Board jurisdictions, but that will regulate OWTS within the Central Valley. Staff have reviewed all these LAMPs. Staff regularly update LAMP review progress on the following webpage: https://www.waterboards.ca.gov/centralvalley/water_issues/owts/lamp_reviews/

PUBLIC OUTREACH

On 24 October 2018, Kate Burger and Bill Bergmann met with the City of Corning Manager and City Engineer to discuss a planned investigation funded by the State Water Resources Control Board Site Cleanup Subaccount Program (SCAP). The investigation will investigate the nature and extent of perchloroethylene (PCE) contamination along Solano Street. The City Manager requested that staff meet informally with City Council Members and give a presentation to the City Council. On 31 October 2018, Bill Bergmann and Eric Rapport had a follow-up meeting with the City of Corning Manager to discuss her concerns regarding the investigation.

As a result of the 31 October 2018 CalMAIN plenary meeting, Clint Snyder, Elizabeth Betancourt, and Katie Gilman participated in a series of agency one-to-one meetings to dig more deeply into participating agency's needs, hopes, and concerns regarding the development of this tool, whose intent is to inform natural resource-based management decisions in oak woodland and forested watersheds, including timber harvest, cannabis, water rights and flow assessment, forest health initiatives, cumulative effects of landscape management, and other closely related focus areas. These meetings occurred on December 13th, 18th, and 19th, and included meetings with the California Natural Resources Agency, Cal Fire, Department of Fish and Wildlife, Department of Conservation, and the Strategic Growth Council. Meetings were well attended, with active participation by individuals at the managerial and executive levels of the organizations. Meetings of the same type will be held in January with the Department of Water Resources, Department of Food and Agriculture, and the Sierra Nevada Conservancy.

On 7 November, Rebecca Tabor attended the Shasta-Tehama Watershed Education Coalition's bi-monthly board meeting in Red Bluff.

On 13 November, Anthony Toto attended the Fresno Environmental Reporting Network task force meeting to review and provide updates regarding environmental complaints lodged by various disadvantaged community groups and members. A question regarding illegal dump sites was asked and Anthony provided the link to CALRECYCLE regarding illegal dumping. Also, assistance was requested for testing wells in the Tombstone area (Fresno County)

On 15 November, Jennifer LaBay, Holly Grover, and Taran Sahota attended State Water Board Grant Manager Training in Sacramento, which focused on Nonpoint Source 319(h) grants.

On 27 November, Justin LaNier attended the Greater Battle Watershed Working Group Meeting at the US Fish and Wildlife office in Red Bluff, CA. This public meeting covers issues interest for Battle Creek watershed stakeholders. Discussions covered ongoing research, status of endangered salmon and habitat issues, hatchery and rearing status, habitat restoration project, watershed-based planning efforts, and PG&E's decision to not re-license their hydroelectric project in Battle Creek.

On 27–28 November, Clay Rodgers and Doug Patteson attended a Dairy Sustainability Summit in Sacramento to discuss the role dairies play in achieving a sustainable food supply and environment. California is leading the world in the development of innovative and sustainable dairy farm practices to

reduce methane emissions, protect air and water quality, produce clean, renewable energy, and conserve resources through increased efficiency.

On 28 November, Alex MacDonald presented at the Aerojet Community Advisory Group's bi-monthly meeting. The presentation included field activities at the Aerojet Superfund Site and the Inactive Rancho Cordova Test Site, the investigation of perfluorinated compound in groundwater on Aerojet and at the Former Mather AFB, upcoming well installations and reports to be submitted. The meeting focused on responses to the CAG comments on the Remedial Action Plan for Area 40 and the implementation process for remediation

On 30 November, Anthony Toto attended the Environmental Justice Training for State and Local Agencies. During the Environmental Justice panel discussion, the representative from Fresno Environmental Reporting Network, Nayamin Martinez, expressed appreciation for Central Valley Water Board staff going out of its way to be responsive to the EJ community – even when the matter is not within the purview of water quality.

On 4 December, Anthony Toto participated in a conference call in the Kern Environmental Enforcement Network task force meeting to review and provide updates regarding environmental complaints lodged by various disadvantaged community groups and members.

On 5 December, Susan Fregien and Rebecca Tabor met with the Sacramento Valley Water Quality Coalition to discuss the Coalition's approach to determine the need for E. coli management plans within the watershed.

On 6 December, Colt Brockman presented to the Forest Leadership Team (FLT) from Lassen National Forest (LNF). In attendance for the presentation was the Forest Supervisor, District Rangers, and many specialist (Ecologists, Engineers, Hydrologists). About 35 LNF representatives in all. The presentation included an overview of the *Waste Discharge Requirements General Order for Discharges Related to Timberland Management Activities, Order No. R5-2017-0061* (General Order) and the development of a programmatic Federal Nonpoint Source Permit (Fed NPS Permit). Items covered under the General Order presentation included the following: Regulatory Overview, Eligibility Criteria, Enrollment, Conditions, Monitoring and Reporting and Permit Termination. Items covered under the Fed NPS Permit presentation included the following: Informational overview for the need of a programmatic Fed NPS Permit, Programmatic permitting components, Activities the Fed NPS Permit could potentially cover, BMP evaluations, Fed NPS Permit projected timeline to Water Board Adoption Hearing.

On 6 December, James Taylor participated in the former McClellan Air Force Base Restoration Advisory Board (RAB) meeting at the North Highlands Park and Recreation District Center in North Highlands, California. This is a public meeting where agencies inform the public of cleanup issues at Department of Defense facilities and enlist their comments. The main topics for the meeting were general updates on the Air Force and Privatized Cleanup Projects at McClellan.

On 10 December Janis Cooke joined Board Member Bradford and senior permitting and enforcement staff in an aerial survey of EcoRestore projects in the Yolo Bypass. The survey and a project briefing were provided by Department of Water Resources and the Resources Agency.

On 10 December, Sue McConnell and Susan Fregien participated in a Northern California Water Association-sponsored tour of the Yolo Bypass in the vicinity of the Fremont Weir. The tour focused on existing and proposed fish passage projects that will enhance growth of juvenile salmon and survival of adult salmon. Agricultural operations are integral to landscape where these projects are being constructed.

On 12 December, Meredith Howard, Sue McConnell and Anne Littlejohn attended a workshop hosted by the Central Valley Salinity Coalition in Modesto. The workshop provided information on amendments to the Basin Plans, and how they may affect permittees in the future. A panel discussion focused on the challenges of nitrate management in the central valley and the process by which management zones may develop to address the issue.

On 13 December, Eric Warren attended a workshop hosted by the Central Valley Salinity Coalition. The workshop provided information on amendments to the Water Quality Control Plan for the Tulare Lake Basin and other basins throughout the region, and how they may affect permittees in the future. A panel discussion focused on the challenges of nitrate management in the central valley and the process by which management zones may develop to address the issue.

On 18 December, Bethany Soto participated in the Kaweah River Basin Integrated Regional Water Management (IRWM) Plan joint meeting between the governing board and stakeholder advisory group. Topics discussed at the meeting included: the progress of the Tulare-Kern Funding Area Integrated Regional Water Management; the Disadvantaged Community Involvement Program, the Project Advisory Committee; the Tulare-Kern Funding Area Prop 1 IRWM implementation grant application workshop with Department of Water Resources on April 8; and updates to the Kaweah IRWM Plan.

On 28 December, Anthony Toto forwarded information regarding CalEPA applications for Environmental Justice Grants to both the Fresno Environmental Reporting Network and Kern Environmental Enforcement Network task forces.

On 4 January, Kate Burger and Bill Bergmann met with the City of Corning Mayor, City of Corning Manager, and a city council member to discuss the planned SCAP-funded investigation of the nature and extent of perchloroethylene (PCE) contamination along Solano Street. Staff will be giving a presentation regarding the investigation at the City Council meeting on 8 January 2019.

On 11 January, Janis Cooke participated in a workshop and panel discussion about implementation of the Delta Independent Science Board's recommendations for monitoring water quality in the Delta. In July 2018, the Delta Independent Science Board released its monitoring review, which focused on nutrients and contaminants. The purpose of the workshop was to identify possible steps for the Delta Stewardship Council and other entities to implement monitoring recommendations.

