

EXECUTIVE OFFICER'S REPORT

10/11 OCTOBER 2019

**California Regional Water Quality Control Board
Central Valley Region**

Patrick Pulupa, Executive Officer



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SUCCESS STORIES

SITE CLEANUPS

UNION PACIFIC RAILROAD COMPANY, DUNSMUIR RAILYARD, NORTH FUELING FACILITY, SISKIYOU COUNTY

Central Valley Water Board staff are working with the Union Pacific Railroad Company (UPRR) in its efforts to comply with the requirements of Cleanup and Abatement Order R5-2019-0713, issued on 11 June 2019. As the first phase of the Comprehensive Site Investigation, UPRR will be implementing the Final River Investigation Work Plan in September 2019. The work plan includes activities to delineate and characterize petroleum impacts in the Sacramento River sediments, pore water, and surface water adjacent to the Site. UPRR will submit a draft Comprehensive Site Investigation Work Plan for the upland and riparian of areas of the site in October 2019. Additionally, UPRR will submit the final version of the Interim Non-Aqueous Phase Liquid (NAPL) Control Plan in September and will begin implementing the plan in mid-October. UPRR will be installing an oleophilic bio-barrier geocomposite material along approximately 880 feet of retaining wall and walkway adjacent to the Sacramento River to control petroleum sheens and encourage biodegradation. Absorbent booms will be used to capture oil that bypasses the barrier. The barrier will be monitored to assess its performance and will be in place until the final remedy is implemented. (Contact: Jason Schroeder at (530) 224-4788.)

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, section 2728(d)(2) of Title 23 of the California Code of Regulations 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.

FRESNO

CASTRO'S MARKET, 6434 2024 GARVEY, CORCORAN, KINGS COUNTY

Castro's Market (Castro's) discovered a gasoline release in 1986 when it removed two 500-gallon gasoline USTs. Castro's did not conduct investigation until 2018 because the original responsible party was deceased and the case placed in a trust, making it ineligible for the Cleanup Fund. During a 2018 investigation, Castro's collected soil samples from borings to delineate the extent of remaining gasoline constituents. Castro's consultant estimated that a total of approximately 249 pounds (39 gallons) of weathered gasoline remained between 11-45 feet below ground surface (bgs) and concluded that the release lacked sufficient mass and mobility threaten groundwater quality. Based on available data and hydrologic and geologic conditions, the limited residual petroleum hydrocarbons that remain should pose little risk to human health, safety, and the environment and should continue to degrade naturally. The case was closed on 16 July 2019.

CONRAD FARMS, 18791 LIVERMORE AVENUE, REEDLEY, FRESNO COUNTY

During a site assessment for a property transfer in late 2018, Conrad Farms discovered a gasoline release from a 550-gallon UST that had been abandoned in-place beneath the concrete foundation of an agricultural shop building. Regional Board staff requested investigation to evaluate the extent of the release, the threat to groundwater, and potential health risk. Conrad's consultant concluded that a "hard pan" cemented soil layer at 15 feet bgs limited vertical migration of petroleum and the petroleum release beneath the former UST had attenuated less than 15 feet laterally from the UST. Groundwater is greater than 60 feet bgs and is not threatened. The remaining hydrocarbon mass should continue to attenuate naturally. The case was closed on 16 July 2019, in accordance with criteria contained in the Low-Threat Closure Policy.

FORMER BEACON STATION #3-363, 1267 OLLER STREET, MENDOTA, FRESNO COUNTY

Beacon removed four diesel and gasoline USTs in May 1986 along with an undetermined volume of petroleum impacted soil, which was disposed of off-site. Beacon conducted multiple soil and groundwater investigations and removed approximately 12,600 pounds (2,000 gallons) of floating gasoline product (i.e., "free product). Beacon operated a soil vapor extraction (SVE) system from January 1991 through December 1996, removing approximately 192,000 pounds (30,476 gallons) of hydrocarbons. The case was closed on 29 September 1998.

Central Valley Water Board staff reopened the case on 29 April 2015 due to the detection of petroleum hydrocarbons in the monitoring network for Gonzales Mini-Mart, an open UST case across the street from the former Beacon Site, that likely originated from the former Beacon site. However, current groundwater analytical results indicated trace to non-detect petroleum concentrations on the Site. The current Site tenant

removed and replaced three 10,000-gallon double-walled steel USTs on 10 July 2018 and excavated and disposed of approximately 857 tons of petroleum-impacted soil.

Based on the available data and hydrologic and geologic conditions, the limited residual petroleum hydrocarbons that remain should pose little risk to human health, safety, and the environment and should continue to degrade naturally. The case meets the criteria of the Low-Threat Closure Policy and was closed on 25 July 2019.

SHAVER LAKE FOOD MART, 41801 TOLLHOUSE ROAD, SHAVER LAKE, FRESNO COUNTY

Shaver Lake Food Mart (SLFM) filed a tank release report in September 1999 after the upgrading its four USTs, dispensers, and product piping. SLFM conducted soil investigations from July 2000 through December 2014, and groundwater monitoring from September 2004 through November 2017. SLFM conducted dual phase extraction (DPE) in October and November 2008; from August 2011 through February 2013; and from November 2013 through June 2016, removing an estimated 90,350 pounds (14,340 gallons) of petroleum hydrocarbons. Based on available data and hydrologic conditions, the remaining hydrocarbons in soil and groundwater are unlikely to pose a threat to human health, safety, or the environment and should continue to degrade naturally. The case meets criteria in the Low-Threat Closure Policy and was closed on 19 July 2019.

N. F. DAVIS FACILITY, 39500 W. BULLARD AVE, FIREBAUGH, FRESNO COUNTY

N. F. Davis (NFD) filed a tank release report in January 2017 after it removed two USTs. There were no dispensers or product piping associated with the USTs. NFD conducted soil investigations from September 2016 through December 2017 and in November 2017 removed approximately 410 cubic yards of petroleum hydrocarbon impacted soil. NFD conducted groundwater investigation from December 2017 through the third quarter of 2018 and concluded that the remaining hydrocarbons in soil and groundwater are not likely to pose a threat to human health, safety, or the environment. The case was closed in accordance with criteria contained in the Low-Threat Closure Policy on 16 July 2019.