GENERAL UPDATES TO THE BOARD

1. Constituents of Emerging Concern (CECs)

In 2016, Central Valley Water Board staff began working with representatives from the Central Valley Clean Water Association (representing publicly-owned treatment works or POTWs) and Central Valley Municipal Separate Storm Sewer System agencies (MS4) to develop a work plan in response to State Water Board's *Constituents of Emerging Concern (CECs) Statewide Pilot Study Monitoring Plan*. The POTW/MS4 group have developed the *Central Valley Pilot Study for Monitoring Constituents of Emerging Concern (CECs) Work Plan* (Work Plan) based on feedback from the State Water Board and Central Valley Water Board staff.

Staff worked with the POTW/MS4 group to secure funding from the Delta Regional Monitoring Program (DRMP) Steering Committee to develop a Quality Assurance Project Plan (QAPP) and fund program implementation costs (e.g. – planning, contracting, start-up mobilization, etc.). The DRMP CEC Subcommittee is currently working with the Aquatic Science Center to develop the QAPP for approval by the Surface Water Ambient Monitoring Program, and the Sampling and Analysis Plan.

The DRMP CEC Subcommittee and Central Valley Water Board staff are continuing to explore other external funding sources through Supplemental Environmental Projects and other sources, such as Proposition 1 grant funds. The Aquatic Science Center recently submitted an application on behalf of the DRMP on 26 October 2018 for a Proposition 1 Delta Science Proposal Solicitation. The submitted application expands the approved Work Plan to include non-targeted analysis, invitro bioassays, and sampling for microplastics. Ambient CEC sampling is scheduled to begin July 2019.

2. Central Valley Water Board Response to Carr Fire

The Carr Fire burned 229,651 acres in late July and August 2018 in Shasta and Trinity counties, including 1,077 homes in and near Redding, CA. The Central Valley Water Board has secured \$8.4 million in state and federal funds to implement sediment and erosion control measures in five key watersheds critical for the protection of drinking water supplies and fisheries habitat. Through a contract with the Western Shasta Resource Conservation District, 260 acres of burned area have received treatments to date. A total of 1,600 acres are planned for treatment over the next year. Field monitoring and water quality sampling is also occurring in order to determine the water quality impacts associated with the fire, assess threats to water supply, and measure the effectiveness of the sediment and erosion control measures and other post-fire actions. Ongoing monitoring to date has shown elevated levels of sediment and turbidity in receiving streams and associated slightly elevated concentrations of naturally-occurring metals.

3. Camp Fire, Butte County

The Central Valley Water Board is leading a surface water quality monitoring program on behalf of Butte County Office of Emergency Services. The purpose of the monitoring program is to assess post-fire water quality impacts throughout the burn area and downstream of the burn area. The program is conducted in coordination with Butte County, the Department of Fish and Wildlife, CalTrans, and the Department of Water Resources. On 18 January 2019, the board coordinated development of a press release summarizing results of a 9 January 2019 sampling event. Concentrations in receiving waters are slightly elevated for certain naturally occurring metals and elevated for some polycyclic aromatic hydrocarbons.

**PERSONNEL AND ADMINISTRATION
STAFFING UPDATES
November 1, 2018 – December 31, 2018**

Promotion:

None

Leave of Absence:

Daniel Carlson – Sr. Engineering Geologist
Bethany Soto – Environmental Scientist

Retirement:

Betty Yee – Sr. WRCE
Linda Bracamonte – SSM II
Zhimin Lu - WRCE

Authorized Positions: 261.7

Vacant Positions: 13.4

Separations	New Hires
Mike Grill – Environmental Scientist Shane Price – Environmental Scientist	Matthew Boone – Sr. Environmental Scientist

Temporary Help Positions

Separations	New Hires
David Hill – Scientific Aid Alyssa Rhodes – Scientific Aid Natasha Ocegueda – Scientific Aid	Heidi Deneke – Seasonal Clerk

**TRAINING UPDATE
November 1, 2018 – December 31, 2018**

Class Title	Number of Attendees
40-Hour HAZWOPPER Training	1
8-Hour HAZWOPPER Refresher Training	39
Basic Incident Management Training	1
Basic Supervision for Supervisors – Part I	2
Excel Level 2	4
Fluvial Geomorphology	9
Grant Manager Training	3
Intermediate Excel 2016	1
Introductory Environmental Statistics Using R	1
ITRC Symposium of Characterizing and Managing PFAS at Impacted Sites	3
Leading Effectively	1
SETAC North America 39th Annual Meeting	9
Supervisor's Health and Safety	6
UST Cleanup Summit	1
Visualizing and Analyzing Environmental Data with R	3
Writing Effective and Compliant Duty Statements	2

FISCAL UPDATE

A fiscal update cannot be provided at this time due to the Water Board's implementation of the Fi\$Cal accounting system. This information will be provided once budget reports become available.

CONTRACTS					
OPERATIONAL SUPPORT SERVICES					
CONTRACT NUMBER	CONTRACTOR NAME	DESCRIPTION	START DATE	END DATE	AMOUNT
16-029-150	Courtney Aviation	Airplane inspection services – Rancho Office	04/18/2017	03/31/2019	\$40,000
17-084-150, Am. 1	Air Shasta Rotor and Wing, Inc.	Helicopter inspection services – Redding Office	05/24/2018	09/30/2020	\$60,000
WATER QUALITY STUDY/PLANNING					
16-046-150, Am. 1	UC Davis	Study to develop reference toxicity values for herbicides/fungicides present in Delta for native algal species.	TBD	02/12/2020	\$375,000
16-048-150	UC Santa Cruz	Evaluation of temperature criteria to recommend methodology for deriving temperature criteria.	03/13/2017	03/31/2019	\$396,250
16-074-150, Am. 2	Lawrence Berkeley National Lab	Plant, soil and water testing	04/28/2018	06/30/2019	\$443,511
17-022-150	Department of Water Resources	Ongoing operation and maintenance – SWAMP.	07/01/2017	06/30/2020	\$180,000
17-054-150	Delta Conservancy	Administrative and program management of the Delta Monitoring Exposure Reduction Program (MERP).	01/09/2018	06/30/2020	\$154,191
17-065-150	USGS	Non-point source aquatic passive sampling study plan (Phase 2).	06/30/2018	03/31/2020	\$190,000
17-066-150	Dept. of Fish and Wildlife	Tech assistance to design and implement a monitoring program to assess reference conditions in non-perennial streams.	06/30/2018	03/31/2020	\$154,055
17-069-150	CSU Chico	Tech assistance to design and implement a monitoring program to assess reference conditions in non-perennial streams.	06/30/2018	06/30/2020	\$135,500
18-027-150	UC Davis	Tech assistance to determine pyrethroid partition coefficients for sediment samples of the Central Valley.	11/29/2018	01/31/2021	\$100,000
18-053-150	Caltest Analytical Laboratory	Lab services (Rancho Cordova office)	08/15/2018	06/30/2021	\$240,000
18-054-150	Basic Laboratory, Inc.	Lab services (Redding office)	08/15/2018	06/30/2021	\$165,000
18-055-150	Moore Twining Associates, Inc.	Lab services (Fresno office)	08/15/2018	06/30/2021	\$195,000
18-057-150	UC Davis	Interpretation of Soil Chemistry	07/01/2018	03/31/2020	\$199,987

WATER QUALITY STUDY/PLANNING (continued)

CONTRACT NUMBER	CONTRACTOR NAME	DESCRIPTION	START DATE	END DATE	AMOUNT
18-058-150	Aquatic Science Center	Development of a computer-based biogeochemical model for the Delta and Suisun Bay to quantitatively explore nutrient loads, cycling and characterize ecosystem response under current and future scenarios.	07/01/2018	03/31/2020	\$400,000
18-071-150	Basic Laboratory, Inc.	Emergency lab services – Carr Fire	07/26/2018	06/30/2020	\$110,000
18-084-150	Southern California Coastal Water Research Project Authority	To organize and facilitate a Surface Water Expert Panel to evaluate the adequacy of the surface water monitoring and assessment framework in the Eastern San Joaquin (ESJ) River Watershed General Waste Discharge Requirements	TBD	01/30/2021	\$249,806
18-088-150	Alpha Laboratories, Inc.	Emergency laboratory analysis of water samples – Mendocino Complex Fire.	11/1/2018	10/31/2018	\$70,000
19-002-270	Merced County Department of Public Health	To revise and/or modify existing online proprietary reporting tools for preparing annual reports and waste management plans developed for dairy operations to be used by bovine operations.	TBD	03/31/2022	\$300,000
19-003-150	Southern California Coastal Water Research Project Authority	The project will identify the environmental drivers contributing to cyanobacterial blooms and toxin production in Clear Lake, Lake County.	TBD	03/31/2022	\$510,000
19-004-150	TBD	Web-based, interactive presentation/display of landscape level forest health and water quality assessment/planning for protection of the Battle Creek watershed.	TBD	03/31/2022	\$95,000

FUTURE BOARD ACTIVITIES

The following are significant Board meeting actions anticipated for the next three Board meetings. This is not a complete listing of all Board meeting items. This listing is tentative and subject to change for many reasons. The listing is intended to give a longer-range view of planned Regional Board activities per program.

APRIL 2019 BOARD MEETING

NPDES PERMITTING

- CDCR Deuel Vocational Institution WWTP Renewal
- Forbestown WTP Renewal
- City of Clovis WWTF Renewal
- Burney Cogeneration/Sawmill Renewal
- City of Shasta Lake WWTP Municipal GO NOA

WASTE DISCHARGE REQUIREMENTS (WDR) PROGRAM – DISCHARGE TO LAND

- TKI Fresno Pesticides (New WDRs)
- KRS Truck Wash (New WDRs)
- Bear Creek Winery (Revised WDRs)
- Beale AFB WWTF (Revised WDRs)
- Smucker's Juice (Revised WDRs)
- Order Amending Poultry General Order (Amended WDRs)
- Alon Refinery (Amended WDRs)
- Kern Tulare Water District et al (Revised WDRs)
- E&B Natural Resources and Sherwood Hills, LLC (New WDRs)

LAND DISPOSAL PROGRAM – CHAPTER 15/TITLE 27

- Exeter Landfill, Tulare County (Revised WDRs)
- Black Butte Landfill (Revised WDRs)
- Geer Landfill (Revised WDRs)
- L&D Landfill (Revised WDRs)
- Geothermal Inc (New WDRs)

JUNE 2019 BOARD MEETING

NPDES PERMITS

- City of Vacaville Easterly WWTP Renewal
- Delleker WWTP Renewal
- Sequoia/Kings Canyon National Parks Rotenone Application (New Permit)
- Yosemite National Park, El Portal WWTF Renewal

WASTE DISCHARGE REQUIREMENTS (WDR) PROGRAM – DISCHARGE TO LAND

- B&R Truck Wash (New WDRs)
- Tomatek Tomato Processing (Revised WDRs)
- Tuolumne County Sanitary District (Revised WDRs)
- Sacramento Rendering (Revised WDRs)
- Bronco Winery (Revised WDRs)
- Butte Community College (Revised WDRs)
- Olson Meats (Revised WDRs)

LAND DISPOSAL PROGRAM – CHAPTER 15/TITLE 27

- Forward Landfill (Revised WDRs)
- Roseville Landfill (Revised WDRs)
- GFB/Pittsburg Landfill (Revised WDRs)

- Chateau Fresno MSW (Revised WDRs)

AUGUST 2019 BOARD MEETING

NPDES PERMITS

- Town of Discovery Bay WWTP Renewal
- City of Stockton RWCF Renewal

WASTE DISCHARGE REQUIREMENTS (WDR) PROGRAM – DISCHARGE TO LAND

- City of Madera WWTF (Revised WDRs)
- Tejon Mountain Village WWTF (New WDRs)
- Atlas Business Industrial WWTF (Revised WDRs)
- City of Corcoran WWTF (Revised WDRs)

IRRIGATED LANDS REGULATORY PROGRAM

Individual Growers (Revised WDRs)

PENDING ACTIONS, BUT NOT YET SCHEDULED FOR A BOARD MEETING

STORM WATER AND WATER QUALITY CERTIFICATION

- General Order for Dredging Activities not requiring a Federal Permit/General 401 Certification for Dredging Activities requiring a Federal Permit
- Caltrans, Grapevine Channel Repair, Waste Discharge Requirements for Dredge/Fill Activity, Kern County
- South Sacramento Habitat Conservation Plan Programmatic Certification, Sacramento County

NPDES PROGRAM – PERMITTING

- Malaga WWTF Rescission
- Alturas WWTP Renewal
- Wheelabrator Shasta Energy Renewal
- Anderson WPCP Renewal
- Sierra Pacific Industries Burney Division Sawmill Renewal
- Cold Water CAAP General Order Renewal
- McClellan AFB GETS Rescission
- Merced WWTF Renewal
- Woodland WWTP Renewal

WASTE DISCHARGE REQUIREMENTS (WDR) PROGRAM - DISCHARGE TO LAND

- Barrel 10 Winery (Amended WDRs)
- City of Sutter Creek (Revised WDRs)
- City of Galt (Revised WDRs)
- City of Huron (WWTF)
- City of Lone (Revised Cease and Desist Order)
- City of Lodi (Revised WDRs)
- City of Manteca WWTF (Revised WDRs)
- City of Modesto WQCF (Revised WDRs)
- City of Richgrove WWTF (Revised WDRs)
- CDCR Mule Creek State Prison WWTF (Revised WDRs)
- Dairy General Order (Revised WDRs)
- E&J Gallo Madera (Revised WDRs)
- E&J Gallo Livingston (Revised WDRs)
- Exeter Ivanhoe Citrus (Revised WDRs)
- Farmersville WWTF (Revised WDRs)
- Former Pilkington Glass Manufacturing Facility (Revised WDRs)

- Golden Feather School District, Spring Valley School (Revised WDRs)
- E&J Gallo Liberty Winery (New WDRs)
- Maxwell PUD (Revised WDRs)
- Mokelumne Rim Vineyards (Revised WDRs)
- North State Rendering Tallow Plant (Revised WDRs)
- Sun Maid Raisins Orange Cove (Revised WDRs)
- Tasteful Selections (Revised WDRs)
- Westwood STP (Revised WDRs)
- Wonderful Pistachios (Revised WDRs)

LAND DISPOSAL PROGRAM – CHAPTER 15/TITLE 27

- Pittsburg Landfill (Revised WDRs)
- SMS Briners (Revised WDRs)
- UC Davis Landfill (Revised WDRs)
- Ponderosa Landfill (Revised WDRs)
- Dixon Pit Landfill (Revised WDRs)
- Rio Vista Landfill (Revised WDRs)
- Steele Canyon Landfill (Revised WDRs)
- Lincoln Landfill (Revised WDRs)
- Meadow Vista Landfill (Revised WDRs)

SIGNIFICANT CENTRAL VALLEY WATER BOARD PLANS, PERMITS AND POLICIES UNDER DEVELOPMENT

Central Valley Pyrethroids Basin Plan Amendment

The Basin Plan Amendment was adopted by the Central Valley Water Board on 8 June 2017 and approved by the State Water Board on 10 July 2018. OAL and USEPA approval are still needed before it becomes fully effective.

Organochlorine Pesticides in the Sacramento River and San Joaquin River Basin Plan

Regional Board completed CEQA Scoping meeting in July 2009. A draft summary report on OC pesticides was completed in December 2014. Loss of staff has delayed this project. Project was Re-initiated in FY18/19 and a summary report is expected to be completed in early 2019.

Mercury Implementation Plan for Reservoirs

Staff from the SF Bay Water Board, the Central Valley Water Board, and the State Water Board are developing a program to address fish mercury impairments in about 130 reservoirs statewide. Staff prepared the scientific and technical analysis and regulatory provisions for the implementation plan. Discussions are ongoing with reservoir managers and amongst regulatory staff regarding the appropriate regulatory measures to implement the goals of this program.

CV-SALTS Basin Plan Amendments

The Central Valley Water Board adopted a Central Valley-Wide Salt and Nitrate Control Program on 31 May 2018, which consisted of a package of Basin Plan Amendments that will change the way salts and nitrates are regulated by the Central Valley Water Board. The Basin Plan Amendments included a revised Variance and Exceptions Policy, a new Drought and Conservation Policy, a new Offsets Policy, and clarification on the use of Secondary MCLs to protect the MUN use. Central Valley Water Board staff have completed a series of meetings with State Water Board technical staff in an effort to bring amendments to the State Water Board, OAL and USEPA for approval. Target date for State Water Board consideration is April 2019.