MIKE BUTLER'S GARAGE, 301 W. HERMOSA, LINDSAY, TULARE COUNTY

Mike Butler's Garage (MBG) filed a tank release report in July 1988 after removing four USTs from the Site. MBG conducted soil investigations from February 1996 through October 2017 and groundwater investigations from May 1997 through August 2018. MBG removed an estimated 22,480 pounds (3,540 gallons) of gasoline from the subsurface by groundwater over-purging, DPE, and SVE/air sparging. The remaining hydrocarbons are not likely to pose a threat to human health, safety, or the environment. A case closure letter was issued in accordance with the Low-Threat Closure Policy on 30 July 2019.

SACRAMENTO

JAS'S ENTERPRISES INC., 18806 N. LOWER SACRAMENTO ROAD, WOODBIDGE, SAN JOAQUIN COUNTY

Some time prior to 1975, a 1,000-gallon and a 2,000-gallon gasoline USTs were removed from the Site, which was an automotive service garage between approximately 1937 to pre-1975. No structures were present at the Site between 1975 and 1984, and the Site was developed into its current configuration in 1993. A total of 12 Unauthorized Release Reports (URRs) were filed for the Site with San Joaquin County Environmental Health Department (SJCEHD) between January 1992 and January 2007. The reported releases range from a pint of gasoline spilled on the ground by a customer to a leaking dispenser discharge tube flange.

Active remediation was not performed at the Site. As of April 2018, the extent of hydrocarbon impact to groundwater is less than 100 feet in length, there is no free product, and there are no water supply wells within 250 feet of the Site. While the nearest surface water body, the Mokelumne River, is approximately 150 feet from the Site, residual petroleum hydrocarbons in soil or groundwater at the Site are not a threat to the Mokelumne River. The Site meets the Low-Threat Closure Policy's Groundwater-Specific criteria by Scenario 5. The Site meets the rest of the general and media-specific criteria for closure, and the case was closed on 8 July 2019.

QUICK N SAVE FORMER CIRCLE T MARKET, 5925 TERMINAL AVENUE, RIVERBANK, STANISLAUS COUNTY

The Site is currently an active Quick N Save-branded gasoline service station. Quick N Save detected petroleum hydrocarbon constituents in soil samples collected in 2000 from beneath two former USTs, indicating that a release had occurred. In 2004 and 2015, Quick N Save advanced a total of eight temporary borings to delineate the extent of subsurface petroleum hydrocarbons. In March 2016, Quick N Save installed five groundwater monitoring wells (MW-1 through MW-5) with 20-foot screen intervals to total depths of 85 feet bgs. Quick N Save conducted seven groundwater monitoring events in 2016 and 2017 and detected only methyl tert-butyl ether (MTBE; 0.52 µg/L) and 1,2-dichloroethane (up to 12 µg/L) in groundwater samples indicating that most of the petroleum hydrocarbon release had not reached groundwater. Central Valley Water Board staff agreed with Quick N Save's conclusion that residual petroleum hydrocarbons do not pose a threat to human health or the environment and concurred with their recommendation of regulatory closure as a low threat site. The case was closed on 8 July 2019.

BIG OAK FLAT MAINTENANCE YARD, 11240 WARDS FERRY ROAD, BIG OAK FLAT, TUOLUMNE COUNTY

The Site, approximately 8 acres in size, is an active maintenance yard supporting the South Road Division for Tuolumne County on Wards Ferry Road in Big Oak Flat, Tuolumne County. In February 1997, during the removal of a 10,000-gallon gasoline

UST and a 1,000-gallon diesel UST, Tuolumne County detected petroleum hydrocarbons in a soil sample from the excavated soil. Additional investigation of soil indicated that an unauthorized release of petroleum hydrocarbons had occurred at the Site. Tuolumne County excavated impacted soil to approximately 9 feet below ground surface and stockpiled and bioremediated the soil on Site. In December 2015, E2C remediation (E2C) conducted an additional investigation collecting soil samples from four soil borings. E2C did not detect petroleum hydrocarbons above the laboratory detection limits in the soil samples collected from the borings. E2C did not encounter groundwater during Site investigation. 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 8 July 2019.

BEACON NO. 3527 (FORMER), 601 SUNRISE AVENUE, ROSEVILLE, PLACER COUNTY

The Site is currently a Kwik Serv fueling station and mini mart. In August 1993, Ultramar Inc. (a subsidiary of Valero Energy Corporation; Ultramar) observed petroleum hydrocarbons in the Site's sump pump and filed an unauthorized release report. In March 1995, Ultramar discovered total petroleum hydrocarbon impacted soil during the repair and replacement of a conveyance line. Ultramar conducted soil and groundwater investigations from 1995 to 2002. In 1997, Ultramar removed three single-walled underground storage tanks observed as in good condition (no holes or pitting). Since 2002, Tesoro (new operator) continued soil, groundwater, and soil gas investigations defining the extent of petroleum hydrocarbons remaining in soil and groundwater. Tesoro completed remedial efforts including air sparging, ozone injection, bioventing, SVE, and vacuum truck events that removed approximately 2,660 pounds of total petroleum hydrocarbon mass. Tesoro concluded the extent of petroleum hydrocarbons remaining in soil and groundwater beneath the Site is defined and relatively stable. 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 on 8 July 2019.

MARYSVILLE PLAZA, 401 E STREET, MARYSVILLE, YUBA COUNTY

The Site is a commercial building occupied by a Subway® sandwich shop within a mixed commercial area of Marysville. In 1992, Marysville Plaza Partners (MPP) purchased the Site property and identified petroleum hydrocarbon impacted soil on-Site. In January 1994, MPP identified two possible underground storage tanks (USTs) under the sidewalk west of the Site. Between 1994 and 2017, MPP conducted soil and groundwater investigations characterizing the extent of petroleum hydrocarbons remaining in soil and groundwater. In 2009, MPP discovered four abandoned USTs and in 2012 verified their location and condition. MPP concluded the USTs did not contain hydrocarbon fluids and were properly backfilled with sand. On-Site remediation included extraction of approximately 24,000 gallons of hydrocarbon impacted groundwater; enhanced biodegradation by air sparging; and free product removal by skimmer and

bailers. MPP concluded the extent of petroleum hydrocarbons remaining in soil and groundwater beneath the Site is defined, relatively stable and degrading. 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 on 1 July 2019.