Revision of General Order for Existing Dairies

Revision of Revised General Order R5-2013-0122 to include requirements for composting consistent with the statewide composting General Order WQ 2015-0121-DWQ and requirements for land application areas consistent with the Irrigated Lands Regulatory Program requirements. Staff is drafting revisions for Board considerations at future meeting. Program staff expect to incorporate results of Dairy Representative Monitoring Program Summary Report, due in April 2019, into the Revised General Order.

Water Quality Objectives for Ammonia

Scoping meetings held on 15, 16 and 22 March 2018 in Rancho Cordova, Fresno and Redding, respectively. Agency meeting held 24 May 2018. Toxicity testing is completed. Currently working on recalculating criteria using USEPA's recalculation procedures.

USFS MOU for BAER activities

Staff has engaged the USFS in drafting an MOU that will outline the process by which the Regional Boards may choose to participate in USFS Burned Area Emergency Response (BAER) teams. Temporarily on hold due to vacancies at the regional USFS office.

Basin Plan Amendment for a region-wide evaluation process for the Municipal and Domestic Supply (MUN) beneficial use in agriculturally dominated surface water bodies

The Central Valley Water Board adopted the Basin Plan Amendment Package on 11 August 2017. At the State Water Board approval hearing on 10 July 2018, the decision was made to bring the item back to the Board for consideration at a future date. Several policy discussions between the Central Valley Water Board staff and management and the State Water Board have been conducted, and the State Water

Board will likely consider a resolution remanding the Basin Plan Amendment to the Central Valley Water Board for further consideration of several components of the Basin Plan Amendment due to changes in policy priorities since the Central Valley Water Board's Basin Plan Amendments were first developed.

Development of Permit for Federal Non-Point Source (NPS) activities on Forest Lands

The Central Valley Water Board is working with the Lahontan Water Board to develop permits to cover NPS activities on USFS and BLM managed lands with the potential to affect water quality. Initial public outreach meetings were held from October through early December 2017. Project information can be found here: http://www.waterboards.ca.gov/lahontan/water_issues/programs/nps/federal_lands/

ATTACHMENT A - Sanitary Sewer Spills - Summary Report

Count of Spills for October and November 2018

Count of Spills Month	5F				5R				5S				Grand Total
	Category 1	Category 2	Category 3	5F Total	Category 1	Category 2	Category 3	5R Total	Category 1	Category 2	Category 3	5S Total	
October 2018	0	2	6	8	2	1	0	3	9	1	78	88	99
November 2018	1	2	9	12	0	0	1	1	8	0	125	133	146
Total	1	4	15	20	2	1	1	4	17	1	203	221	245

Spill Cause	Count of Spills	%
Root Intrusion	135	54.2%
Debris-General	39	15.7%
Grease Deposition (FOG)	28	11.2%
Other	11	4.4%
Operator Error	7	2.8%
Damage by others not related to CS Const/Maint.	5	2.0%
Pipe Structural Problem/Failure	5	2.0%
Pump Station Failure-Controls	4	1.6%
Debris from Lateral	3	1.2%
Damage by Others Not Related to CS Construction/Maintenance	2	0.8%
Debris from Construction	2	0.8%
Debris-Wipes/Non-Dispersables	2	0.8%
Air Relief Valve (ARV)/Blow-Off Valve (BOV) Failure	1	0.4%
Debris-Rags	1	0.4%
Pump Station Failure-Mechanical	1	0.4%
Pump Station Failure-Power	1	0.4%
Surcharged Pipe (Combined CS Only)	1	0.4%
Vandalism	1	0.4%
Total	249	100%

Category 1: Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow condition that:

Reach surface water and/or reach a drainage channel tributary to a surface water; or

Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).

Category 2: Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee's sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly

Category 3: All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition

ATTACHMENT A - Sanitary Sewer Overflow (SSO) Spills - October and November 2018

Region	Collection System	WDID	Spill ID	Certification Status	Spill Type	Spill Location Name	County	Did Spill Reach Surface Waters? (Y/N)	Total Spill Volume (Gallons)	Spill Volume that Reached Surface Waters (Gallons)	Start Date	Spill Cause
SS	Galt CS	55SO10951	853483	Certified	Category 1	Live Oak Lift Station City of Galt; 10065 Live Oak Ave. Galt Ca. 95632	Sacramento	Yes	301,000	301,000	11/28/2018	Pump Station Failure-Power
SS	City of Stockton MUD CS	55SO11433	853929	Certified	Category 1	4478 Cotton Ct.	San Joaquin	Yes	10,080	10,080	11/25/2018	Root Intrusion
SS	City of Sacramento Utilities CS	55SO10901	854005	Certified	Category 1	1339 Florin Road, Sacramento, CA	Sacramento	Yes	6,300	6,000	11/30/2018	Debris from Construction
SS	Deer Creek CS	55SO10923	851786	Certified	Category 1	Winterhaven	El Dorado	Yes	4,000	4,000	10/13/2018	Debris-General
SS	SMD No. 1 CS	55SO11028	852582	Certified	Category 1	Bell Road and Hwy 49	Placer	Yes	3,930	3,850	11/7/2018	Grease Deposition (FOG)
SS	SMD No. 1 CS	55SO11028	852013	Certified	Category 1	SMD 1 - Corner of Christian Valley Road and Ray Circle	Placer	Yes	2,925	2,925	10/22/2018	Pipe Structural Problem/Failure
SS	City of Stockton MUD CS	55SO11433	853198	Certified	Category 1	530 East Park Street	San Joaquin	Yes	1,106	1,106	11/22/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	854321	Certified	Category 1		231064 Sacramento	Yes	1,428	936	11/30/2018	Root Intrusion
SS	City Of Auburn CS	55SO10722	851732	Certified	Category 1	Auburn Wastewater Treatment plant	Placer	Yes	1,000	920	10/12/2018	Pump Station Failure-Controls
SS	Sacramento Area Sewer District CS	55SO10912	851679	Certified	Category 1		225937 Sacramento	Yes	945	915	10/6/2018	Root Intrusion
5R	Redding City CS	55SO10801	852349	Certified	Category 1	3411 Churn Creek Rd, behind Enterprise High School	Shasta	Yes	900	870	10/29/2018	Other (specify below)
SS	Sacramento Area Sewer District CS	55SO10912	851672	Certified	Category 1		225911 Sacramento	Yes	512	327	10/2/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	852541	Certified	Category 1		228204 Sacramento	Yes	275	267	11/3/2018	Root Intrusion
5R	Redding City CS	55SO10801	851686	Certified	Category 1	Manhole K4-17, just south of 2850 Pioneer Dr	Shasta	Yes	114	100	10/9/2018	Other (specify below)
SS	California State University, Sacramento	55SO10882	851969	Certified	Category 1	University Union	Sacramento	Yes	110	100	10/22/2018	Other (specify below)
5F	Mariposa Co YOSEMITE WEST CS	55SO11323	852631	Certified	Category 1	Choke cherry & Yosemite Park Way	Mariposa	Yes	100	100	11/9/2018	Root Intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853541	Certified	Category 1		226002 Sacramento	Yes	90	60	10/8/2018	Root Intrusion
SS	Folsom State Prison CS	55SO11192	851416	Certified	Category 1	FWF Sewage Lift Station	Sacramento	Yes	2,050	50	10/1/2018	Pump Station Failure-Mechanical
SS	City Of Antioch CS	55SO10890	852705	Certified	Category 1	821 W 3rd St Antioch ca	Contra Costa	Yes	67	38	11/8/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	852546	Certified	Category 1		227748 Sacramento	Yes	200	16	10/29/2018	Other (specify below)
SS	Grass Valley City CS	55SO10958	852616	Certified	Category 1	11954 NEVADA CITY HWY	Nevada	Yes	175	15	11/8/2018	Grease Deposition (FOG)
5F	City Of Bakersfield CS	55SO10717	851996	Certified	Category 2	Sewer Lateral - Niles & Alta Vista	Kern	No	7,500	0	10/24/2018	Grease Deposition (FOG)
5F	City of Fresno CS	55SO11202	852622	Certified	Category 2	Peach and Liberty	Fresno	No	5,780	0	11/6/2018	Other (specify below)
5F	City of Fresno CS	55SO11202	853382	Certified	Category 2	Third Between Butler and Lyell	Fresno	No	3,130	0	11/26/2018	Damage by Others Not Related to CS Construction/Maintenance (Specify Below)
SS	Modesto CS	55SO11001	851677	Certified	Category 2	1707 Floyd Ave	Stanislaus	No	2,160	0	10/6/2018	Grease Deposition (FOG)
5R	Coming Indust/Domestic CS	55SO10805	851881	Certified	Category 2	Sunrise way, Corning, CA	Tehama	No	1,500	0	10/20/2018	Debris-General
5F	Sequoia Fields/Bob Wiley CS	55SO11252	853631	Certified	Category 2	Bob Wiley Detention Facility	Tulare	No	1,000	0	10/28/2018	Debris-General
SS	Galt CS	55SO10951	852681	Certified	Category 3	Galt Wastewater Treatment and Reclamation Facility	Sacramento	No	668	0	11/6/2018	Operator Error
5F	City of Fresno CS	55SO11202	854026	Certified	Category 3	1283 N Delno Ave	Fresno	No	584	0	10/24/2018	Root Intrusion
5F	Springville PUD CS	55SO11247	854324	Certified	Category 3	35741 Bridge Drive	Tulare	No	500	0	11/4/2018	Other (specify below)
SS	City Of Auburn CS	55SO10722	853052	Certified	Category 3	Fawn Creek lift station SSO 2018	Placer	No	500	0	11/18/2018	Pipe Structural Problem/Failure
SS	Sacramento Area Sewer District CS	55SO10912	853671	Certified	Category 3		227894 Sacramento	No	481	0	10/30/2018	Root intrusion
SS	Easterly CS	55SO10938	853266	Certified	Category 3	295 Shasta	Solano	No	457	0	11/22/2018	Grease Deposition (FOG)
SS	Sacramento Area Sewer District CS	55SO10912	854880	Certified	Category 3		229606 Sacramento	No	425	0	11/16/2018	Grease deposition (FOG)
SS	Sacramento Area Sewer District CS	55SO10912	854881	Certified	Category 3		230090 Sacramento	No	419	0	11/22/2018	Debris-General
5F	Tuolumne Utilities District CS	55SO10711	853026	Certified	Category 3	clea out in backyard of 20583 W Willow Springs dr	Tuolumne	No	400	0	11/17/2018	Root Intrusion