FLYERS ENERGY NUMBER 10, 2349 RICKENBACKER WAY, AUBURN, PLACER COUNTY

The Site is currently a commercial building and parking area for Moonraker Brewing Company. The Site is adjacent to the Auburn Municipal Airport and zoned for industrial/commercial use. In 1986, Nella Oil Company (Nella) installed and operated a 5,000-gallon underground storage tank (UST). In August 2003, Nella changed fueling operations from diesel to aviation fuel and replaced the dispenser pan on-Site. During dispenser pan replacement, Nella collected a soil sample (ND#1) which contained. In 2003, the Central Valley Water Board staff opened a leaking UST case (No. 310407). Between 2004 and 2005, Nella evaluated impacts to soil and groundwater and in March 2006 received case closure.

In April 2018, Flyers Energy, LLC (Flyers) removed the 5,000-gallon UST, ten feet of product piping, and a dispenser island. Flyers reported TPH impacts to groundwater from a UST groundwater sample. In May 2019, Flyers assessed the vertical and lateral extent of TPH impacts related to the former UST. Flyers adequately characterized soil and groundwater 40 feet in the down and cross groundwater gradient and reported no TPH constituents above their laboratory detection limits. 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 on July 30, 2019.

FORMER MCCLELLAN AIR FORCE BASE, SACRAMENTO COUNTY

In September 2019, a major milestone was achieved at the former McClellan Air Force Base as the last cleanup program Record of Decision was completed. The U.S. Environmental Protection Agency and the Department of Toxic Substances Control, representing the State (including the Central Valley Regional Water Quality Control Board), signed the Final Finding of Suitability for Early Transfer (FOSET) #1 – Group 4 Sites Record of Decision (Group 4 ROD). This is the last soil Record of Decision for the entire former McClellan Air Force Base. The Group 4 ROD for 15 sites is one of 16 RODs which addressed soil and groundwater contamination at over 300 Installation Restoration Program sites. The Group 4 Sites are now being addressed through a private-sector cleanup by McClellan Business Park, LLC.

REDDING

ANTLERS RESORT, UST CASE 450360, SHASTA COUNTY

Two 3,000-gallon USTs were removed from the resort in 1991. During the UST removal, low levels of total petroleum hydrocarbons as gasoline (TPHG) and benzene were detected in the tank pit; groundwater was encountered but not sampled. In 1992, Antlers Resort overexcavated soil in the area of the tank pit; confirmation samples indicated no TPHG or benzene, toluene, ethylbenzene, and xylenes (BTEX) constituents. The case stalled because neither the tank removal contractor nor the property owner submitted the tank and rinsewater disposal manifests to the County. The County referred the case to the Central Valley Water Board in 2013. During 2016 and 2017, staff attempted to obtain the necessary information to close the case, but manifests were not available from the tank removal contractor or current owners. In October 2017, staff met with the current owners to discuss a path forward. Antlers Resort agreed to sample the current drinking water system, the primary sensitive receptor in the vicinity of the former UST system. The onsite wells were sampled in 2018 and analyzed for TPHG, BTEX and fuel oxygenates including methyl tert-butyl ether. All constituents were non-detect. Because there was no detectable contamination in soil confirmation samples or well samples, staff recommended case closure. Staff closed the case in July 2019.

WYNTON ESTATES, UST CASE 470056, SISKIYOU COUNTY

From 1953 until circa 1980, the Discharger used a 4,000-gallon heating oil underground storage tank (UST) to supply heating oil to a boiler used to heat several large vacation homes along the McCloud River. In 2017, a construction crew discovered and removed the UST under Siskiyou County Environmental Health Department (SCEHD) oversight. Groundwater seeped into the excavation due to the proximity to the McCloud River. The contractor removed 2,000 gallons of mixed water and red-dyed diesel from the UST. Free product was not observed on the water surface in the excavation. Samples of the soil and groundwater from the pit contained diesel-range organics (DRO). SCEHD referred the case to Central Valley Water Board in January 2018. The Discharger resampled the groundwater from the excavation. Petroleum constituent concentrations were less than Low Threat Closure Policy criteria. Staff estimate that 1.1 pounds of DRO were removed with the excavated soil and 0.1 pound of DRO was removed from the groundwater. Staff closed the case in July 2019.

STAFF RECOGNITION

SUPERIOR ACCOMPLISHMENT AWARDS

At the August 1/2 Board Meeting, Executive Officer Patrick Pulupa presented Superior Accomplishment Awards to the following staff:

Employee:Walter Floyd

Unit: Site Cleanup Program

Location:Sacramento Office

Title: Engineering Geologist
Supervisor: Marie McCrink

Walter is an Engineering Geologist-(EG) in the Site Cleanup Program.(SCP), Department of Defense (DoD) Unit. He has over 25 years of experience in the private sector conducting and managing environmental cleanup of soil and groundwater at private sites and DoD facilities. In the four plus years that Walter has worked in SCP he has taken on management and oversight of a wide variety of complex cleanup projects like the former Lime Kiln Site in Diamond Spring, and the privatization of numerous sites at McClellan Business Park.

Most noteworthy Walter has spear-headed the process of conducting several region-wide evaluations of emerging contaminants in the Central Valley, specifically for Hexavalent Chromium (CrVI), 1,2,3-Trichloropropane (1,2,3-TCP), and Perfluoroalkyl Substances (PFAS). To do these studies, Walter has been working with State Board staff, the Division of Drinking Water, and Regional Board staff to develop a GIS mapping tool that imports analytical data and presents it in a comprehensive way. Using this mapping tool, Walter has identified a significant number of new areas of groundwater contamination that will be addressed by the SCP team.

For example, Walter is using his GIS tool to evaluate non-point and point sources of 1,2,3-TCP using relative concentrations of 1,2,3-TCP detections and maps of 1,2,3-TCP detections, application areas, and pesticide manufacturers. These parameters aid in the development of correlations and associations that characterize, most importantly, the non-point sources. Due to 1,2,3-TCP's very low Maximum Contaminant Level of 5 parts per trillion, Walter's work is helping to fulfil a critical need of the Central Valley Water Board to better understand the 1,2,3-TCP region-wide groundwater distribution. In addition, Walter has collaborated with the US Geological Society (USGS) and co- authored a paper titled "Factors Affecting 1,2,3-TCP Contamination in Groundwater in California," dated 23 April 2019.