5F	Ford City-Taft Heights CS	55SO10730	852630	Certified	Category 3	705 Polk Street, Taft California	Kern	No	361	0	11/8/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	854844	Certified	Category 3		230125 Sacramento	No	353	0	11/23/2018	Grease deposition (FOG)
SS	Sacramento Area Sewer District CS	55SO10912	854824	Certified	Category 3		228101 Sacramento	No	299	0	11/2/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854865	Certified	Category 3		228087 Sacramento	No	299	0	11/2/2018	Debris-General
5R	Portola CS	55SO10843	853214	Certified	Category 3	349 E. Sierra	Plumas	No	250	0	11/2/2018	Debris-General
SS	Patterson CS	55SO11021	852407	Certified	Category 3	American Eagle	Stanislaus	No	250	0	11/4/2018	Grease Deposition (FOG)
5F	City of Fresno CS	55SO11202	854620	Certified	Category 3	First and Shields	Fresno	No	241	0	11/20/2018	Root Intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854883	Certified	Category 3		230149 Sacramento	No	234	0	11/25/2018	Grease deposition (FOG)
SS	City of Stockton MUD CS	55SO11433	851662	Certified	Category 3	607 S. Sierra Nevada St Stockton Ca.	San Joaquin	No	229	0	10/9/2018	Pipe Structural Problem/Failure
5F	Tehachapi, City Of CS	55SO10764	852464	Certified	Category 3	1309 Dolce Court	Kern	No	200	0	11/5/2018	Other (specify below)
SS	Sacramento Area Sewer District CS	55SO10912	854831	Certified	Category 3		229741 Sacramento	No	191	0	11/19/2018	Damage by others not related to CS Const/Maint.
SS	Ironhouse Sanitary District CS	55SO10970	852577	Certified	Category 3	Intersection of Gateway/Windsweep Bethel Island Ca	Contra Costa	No	181	0	11/1/2018	Pump Station Failure-Controls
SS	Sacramento Area Sewer District CS	55SO10912	854823	Certified	Category 3		230136 Sacramento	No	181	0	11/24/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853661	Certified	Category 3		227618 Sacramento	No	176	0	10/27/2018	Debris-General
SS	City Of Antioch CS	55SO10890	852906	Certified	Category 3	1917 Verne Roberts Cir Antioch	Contra Costa	No	160	0	11/15/2018	Grease Deposition (FOG)
SS	Marysville CS	55SO10994	852840	Certified	Category 3	air release valve on pipeline to Linda County WWTP	Yuba	No	150	0	11/13/2018	Air Relief Valve (ARV)/Blow-Off Valve (BOV) Failure
SS	Sacramento Area Sewer District CS	55SO10912	853652	Certified	Category 3		227052 Sacramento	No	135	0	10/21/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853680	Certified	Category 3		225944 Sacramento	No	123	0	10/6/2018	Debris-General
SS	West Sacramento CS	55SO11082	851706	Certified	Category 3	317 6th Street, West Sacramento CA	Yolo	No	120	0	10/10/2018	Grease Deposition (FOG)
SS	Sacramento Area Sewer District CS	55SO10912	854833	Certified	Category 3		229493 Sacramento	No	114	0	11/15/2018	Grease deposition (FOG)
SS	Sacramento Area Sewer District CS	55SO10912	854832	Certified	Category 3		230094 Sacramento	No	108	0	11/22/2018	Debris from Construction
SS	Sacramento Area Sewer District CS	55SO10912	854891	Certified	Category 3		228222 Sacramento	No	108	0	11/3/2018	Root intrusion
5F	SA-2 Bass Lake CS	55SO11319	852046	Certified	Category 3	Mainline between L/S 10 and L/S 1	Madera	No	100	0	10/26/2018	Debris-Wipes/Non-Dispersables
SS	Hangtown Creek CS	55SO10965	852482	Certified	Category 3	1100 Locust	El Dorado	No	100	0	10/28/2018	Debris-General
SS	San Andreas CS	55SO11048	851700	Certified	Category 3	MH 1339-D	Calaveras	No	100	0	10/2/2018	Root Intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853673	Certified	Category 3		226180 Sacramento	No	98	0	10/10/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853637	Certified	Category 3		227874 Sacramento	No	90	0	10/31/2018	Root intrusion
SS	City of Stockton MUD CS	55SO11433	852969	Certified	Category 3	1214 E Scotts Ave Stockton Ca	San Joaquin	No	89	0	11/16/2018	Pipe Structural Problem/Failure
SS	City of Stockton MUD CS	55SO11433	852123	Certified	Category 3	306 E Flora St Stockton Ca	San Joaquin	No	85	0	10/24/2018	Grease Deposition (FOG)
SS	Sacramento Area Sewer District CS	55SO10912	853650	Certified	Category 3		225338 Sacramento	No	76	0	10/1/2018	Root intrusion
SS	City of Stockton MUD CS	55SO11433	852975	Certified	Category 3	1883 W. Flora Stockton Ca.	San Joaquin	No	74	0	11/16/2018	Debris-General
SS	City of Stockton MUD CS	55SO11433	852706	Certified	Category 3	706 West Oak St Stockton Ca.	San Joaquin	No	70	0	11/6/2018	Root Intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854872	Certified	Category 3		228446 Sacramento	No	67	0	11/6/2018	Grease deposition (FOG)
SS	Patterson CS	55SO11021	853411	Certified	Category 3	164 Walker Ranch Parkway	Stanislaus	No	60	0	11/28/2018	Grease Deposition (FOG)
SS	City of Stockton MUD CS	55SO11433	853270	Certified	Category 3	917 Searchlight Av	San Joaquin	No	59	0	11/22/2018	Root Intrusion
SS	Easterly CS	55SO10938	853360	Certified	Category 3	Marshall and Pebody	Solano	No	56	0	11/26/2018	Surcharged Pipe (Combined CS Only)
5F	City Of Bakersfield CS	55SO10717	852892	Certified	Category 3	1006 Baker St and Kentucky	Kern	No	50	0	11/15/2018	Grease Deposition (FOG)
SS	City of Stockton MUD CS	55SO11433	851478	Certified	Category 3	1139 S. California St Stockton Ca.	San Joaquin	No	49	0	10/1/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	854822	Certified	Category 3		230088 Sacramento	No	49	0	11/22/2018	Root intrusion
SS	City of Stockton MUD CS	55SO11433	853271	Certified	Category 3	2173 Monte Diablo Av Stockton Ca	San Joaquin	No	49	0	11/19/2018	Root Intrusion
SS	City of Stockton MUD CS	55SO11433	852125	Certified	Category 3	1944 N El Dorado St Stockton Ca	San Joaquin	No	47	0	10/28/2018	Root Intrusion
SS	City of Stockton MUD CS	55SO11433	853272	Certified	Category 3	1548 Sikh Temple Av, (Formerly was Grant St), Stockton, Ca	San Joaquin	No	47	0	11/25/2018	Root Intrusion

ATTACHMENT A - Sanitary Sewer Overflow (SSO) Spills - October and November 2018

Region	Collection System	WDID	Spill ID	Certification Status	Spill Type	Spill Location Name	County	Did Spill Reach Surface Waters? (Y/N)	Total Spill Volume (Gallons)	Spill Volume that Reached Surface Waters (Gallons)	Start Date	Spill Cause
SS	City of Woodland CS	55SO10903	854555	Certified	Category 3	4 N. Grand Ave	Yolo	No	47	0	11/17/2018	Root Intrusion
SS	City of Stockton MUD CS	55SO11433	852849	Certified	Category 3	302 E. Wyandotte St Stockton Ca.	San Joaquin	No	46	0	11/11/2018	Debris-General
5F	City Of Bakersfield CS	55SO10717	851901	Certified	Category 3	23rd between Eye and Chester	Kern	No	45	0	10/18/2018	Other (specify below)
SS	Hangtown Creek CS	55SO10965	852483	Certified	Category 3	1100 Locust b	El Dorado	No	45	0	10/29/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	854887	Certified	Category 3		228888 Sacramento	No	45	0	11/8/2018	Root intrusion
SS	City of Stockton MUD CS	55SO11433	853268	Certified	Category 3	1737 West Lane Stockton Ca	San Joaquin	No	44	0	11/19/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	853644	Certified	Category 3		225590 Sacramento	No	42	0	10/3/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853684	Certified	Category 3		226909 Sacramento	No	42	0	10/18/2018	Root intrusion
SS	City of Stockton MUD CS	55SO11433	852978	Certified	Category 3	1218 S Harrison St, Stockton Ca	San Joaquin	No	42	0	11/16/2018	Debris from Lateral
SS	Sacramento Area Sewer District CS	55SO10912	853636	Certified	Category 3		227460 Sacramento	No	41	0	10/25/2018	Damage by others not related to CS Const/Maint.
SS	Davis CS	55SO10921	851849	Certified	Category 3	1102 Valenda Ave.	Yolo	No	40	0	10/17/2018	Root Intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853647	Certified	Category 3		227229 Sacramento	No	34	0	10/23/2018	Root intrusion
SS	City of Stockton MUD CS	55SO11433	851540	Certified	Category 3	1459 W. Sonoma Stockton Ca.	San Joaquin	No	34	0	10/7/2018	Root Intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854870	Certified	Category 3		228079 Sacramento	No	34	0	11/1/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853662	Certified	Category 3		227690 Sacramento	No	33	0	10/28/2018	Debris-General
SS	Hangtown Creek CS	55SO10965	852037	Certified	Category 3	2898 Norman	El Dorado	No	30	0	10/16/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	853674	Certified	Category 3		227548 Sacramento	No	30	0	10/25/2018	Root intrusion
SS	County Service Area 44 Zone G CS	55SO11483	854618	Certified	Category 3	27632 Leana	San Joaquin	No	30	0	11/3/2018	Pump Station Failure-Controls
SS	City of Woodland CS	55SO10903	854465	Certified	Category 3	175 Walnut St	Yolo	No	30	0	11/15/2018	Pipe Structural Problem/Failure
SS	SMD No. 2 CS	55SO11362	851643	Certified	Category 3	8440 Oak Knoll Dr, Granite Bay, CA	Placer	No	28	0	10/8/2018	Root Intrusion
SS	City of Stockton MUD CS	55SO11433	851665	Certified	Category 3	2052 Del Rio Stockton Ca	San Joaquin	No	28	0	10/10/2018	Root Intrusion
SS	City of Stockton MUD CS	55SO11433	852714	Certified	Category 3	530 E Park St Stockton Ca	San Joaquin	No	28	0	11/13/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	853642	Certified	Category 3		227310 Sacramento	No	26	0	10/23/2018	Grease deposition (FOG)
SS	Sacramento Area Sewer District CS	55SO10912	853676	Certified	Category 3		226503 Sacramento	No	26	0	10/12/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854885	Certified	Category 3		227985 Sacramento	No	26	0	11/1/2018	Root intrusion
SS	Davis CS	55SO10921	851702	Certified	Category 3	1522 Orange Ln.	Yolo	No	25	0	10/10/2018	Root Intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853648	Certified	Category 3		225958 Sacramento	No	24	0	10/7/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854866	Certified	Category 3		228158 Sacramento	No	24	0	11/2/2018	Damage by others not related to CS Const/Maint.
SS	City of Stockton MUD CS	55SO11433	852971	Certified	Category 3	2623 Pyrenees Av Stockton Ca	San Joaquin	No	24	0	11/16/2018	Grease Deposition (FOG)
SS	Sacramento Area Sewer District CS	55SO10912	854843	Certified	Category 3		230107 Sacramento	No	22	0	11/23/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854857	Certified	Category 3		228745 Sacramento	No	22	0	11/8/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854840	Certified	Category 3		229323 Sacramento	No	21	0	11/14/2018	Root intrusion
SS	City of Stockton MUD CS	55SO11433	852421	Certified	Category 3	335 E Adams St, Stockton, Ca	San Joaquin	No	21	0	11/1/2018	Root Intrusion
5F	El Portal CS	55SO10735	852715	Certified	Category 3	9743 Red Bud in El Portal CA 95318	Mariposa	No	20	0	10/14/2018	Debris-Rags
SS	Davis CS	55SO10921	852278	Certified	Category 3	611 Radcliffe Dr.	Yolo	No	20	0	10/26/2018	Root Intrusion
SS	Hangtown Creek CS	55SO10965	852036	Certified	Category 3	2684 Northridge	El Dorado	No	20	0	10/16/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	853679	Certified	Category 3		227643 Sacramento	No	20	0	10/28/2018	Root intrusion
SS	Davis CS	55SO10921	853183	Certified	Category 3	735 Valencia Ave.	Yolo	No	20	0	11/19/2018	Root Intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854861	Certified	Category 3		230601 Sacramento	No	20	0	11/30/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	854897	Certified	Category 3		230119 Sacramento	No	20	0	11/23/2018	Root intrusion
SS	City Of Antioch CS	55SO10890	851960	Certified	Category 3	924 W 10th St Antioch CA	Contra Costa	No	19	0	10/22/2018	Grease Deposition (FOG)
SS	Dry Creek CS	55SO10935	852225	Certified	Category 3	9117 Moondancer Ct	Placer	No	19	0	10/25/2018	Root Intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854882	Certified	Category 3		230120 Sacramento	No	19	0	11/23/2018	Root intrusion
SS	City Of Antioch CS	55SO10890	851889	Certified	Category 3	3205 G st Antioch CA	Contra Costa	No	17	0	10/19/2018	Root Intrusion
SS	Dry Creek CS	55SO10935	852004	Certified	Category 3	400 Elefa St.	Placer	No	17	0	10/4/2018	Root Intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854835	Certified	Category 3		229951 Sacramento	No	17	0	11/20/2018	Root intrusion
SS	City of Sacramento Utilities CS	55SO10901	852224	Certified	Category 3	906 Calhoun Court, Sacramento, CA	Sacramento	No	16	0	10/30/2018	Other (specify below)
SS	City of Stockton MUD CS	55SO11433	852846	Certified	Category 3	3405 Grange Av Stockton Ca.	San Joaquin	No	16	0	11/13/2018	Debris-General
5F	Yosemite Valley CS	55SO10774	852716	Certified	Category 3	Yosemite Lodge Housekeeping	Mariposa	No	15	0	10/25/2018	Pump Station Failure-Controls
SS	Sacramento Area Sewer District CS	55SO10912	853656	Certified	Category 3		225352 Sacramento	No	15	0	10/1/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853678	Certified	Category 3		227437 Sacramento	No	15	0	10/25/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	853683	Certified	Category 3		225948 Sacramento	No	15	0	10/7/2018	Root intrusion
5F	City Of Bakersfield CS	55SO10717	852352	Certified	Category 3	Cleanout - 2801 Vassar St & Columbus St	Kern	No	15	0	11/23/2018	Grease Deposition (FOG)
5F	City Of Bakersfield CS	55SO10717	853253	Certified	Category 3	Manhole - 6000 Nutmeg Dr and Cumins Ln	Kern	No	15	0	11/25/2018	Grease Deposition (FOG)
5F	Bear Valley Csd CS	55SO10718	854416	Certified	Category 3	Intersection of Port Royal Ct, and Shoreline Ct	Kern	No	15	0	11/25/2018	Root Intrusion
SS	Davis CS	55SO10921	853260	Certified	Category 3	5035 Swingle	Yolo	No	15	0	11/24/2018	Root Intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854820	Certified	Category 3		229037 Sacramento	No	15	0	11/10/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854896	Certified	Category 3		229828 Sacramento	No	15	0	11/20/2018	Root intrusion
SS	City of Stockton MUD CS	55SO11433	852699	Certified	Category 3	530 E Park St Stockton Ca	San Joaquin	No	15	0	11/7/2018	Debris-General
SS	City of Stockton MUD CS	55SO11433	852894	Certified	Category 3	2034 Farley Dr Stockton Ca.	San Joaquin	No	15	0	11/15/2018	Root Intrusion
SS	City of Stockton MUD CS	55SO11433	852891	Certified	Category 3	2707 Anita St Stockton Ca.	San Joaquin	No	14	0	11/14/2018	Root Intrusion
SS	City Of Lakeport CS	55SO10896	852628	Certified	Category 3	1156 Fifth St	Lake	No	13	0	11/8/2018	Root Intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854834	Certified	Category 3		229682 Sacramento	No	13	0	11/17/2018	Root intrusion
SS	Easterly CS	55SO10938	853103	Certified	Category 3	462 Deodara	Solano	No	13	0	11/19/2018	Root Intrusion
SS	West Sacramento CS	55SO11082	852834	Certified	Category 3	Holly St. @ Maple Street	Yolo	No	13	0	11/7/2018	Grease Deposition (FOG)
SS	Woodbridge Sd CS	55SO11093	852048	Certified	Category 3	Woodbridge, CA	San Joaquin	No	12	0	10/24/2018	Grease Deposition (FOG)
SS	City Of Jackson CS	55SO10895	852956	Certified	Category 3	640 N. Main St.	Amador	No	12	0	11/17/2018	Root Intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854860	Certified	Category 3		230092 Sacramento	No	12	0	11/22/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854826	Certified	Category 3		229430 Sacramento	No	11	0	11/14/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	854894	Certified	Category 3		229737 Sacramento	No	11	0	11/19/2018	Root intrusion
5F	City Of Bakersfield CS	55SO10717	851766	Certified	Category 3	Clean out	Kern	No	10	0	10/3/2018	Grease Deposition (FOG)
SS	Sacramento Area Sewer District CS	55SO10912	853639	Certified	Category 3		226965 Sacramento	No	10	0	10/19/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853654	Certified	Category 3		226864 Sacramento	No	10	0	10/18/2018	Root intrusion
SS	Davis CS	55SO10921	853262	Certified	Category 3	1211 Cypress Lane	Yolo	No	10	0	11/25/2018	Root Intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854848	Certified	Category 3		229712 Sacramento	No	10	0	11/19/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854869	Certified	Category 3		229496 Sacramento	No	10	0	11/15/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854878	Certified	Category 3		228559 Sacramento	No	10	0	11/7/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853667	Certified	Category 3		226043 Sacramento	No	9	0	10/9/2018	Root intrusion