At the former McClellan AFB, Walter has created another amazing GIS tool: an interactive map in Geotracker showing all State Land Use Covenants (SLUCs) at McClellan Business Park (MBP). Walter has also added a direct link to the "SLUC PDF" to see the actual SLUC. Since there are hundreds of SLUCs at MBP, this tool creates a very simple and efficient way to review parcel specific information. In summary, Walter goes far above and beyond his EG duties to ensure that quality work is completed, and that human health and the environment are protected.

Employee: Ronna Bowers
Unit: Forest Activities Program
Location: Redding Office
Title: Engineering Geologist
Supervisor: Angela Wilson

Ronna Bowers is an Engineering Geologist in the Central Valley Regional Water Board's Redding office. She works in the Forest Activities Program and is being recognized for her outstanding work performance on Timber Harvest Plan Review, Emergency Fire Salvage regulatory work and Grant Management. Ronna joined the Central Valley Water Board three years ago, bringing with her more than 15 years of private industry experience working in geologic interpretation, erosion and sediment control. Since joining the Forest Activities Program, Ronna has successfully applied experience from her diverse background along with excellent technical and communication skills to effectively regulate and bring into compliance both large Industrial and small private landowners with challenging forestland management projects.

Ronna provides regulatory oversight for timber harvest projects in Shasta County, our region's busiest county for commercial timber production. She volunteered to provide technical oversight for the Battle Creek Watershed Road Sediment Reduction Program which is a field-based road assessment inventory to characterize sediment sources along twenty-three (23) miles of native surface and/or rocked road within the Battle Creek watershed. In 2018, 3 major wildfires occurred primarily in Shasta County; the Carr, Delta, and Hirz fires. Much of the damage occurred on private and industrial timberlands. Ronna has processed in excess of 90 emergency fire salvage and substantially damaged timber harvest projects across tens of thousands of acres. Combined with a well above-average 2018/2019 winter on top of recent fire scars, we had localized flooding and debris flows within the forested setting resulting in failed structures and multiple discharges to surface waters. Ronna works tirelessly with private and industrial landowners as well as powerline companies to develop site specific mitigations and best management practices to improve those failed structures, roads and various other sites impacted by the severe winter.

Ronna is a valuable team player often going above and beyond to ensure a job is completed and water quality is protected. Over the past year, she has continually met all these challenges with a positive and can-do attitude. Ronna carries with her a level of professionalism and dedication that well represents the Redding office, the Board's Forest Activities Program and the Central Valley Regional Water Quality Control Board as a whole.

Employee:Kristen Gomes
Unit: Forest Activities Program
Location:Fresno Office
Title: Water Resources Control Engineer
Supervisor:Scott Hatton

Kristen Gomes is receiving this award because she performed beyond her normal job duties in keeping the Title 27 Program work in the Fresno office moving forward while the Senior Engineering Geologist was on an extended leave of absence.

In addition, she was the only staff member for several months in the unit because of vacancies and other leaves of absence by staff and has taken the lead to review multiple technical reports submitted by dischargers; conducted several site inspections to verify the correct installation of liners at landfills and regulatory compliance; prepared Waste Discharge Requirements for a recent Board meeting agenda; and was the face of the unit to respond to public inquiries.

She consistently provides excellent work that is completed in a timely manner and is invaluable at working towards meeting our fiscal year goals.

EMPLOYEE RECOGNITION AWARDS JULY THROUGH AUGUST 2019

Employee: Jim Brownell

Unit: Planning Unit

Location: Sacramento Office

Title: Engineering Geologist

Supervisor: Anne Littlejohn

Jim Brownell is an Engineering Geologist in the Planning Section and is being recognized for his diligent efforts supporting basin planning efforts related to CV-SALTS.

Jim has been a valued member CV-SALTS unit for the past eight years. He served as the lead on Basin Plan Amendment to establish salinity objectives in the Lower San Joaquin River, which was finalized and approved by US EPA this past year. Jim worked diligently with stakeholders and staff during the long and sometimes contentious public process, building positive working relationships and maintaining a strong commitment to program goals.

More recently, Jim spent many hours patiently poring through an exhaustive list of research reports, meeting notes, policy documents and other related literature to compile the entire CV-SALTS Basin Plan Amendment Administrative Record. This work involved cataloging and merging tens of thousands of pages of documents, spanning over a decade of work. Jim's thoroughness and attention to detail were critical contributing factors to the success of this effort and will ensure that the project stays on track

Jim is a pleasure to work with and for his hard work on these projects and others not mentioned, he is well deserving of this Employee Recognition Award.

Employee: Mark Bare

Unit: Site Cleanup Program

Location: Sacramento Office

Title: Engineering Geologist

Supervisor: Marie McCrink

Mark Bare is an Engineering Geologist in the Site Cleanup Program (SCP), Rancho Cordova office. Mark transferred to Region 5 from Region 2 in March of 2016 and is currently working in the Department of Defense (DoD) Unit. On his first day in Region 5 Mark hit the ground running. He quickly familiarized himself with complex project histories and began providing technical and regulatory guidance on large DoD facilities and at a variety of private sites. Mark has also become an essential part of our emergency response network. He manages all the daily OES spill reports and has transitioned numerous spills into remediation cost recovery cases. To keep track of the hundreds of OES reports that we receive each year, Mark designed and implemented a weekly OES tracking and reporting system. This system consists of a spreadsheet detailing the status of OES reports received by Region 5, follow-up on each spill, and information on the additional work required to address each release. Mark also takes on the spills that require additional remediation and performs the tasks required to recover costs and guide each release to a no further action determination.

Mark's most recent accomplishment is the writing of the Central Valley Region, Rancho Cordova Office Emergency Response Plan (ERP). This 190-page plan is a comprehensive guide and checklist for actions to be taken during an emergency. The ERP contains policies, procedures and references to supporting documents, contacts, forms and resources that may be needed to mobilize, remediate and demobilize an emergency response.

Most noteworthy is the ERP Quick Reference guide that Mark developed to ensure that executive management have a step by step process to follow during what are often very fast pace and stressful events. The ERP quick reference provides contact information for technical and emergency management staff, a guide for support services and clear actions to take in an emergency.

As you can see Mark is highly organized and efficient. He follows through on all assignments with a positive and helpful attitude. It is a genuine pleasure to have Mark on our team.

Employee: Natalie Banbridge

Unit: Waste Discharge Requirements/Non-15

Location: Redding Office

Title: Scientific Aid

Supervisor: George R. Low

Natalie is being nominated for her contributions to the Redding office, and specifically the WDR Unit. Natalie was hired by the Central Valley Water Board in July 2018 as a Scientific Aid and has since proven to be a valuable employee and coworker.

Currently Natalie assists WDR unit staff with case work data management which includes uploading and managing documents and data in to our CIWQS and ECM databases. She has also assisted staff in compiling and analyzing water quality data for various facilities. Most notably she assisted staff in compiling and correlating historical

data associated with the Antelope Blvd. Nitrate project which helped to support an in-depth staff presentation to our Executive Officer.

Additionally, Natalie has taken a lead role in operating and maintaining our office's water quality monitoring and sampling equipment as well as assisting staff to maintain our office's lab space. She has also assisted staff in several site inspections, some of which included water quality sampling.

In Natalie's short time with the Water Board she has surpassed workload expectations and has ventured outside of her typical daily duties. Natalie is a positive, consistent, well organized, courteous, conscientious, and thorough in her work. Her work attitude and dedication are greatly appreciated. The Redding office and especially the WDR unit benefits from Natalie's dedication and hard work.

Employee: Heaven Collins

Unit: NPDES

Location: Redding Office

Title: Scientific Aid

Supervisor: Jeremy Pagan

Heaven Collins is a Scientific Aid working in the NPDES Unit of the Redding office of the Central Valley Water Board. She is in fact the longest tenured member of the NPDES Unit and provides a tremendous amount of assistance to the full-time staff in the unit.

The NPDES Unit relies heavily on Heaven for assistance in producing and reviewing technical work documents including self-monitoring reports review, notice of violations, and general compliance/enforcement workload. In addition, Heaven helps to create CIWQS data entry tools and has become an expert and liaison with the State Water Board for CIWQS issues and data entry consistency. She has even spent time training new full-time staff as they join the unit regarding CIWQS entry and business rules. She also assists the unit with special projects including coordinating the review of discharger's sanitary sewer management plans, compiling data collected as part of water quality sampling inspections, and developing strategies and tracking spreadsheets for handling some of the unit's intermittent (and therefore more likely to be neglected) work load. Finally, Heaven performs data reviews and quality assurance checks on much of the unit's work products and handles administrative/clerical duties for many of the documents being produced and mailed out from the Unit.

Heaven is a fantastic team member and plays an important role and function for the NPDES Unit. She consistently shows up to work ready to tackle any challenge or work assignment given to her, and she will take on these work assignments with a fantastic, can-do attitude. She is reliable and can be counted on to help the unit in numerous ways which increases the unit's overall productivity and effectiveness. Heaven is critical to the NPDES Unit's success and she is a tremendous asset to the Central Valley Water Board's Redding Office.

Employee:Balraj Tammali
Unit: Confined Animal Facilities
Location:Fresno Office
Title: Water Resource Control Engineer
Supervisor: Dale Essary

Balraj is receiving this award for his work in the Confined Animal Facilities Unit. Balraj has been working for the Central Valley Water Board for a little more than three years. Last month, Balraj completed the following:

- Three compliance inspections
- Three Water Code section 13260 directives to unenrolled bovine facilities
- One design report review for a Tier1 (double-lined) dairy pond
- One post-construction report review for a Tier 1 dairy pond
- One feedlot/dairy merger approval

In addition to these accomplishments, Balraj was the lead author of the Amended Poultry General Order that was adopted by the Board at the April hearing. Balraj is also well-versed in CIWQS and Geo Tracker and has been instrumental in assisting both staff and management with his database skills.

Employee:Debra Mahnke
Unit: Stormwater/401 Water Quality Certification
Location:Fresno Office
Title: Water Resource Control Engineer
Supervisor: Matt Scroggins

Below is a summary of Debbi's accomplishments that warrant consideration for the August ERA.

- Finalized six 401 water quality certifications, one cert amendment, and drafted one certification for management review
- Finalized CEQA documentation for a Park Service project where we are the lead agency
- Reviewed two wetland cleanup/restoration plans and finalized a conditional approval letter
- Sent out a letter commenting on an initial study/draft mitigated negative declaration for an irrigation pipeline project
- Reviewed other certification applications that are in various stages of development

- Inspected a site near Oakhurst for which we received a complaint that demolition debris had been deposited in a creek
- Helped fill the void left by vacancy of a position in her unit
- In addition to all the work listed above she regularly handles heavy call and email traffic. Debbi is consistently on task and has been the rock anchoring the stormwater and 401 cert programs for years.

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.

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 (CDOs); 13267 Investigative Orders; Expedited Payment Letters (EPLs); 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 – CENTRAL VALLEY ENFORCEMENT ORDERS
(1 JULY 2019 THROUGH 15 AUGUST 2019)**

Action Date	Agency	County	Notes
7/5/19	Mt Shasta City	Siskiyou	ACLIC R5-2019-0511 issued for sanitary sewer overflow by discharging a total of 2,788,310 gallons of untreated sewage to tributaries to the Sacramento River. The ACLIC proposes that the Board impose a civil liability of \$2,367,184 for the discharge or untreated sewage from 27 October 2014 to 1 January 2018 and civil liability of \$84,000 in mandatory minimum penalties (MMPs) for serious and nonserious effluent violations from 28 February 2017 to 30 April 2019.