ATTACHMENT A - Sanitary Sewer Overflow (SSO) Spills - October and November 2018

Region	Collection System	WDID	Spill ID	Certification Status	Spill Type	Spill Location Name	County	Did Spill Reach Surface Waters? (Y/N)	Total Spill Volume (Gallons)	Spill Volume that Reached Surface Waters (Gallons)	Start Date	Spill Cause
SS	City of Stockton MUD CS	55SO11433	851867	Certified	Category 3	507 S Orange St Stockton Ca.	San Joaquin	No	9	0	10/17/2018	Debris from Lateral
SS	West Sacramento CS	55SO11082	851709	Certified	Category 3	1717 Vermont St. West Sacramento	Yolo	No	9	0	10/7/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	854828	Certified	Category 3		228364 Sacramento	No	9	0	11/5/2018	Vandalism
SS	Sacramento Area Sewer District CS	55SO10912	854837	Certified	Category 3		228725 Sacramento	No	9	0	11/8/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	854875	Certified	Category 3		229815 Sacramento	No	9	0	11/19/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853665	Certified	Category 3		227705 Sacramento	No	8	0	10/28/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853669	Certified	Category 3		226182 Sacramento	No	8	0	10/10/2018	Root intrusion
SS	City Of Antioch CS	55SO10890	852719	Certified	Category 3	2836 D St Antioch Ca	Contra Costa	No	8	0	11/11/2018	Root Intrusion
SS	SMD No. 1 CS	55SO11028	852426	Certified	Category 3	6040 Holly Oak Ln	Placer	No	8	0	11/1/2018	Damage by Others Not Related to CS Construction/Maintenance (Specify Below)
SS	Sacramento Area Sewer District CS	55SO10912	854842	Certified	Category 3		229692 Sacramento	No	8	0	11/18/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854852	Certified	Category 3		229263 Sacramento	No	8	0	11/14/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854855	Certified	Category 3		228455 Sacramento	No	8	0	11/6/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854873	Certified	Category 3		228525 Sacramento	No	8	0	11/6/2018	Root intrusion
SS	City of Sacramento Utilities CS	55SO10901	852586	Certified	Category 3	6441 Lake Park Drive, Sacramento CA	Sacramento	No	8	0	11/1/2018	Root Intrusion
SS	City of Stockton MUD CS	55SO11433	852717	Certified	Category 3	4740 Brookstone Av Stockton Ca	San Joaquin	No	8	0	11/6/2018	Debris-General
SS	City of Stockton MUD CS	55SO11433	853632	Certified	Category 3	332 N Filbert St	San Joaquin	No	8	0	11/28/2018	Grease Deposition (FOG)
SS	Sacramento Area Sewer District CS	55SO10912	853655	Certified	Category 3		227049 Sacramento	No	7	0	10/21/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854829	Certified	Category 3		228875 Sacramento	No	7	0	11/8/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854830	Certified	Category 3		229609 Sacramento	No	7	0	11/16/2018	Grease deposition (FOG)
SS	Sacramento Area Sewer District CS	55SO10912	854858	Certified	Category 3		228889 Sacramento	No	7	0	11/8/2018	Root intrusion
SS	City of Stockton MUD CS	55SO11433	852886	Certified	Category 3	9721 Dublin Ct Stockton Ca	San Joaquin	No	7	0	11/14/2018	Grease Deposition (FOG)
SS	West Sacramento CS	55SO11082	852837	Certified	Category 3	1640 Riverbank Rd.	Yolo	No	7	0	11/13/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	853635	Certified	Category 3		226987 Sacramento	No	6	0	10/19/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853640	Certified	Category 3		227858 Sacramento	No	6	0	10/31/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853643	Certified	Category 3		225424 Sacramento	No	6	0	10/1/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853645	Certified	Category 3		227721 Sacramento	No	6	0	10/29/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853672	Certified	Category 3		226084 Sacramento	No	6	0	10/8/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853677	Certified	Category 3		227006 Sacramento	No	6	0	10/19/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853682	Certified	Category 3		226991 Sacramento	No	6	0	10/19/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854841	Certified	Category 3		229495 Sacramento	No	6	0	11/15/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854853	Certified	Category 3		227978 Sacramento	No	6	0	11/1/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854876	Certified	Category 3		230385 Sacramento	No	6	0	11/28/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854879	Certified	Category 3		228651 Sacramento	No	6	0	11/7/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854893	Certified	Category 3		229367 Sacramento	No	6	0	11/13/2018	Root intrusion
SS	City of Sacramento Utilities CS	55SO10901	853186	Certified	Category 3	4611 Hillview Way, Sacramento, CA 95822	Sacramento	No	6	0	11/20/2018	Root Intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853653	Certified	Category 3		227502 Sacramento	No	5	0	10/25/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853658	Certified	Category 3		226942 Sacramento	No	5	0	10/19/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853664	Certified	Category 3		226365 Sacramento	No	5	0	10/12/2018	Damage by others not related to CS Const/Maint.
SS	Sacramento Area Sewer District CS	55SO10912	853675	Certified	Category 3		225981 Sacramento	No	5	0	10/8/2018	Damage by others not related to CS Const/Maint.
SS	City Of Folsom CS	55SO10893	852700	Certified	Category 3	1669 Bowen Drive	Sacramento	No	5	0	11/11/2018	Debris from Lateral
SS	Sacramento Area Sewer District CS	55SO10912	854839	Certified	Category 3		229052 Sacramento	No	5	0	11/12/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854854	Certified	Category 3		228205 Sacramento	No	5	0	11/4/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854859	Certified	Category 3		229042 Sacramento	No	5	0	11/11/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	854871	Certified	Category 3		228212 Sacramento	No	5	0	11/4/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854888	Certified	Category 3		229002 Sacramento	No	5	0	11/9/2018	Debris-General
SS	Deer Creek CS	55SO10923	852293	Certified	Category 3	DC-2018-10-05	El Dorado	No	4	0	10/6/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	853651	Certified	Category 3		226223 Sacramento	No	4	0	10/10/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853668	Certified	Category 3		226095 Sacramento	No	4	0	10/9/2018	Root intrusion
SS	West Sacramento CS	55SO11082	851712	Certified	Category 3	1416 Norfolk Ave, West Sacramento	Yolo	No	4	0	10/4/2018	Other (specify below)
SS	Sacramento Area Sewer District CS	55SO10912	854836	Certified	Category 3		228000 Sacramento	No	4	0	11/1/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854846	Certified	Category 3		228536 Sacramento	No	4	0	11/6/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854862	Certified	Category 3		229047 Sacramento	No	4	0	11/11/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854868	Certified	Category 3		229441 Sacramento	No	4	0	11/15/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854886	Certified	Category 3		228533 Sacramento	No	4	0	11/6/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854889	Certified	Category 3		230356 Sacramento	No	4	0	11/28/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854895	Certified	Category 3		229818 Sacramento	No	4	0	11/20/2018	Root intrusion
SS	City of Woodland CS	55SO10903	854463	Certified	Category 3	908 Oak Ave	Yolo	No	4	0	11/24/2018	Debris-Wipes/Non-Dispersables
SS	Sacramento Area Sewer District CS	55SO10912	853638	Certified	Category 3		226132 Sacramento	No	3	0	10/10/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853641	Certified	Category 3		225952 Sacramento	No	3	0	10/7/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853649	Certified	Category 3		227944 Sacramento	No	3	0	10/31/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853657	Certified	Category 3		225920 Sacramento	No	3	0	10/4/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853663	Certified	Category 3		225705 Sacramento	No	3	0	10/3/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853666	Certified	Category 3		227969 Sacramento	No	3	0	10/31/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853681	Certified	Category 3		226833 Sacramento	No	3	0	10/17/2018	Root intrusion
5F	Tuolumne Utilities District CS	55SO10771	852726	Certified	Category 3	Intersection of Theall and Barretta	Tuolumne	No	3	0	11/3/2018	Root Intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854849	Certified	Category 3		230138 Sacramento	No	3	0	11/24/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854864	Certified	Category 3		229517 Sacramento	No	3	0	11/16/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	854874	Certified	Category 3		229688 Sacramento	No	3	0	11/18/2018	Debris-General
SS	Sacramento Area Sewer District CS	55SO10912	854890	Certified	Category 3		230433 Sacramento	No	3	0	11/28/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854892	Certified	Category 3		229053 Sacramento	No	3	0	11/12/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853646	Certified	Category 3		226562 Sacramento	No	2	0	10/16/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853659	Certified	Category 3		227043 Sacramento	No	2	0	10/20/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853660	Certified	Category 3		227504 Sacramento	No	2	0	10/25/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	853670	Certified	Category 3		226535 Sacramento	No	2	0	10/15/2018	Root intrusion
SS	City of Woodland CS	55SO10903	853269	Certified	Category 3	141 W. North St	Yolo	No	2	0	10/3/2018	Root Intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854821	Certified	Category 3		229735 Sacramento	No	2	0	11/19/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854825	Certified	Category 3		229020 Sacramento	No	2	0	11/10/2018	Root intrusion
SS	Sacramento Area Sewer District CS	55SO10912	854850	Certified	Category 3		228567 Sacramento	No	2	0	11/7/2018	Root intrusion

ATTACHMENT A - Sanitary Sewer Overflow (SSO) Spills - October and November 2018

Region	Collection System	WDID	Spill ID	Certification Status	Spill Type	Spill Location Name	County	Did Spill Reach Surface Waters? (Y/N)	Total Spill Volume (Gallons)	Spill Volume that Reached Surface Waters (Gallons)	Start Date	Spill Cause	
55	Sacramento Area Sewer District CS	55SO10912	854856	Certified	Category 3		228685	Sacramento	No	2	0	11/7/2018	Root intrusion
55	Sacramento Area Sewer District CS	55SO10912	854867	Certified	Category 3		229176	Sacramento	No	2	0	11/13/2018	Operator error
55	Sacramento Area Sewer District CS	55SO10912	854877	Certified	Category 3		228055	Sacramento	No	2	0	11/1/2018	Root intrusion
55	City of Stockton MUD CS	55SO11433	852844	Certified	Category 3	810 S Monroe St Stockton Ca	San Joaquin	No	2	0	11/13/2018	Debris-General	
55	West Sacramento CS	55SO11082	852831	Certified	Category 3	644 Kegle Dr. at Cleanout	Yolo	No	2	0	11/14/2018	Other (specify below)	
55	West Sacramento CS	55SO11082	853200	Certified	Category 3	1536 Park Blvd/ 2 feet on property	Yolo	No	2	0	11/15/2018	Debris-General	
55	Easterly CS	55SO10938	852081	Certified	Category 3	595 Buck ave.	Solano	No	1	0	10/28/2018	Grease Deposition (FOG)	
55	Sacramento Area Sewer District CS	55SO10912	854827	Certified	Category 3		230645	Sacramento	No	1	0	11/30/2018	Root intrusion
55	Sacramento Area Sewer District CS	55SO10912	854838	Certified	Category 3		228965	Sacramento	No	1	0	11/9/2018	Operator error
55	Sacramento Area Sewer District CS	55SO10912	854845	Certified	Category 3		228150	Sacramento	No	1	0	11/2/2018	Operator error
55	Sacramento Area Sewer District CS	55SO10912	854847	Certified	Category 3		228856	Sacramento	No	1	0	11/8/2018	Operator error
55	Sacramento Area Sewer District CS	55SO10912	854851	Certified	Category 3		228871	Sacramento	No	1	0	11/8/2018	Operator error
55	Sacramento Area Sewer District CS	55SO10912	854863	Certified	Category 3		229061	Sacramento	No	1	0	11/12/2018	Root intrusion
55	Sacramento Area Sewer District CS	55SO10912	854884	Certified	Category 3		232205	Sacramento	No	1	0	11/21/2018	Operator error
55	West Sacramento CS	55SO11082	852698	Certified	Category 3	Resident front yard	Yolo	No	1	0	11/5/2018	Debris-General	