Action Date	Agency	County	Notes
7/16/19	Mountain House CSD	San Joaquin	EPL R5-2019-0513 issued in amount of \$138,000 which represent the sum of MMPs for serious and nonserious effluent violations from 1 July 2018 to 31 January 2019.
7/18/19	Shasta Forest Properties LLC	Shasta	13267 Order issued for unauthorized discharge of waste to Montgomery Creek. The Discharger is required to submit technical report about removal of cannabis infrastructure, cleanup and proper disposal of any chemicals, and other reports that will ensure that the Discharger comes into compliance.
7/30/19	Soares, Germano & Jacinta	Stanislaus	13267 Order issued for violation of the WDRs, applying wastewater to crops for purposes of disposal, and constructing unauthorized wastewater storage lagoons. The Order requires the Discharger to submit technical reports to assess potential threats and impact to water quality. In addition, the information will help Board staff to determine whether the discharge of waste to unpermitted ponds and land application have impacted groundwater directly underneath the Facility.
7/31/19	Latters, Susan	Stanislaus	EPL R5-2019-0903 issued in amount of \$38,016 for violations of the WDRs. The EPL alleges that the Discharger land applied untreated wastewater to cropland when soils were saturated, and the Discharger did not implement the Nutrient Management Plan.
8/2/19	Phillip Isidro	Calaveras	CAO R5-2019-0704 requires the Dischargers to clean up the site associated with cannabis cultivation activities that are discharging or threatening to discharge to tributaries of Salt Spring Valley Reservoir.

ENFORCEMENT UPDATE

Enforcement Table 2 included below, summarizes the enforcement actions issued in all the Regions for period between 1 July 2019 through 15 August 2019. From a statewide perspective, Region 5 is responsible for 20% of the enforcement actions tracked in CIWQS during this period including 50% of all 13267 Orders, 20% of all ACLs, 50% of all CAOs, and 59% of all NOVs.

**ENFORCEMENT TABLE 2 – STATEWIDE ENFORCEMENT ACTIONS IN CIWQS
(1 JULY 2019 THROUGH 15 AUGUST 2019)**

Region	13267	NNC	ACL	CAO	CDO	EPL	NOV	NTC	SEL	TSO	VER	Total
1	0	0	1	1	0	0	0	0	0	0	0	2
2	0	0	0	0	0	0	1	0	2	0	0	3
3	1	1	0	0	0	0	7	0	1	1	1	12
4	0	14	0	0	0	1	24	4	0	0	4	47
5F	0	0	0	0	0	0	14	0	2	0	0	16
5R	1	0	1	0	0	0	4	0	0	0	0	6
5S	1	0	0	1	0	2	40	0	0	1	1	46
R5 Totals	2	0	1	1	0	2	58	0	2	1	1	68
6T	0	0	0	0	0	0	0	0	2	0	0	2
6V	0	0	0	0	0	0	0	0	1	0	2	3
7	0	0	1	0	0	0	8	0	4	0	0	13
8	0	127	0	0	0	0	0	0	11	0	18	156
9	1	0	2	0	0	0	1	0	36	0	0	40
Totals	4	142	5	2	0	3	99	4	59	2	26	346

ENFORCEMENT ACTIONS:

ENFORCEMENT ACTIONS AND ABBREVIATIONS:

- VER - Verbal Communication
- SEL - Staff Enforcement Letter
- NOV - Notice of Violation
- NNC - Notice of Non-Compliance
- 13267 - Water Code Section 13267 Investigation Order
- TSO - Time Schedule Order
- CAO - Cleanup and Abatement Order
- EPL - Expedited Payment Letter
- ACL - Administrative Civil Liability
- NTC - Notice to Comply

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 JULY 2019 THROUGH 15 AUGUST 2019)

Office	13267 Order	CAO	NOV	VER	Total
5F	0	0	1	0	1
5R	1	0	1	0	2
5S	0	1	1	1	3
Total R5	1	1	3	1	6

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 is included in Table 4, below.

ENFORCEMENT TABLE 4 -REGION 5 ILRP ENFORCEMENT ACTIONS (1 JULY 2019 THROUGH 15 AUGUST 2019)

Office	NOVs for Failure to Respond to 13260 Directives	NOVs for Failure to Submit Annual Reports (Farm Evaluations and Nitrogen Management Plan Summary Report)	Totals
Fresno	0	410	410
Sacramento	62	295	357
Total	62	705	767

SANITARY SEWER OVERFLOWS (SSOS) AND COMPLAINTS

Statewide General Waste Discharge Requirements for Sanitary Sewer System (SSS General Order) 2006-003-DWQ requires enrollees to submit SSO technical report for any Category 1 SSO in which 50,000 gallons or greater are spill to surface waters. For period between 1 July 2019 through 15 August 2019, there was one reported SSO incident in which 50,000 gallons or greater spilled reached surface water.

CITY OF COLFAX, COLFAX COLLECTION SYSTEM, PLACER COUNTY

On 29 July 2019, the Central Valley Water Board was notified by the City of Colfax that sewage spill occurring at Lift Station 5 Canyon Way, Colfax, CA. According to the Discharger, a lateral fracture developed along a force main line and raw sewage water started seeping into Bunch Creek. Following the Discharger’s notification Water Board staff received a California Office of Emergency Services (Cal-OES) report #19-4845. According to the reports, the Category 1 spill estimated at 153,180 gallons of which 119,017 gallons reached surface water. The spill was discovered at 7:00 am on 29 July 2019 and ceased at 8:00 am on 29 July 2019 and entered Bunch Creek. Relevant data from all the spills occurring during this reporting period is included as **Attachment A**.

For the reporting period between 1 July 2019 through 15 August 2019, there were 158 total SSO spills.

SSO SUMMARY DATA

Total Sanitary Sewer Overflow
From 1 July 2019 through 15 August 2019

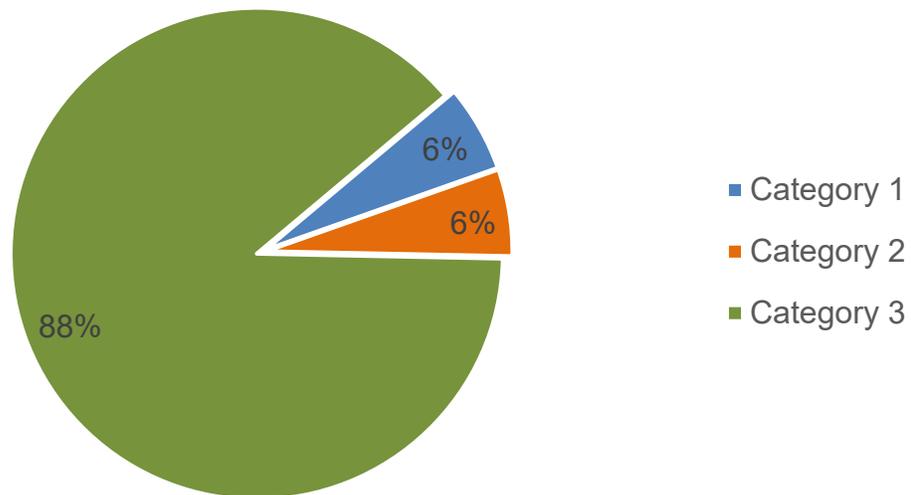


Figure 1: For the reporting period between 1 July 2019 through 15 August 2019, there were 70 total SSO spills: 4 Category 1, 4 Category 2, and 62 Category 3 spills.

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](https://www.waterboards.ca.gov/water_issues/programs/sso/index.html). (https://www.waterboards.ca.gov/water_issues/programs/sso/index.html). 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. From 1 July 2019 through 15 August 2019, Central Valley Water Board staff have received a total of **23 complaints** from phone calls, emails, and from the [CalEPA Complaint database](https://calepacomplaints.secure.force.com/complaints/) (https://calepacomplaints.secure.force.com/complaints/). To date, 20 (87%) complaints

have been investigated and closed or referred to other environmental enforcement agency. Investigations for 3 complaints remain ongoing.

PERFORMANCE TARGETS

Performance measurement and reporting is an important component of a complete system of performance management and is needed to demonstrate how well programs or strategies are working. 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 [Resource Alignment Evaluation Report](https://www.waterboards.ca.gov/about_us/docs/resource_alignment_report.pdf) (https://www.waterboards.ca.gov/about_us/docs/resource_alignment_report.pdf) and was used to develop the FY 2019-2020 performance targets below is the Central Valley Water Board’s Performance Measurement Summary for the 2019-2010 fiscal year. This report was produced for the 2019-2020 fiscal year.

ENFORCEMENT TABLES 5A-5E - REGION 5 INSPECTION PERFORMANCE MEASUREMENT SUMMARY FROM 1 JULY 2018 THROUGH 15 AUGUST 2019

NPDES Wastewater – Table 5a.

Programs	Original Target	Facilities Inspected	% Complete = Actuals/ Original Target	Revised Target	Total # of Inspections Performed
Major Individual Facilities Inspected	29	0	0%	n/a	0
Minor Individual Facilities Inspected	9	0	0%	n/a	0
Minor General Enrollees Facilities Inspected	0	0	N/A	n/a	0

Waste Discharge to Land – Wastewater – Table 5b.

Programs	Original Target	Facilities Inspected	% Complete = Actuals/ Original Target	Revised Target	Total # of Inspections Performed
Municipal Waste, Industrial Waste, and All Other Facilities - Number of Inspections	151	38	28%	n/a	42

Land Disposal – Table 5c.

Programs	Original Target	Facilities Inspected	% Complete = Actuals/ Original Target	Revised Target	Total # of Inspections Performed
Landfill Inspections	113	7	8%	n/a	9
All Other Inspections	23	1	9%	n/a	2

NPDES Storm Water – Table 5d.

Programs	Original Target	Facilities Inspected	% Complete = Actuals/ Original Target	Revised Target	Total # of Inspections Performed
Stormwater Construction Inspections	385	28	7%	n/a	28
Stormwater Industrial Inspections	195	37	18%	n/a	37
Stormwater Municipal Inspections	0	2	N/A	n/a	2

Other Programs – Table 5e.

Programs	Original Target	Facilities Inspected	% Complete = Actuals/ Original Target	Revised Target	Total # of Inspections Performed
Forest Activities Inspections	166	30	30%	n/a	50
Confined Animal Facility Inspections	275	14	6%	n/a	14

ENFORCEMENT TABLES 6A-6D - REGION 5 PERMIT PERFORMANCE MEASUREMENT SUMMARY FROM 1 JULY 2018 THROUGH 15 AUGUST 2019

NPDES Wastewater – Table 6a.

Programs	Original Target	Actuals: Permits or Issued	% Complete = Actuals/ Original Target	Revised Target	Total # of Permits Issued
Major Individual Permits Issued, Revised, and Renewed	9	1	11%	n/a	1
Minor Individual Permits Issued, Revised, and Renewed	6	0	0%	n/a	0

Waste Discharge to Land – Wastewater – Table 6b.

Programs	Original Target	Actuals: Permits or Issued	% Complete = Actuals/ Original Target	Revised Target	Total # of Inspections Performed
Municipal Waste, Industrial Waste, and All Other Facilities - Permits Past Review Date Updated	26	55	165%	n/a	n/a

Programs	Original Target	Actuals: Permits or Issued	% Complete = Actuals/ Original Target	Revised Target	Total # of Inspections Performed
Municipal Waste, Industrial Waste, and All Other Facilities - Number of Inspections	161	206	143%	n/a	231

Land Disposal – Table 6c.

Programs	Original Target	Actuals: Permits or Facilities Inspected	% Complete = Actuals/ Original Target	Revised Target	Total # of Inspections Performed
Landfills Permits Issued, Revised, and Renewed	13	0	0%	n/a	0
All Other Permits Issued, Revised, and Renewed	2	0	0%	n/a	0

Clean Up – Table 6d.

Programs	Original Target	Actuals: Permits or Issued	% Complete = Actuals/Original Target	Revised Target	Total # of Permits Issued
New DoD Sites into Active Remediation	6	3	50%	n/a	n/a
New SCP Sites into Active Remediation	50	0	0%	n/a	n/a
Cleanup Program Sites Closed	60	5	8%	n/a	n/a
New UST Sites into Active Remediation	23	2	9%	n/a	n/a
Underground Storage Tank Sites Closed	68	16	23%	n/a	n/a

DELTA ACTIVITIES

DELTA MERCURY CONTROL PROGRAM

The Delta Mercury Control Program (DMCP) and the Sacramento-San Joaquin Delta Methylmercury TMDL requires entities responsible for reducing methylmercury in the Delta to participate in control studies to develop and evaluate ways to manage methylmercury. The Basin Plan requires the Regional Water Board to conduct a review of these studies and to consider revision of the Delta Mercury Control Program including the fish tissue objectives, linkage analysis (between sources and objectives), modification of mercury goals, implementation actions (including a mercury offset program), and allocations. The review will consider the individual and aggregate findings of the methylmercury control studies, new data and information for the program, as well as recommendations from an external mercury-expert advisory panel. Most of the control study final reports were completed in October 2018, however, DWR was granted further extensions. The DWR Tidal Wetlands report is due December 2019, and the DWR Open Water Modeling report is due June 2020.

The Delta Stewardship Council has funded and convened an independent scientific peer review and advisory panel to review the Phase 1 methylmercury control study final reports and to make recommendations on the effectiveness of control actions proposed by the dischargers subject to the DMCP. A review of seven control study reports received in October 2018 was completed by the Review Panel in August 2019. The [Delta Mercury Control Program Phase 1 Methylmercury Control Studies Independent Scientific Review report](http://www.deltacouncil.ca.gov/pdf/science-program/2019-08-22-delta-methylmercury-review-part-1.pdf) can be viewed here: (<http://www.deltacouncil.ca.gov/pdf/science-program/2019-08-22-delta-methylmercury-review-part-1.pdf>).

For this assessment, the Review Panel evaluated adherence to the study's' approved work plans and the scientific validity of the results and conclusions. The report provided both an overall and individual assessment of the control study findings. Overall, the panel found:

- Work plans were generally followed, but there were concerns over scientific rigor and extrapolation of pilot-scale studies
- Impacts and adaptation to a changing climate were not robustly addressed
- The relative Delta methylmercury loading contributions by the studied sources are minimal and, therefore, cannot offset agricultural or tributary loads
- Methylmercury and inorganic mercury monitoring should be encouraged for updating allocations rather than deeming these sources de minimus.

The panel could not fully assess whether controls could be implemented to meet fish tissue objectives or whether source reductions could offset loads from other sources.

These questions will be addressed after the Tidal Wetland and Open Water study reports are submitted.

Staff will evaluate the seven control studies and the Review Panel report in depth and prepare a two-page summary for the December 2019 Board Meeting Executive Officer Report, describing the findings from each control study and the individual assessment from the advisory panel. A panel review of the two additional DWR reports is anticipated to convene in the summer of 2020, and an advisory panel to inform the DMCP is anticipated to convene in the fall of 2020.

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.

On August 1, MERP staff met with the Department of Water Resources (DWR) graphic design team at the public affairs office. DWR is providing in-kind resources to design and print a low-literacy brochure for MERP outreach and education events. MERP staff reviewed the new draft design and the revisions will be completed by mid-September.

On August 16, staff posted three additional fish consumption advisory signs in Solano County, the Central and South Delta Advisory region. Consumption advisory signs were posted at the final sites with public fishing access to be included in the sign posting effectiveness evaluation. Staff is continuing to coordinate with local entities and planning for additional posting sites in 2019.

MERP staff identified a contractor, finalized an agreement for survey implementation, and began the sign posting effectiveness evaluation of the fish consumption advisory signs. MERP staff provided an initial survey implementation training on August 26 to the Southeast Asian Assistance Center (SAAC) staff. On September 5, MERP staff attended an additional SAAC meeting to provide a follow-up sign posting evaluation training to SAAC staff who are conducting the surveys to address any challenges or concerns they may have encountered in the first two weeks, as detailed in the agreement for the project. Sign posting evaluation surveys are being successfully conducted by SAAC staff.

An important goal of this final year of program implementation is to focus on outreach and education with Delta Tribes. The Delta Conservancy Tribal Liaison will lead this effort and keep the Regional Board Tribal Coordinator informed. On August 31, MERP staff attended the Stockton Annual Labor Day Pow Wow at the University of Pacific Campus to conduct outreach to Native Americans by distributing program materials at an informational booth. Staff spoke to just under 150 families and distributed magnets,

brochures, placemats, info sheets, and stickers. MERP staff also acquired contact information for several potential MERP collaborators to provide secondary outreach in communities and schools that at-risk members of the population attend.

MERP staff is continuing coordination efforts with local entities and other state agencies for additional fish consumption advisory sign posting at Delta sites with public fishing access in 2019. In addition, MERP staff are posting signs. There are currently 91 advisory signs now posted throughout the five Delta counties.

DELTA REGIONAL MONITORING PROGRAM (DELTA RMP)

The Delta RMP Steering Committee (SC) and Technical Advisory Committee (TAC) met for a Long-Range Planning Meeting on July 31 to identify and discuss the long-term priorities and water quality management drivers for the Delta RMP.

On July 16, the Delta RMP Pesticides Subcommittee meet to discuss a proposal to conduct an inter-lab comparison study for two of the five toxicity species currently included in the Delta RMP toxicity monitoring. The group requested more information from the Steering Committee about what the study intends to accomplish. On August 26, the Delta RMP Pesticides Subcommittee met to review the preliminary toxicity and pesticides preliminary data results and the inter-lab comparison study proposal.

On August 5, Daniel McClure presented the Central Valley Water Board's Pyrethroid TMDL and Control Program to the Delta RMP Steering Committee. The Steering Committee discussed the potential to address pesticides through the RMP program and to follow-up on the long-range planning workshop outcomes.

On August 28, the Delta RMP Data Management Subcommittee met to discuss quality assurance codes for toxicity data in the California Environmental Data Exchange Network, the status of QAPPs for new FY 2019-20 monitoring, and the expected completion date of a revised draft Data Management Standard Operating Procedures document.

On August 30, the Delta RMP mercury subcommittee met to finalize current and future mercury sampling for water and fish tissue. The SC previously approved additional winter water sampling events to support seasonal and annual mass balance estimates for the 2022 Delta Mercury TMDL update. In addition to long-term trend monitoring in fish and water, the group is proposing to monitor prey fish and sport fish near habitat restoration projects in the Yolo Bypass, northeast Delta, and west Delta to begin assessing impacts to mercury levels in fish from restoration activities.

On September 13, the Technical Advisory Committee met to discuss a recommendation for changes to the pesticide analyte list (to include indaziflam), a process for documenting Quality Assurance Program Plan deviations and corrective actions, a new mercury monitoring data report, and the Board's Pyrethroid TMDL and Control Program implementation.

The Delta RMP nutrient subcommittee worked with the Delta's Nutrient Research Plan stakeholder group to finalize the QAPP for a study to monitor nutrients and biota during the effluent valve replacement project at the Sacramento River Wastewater Treatment Plant scheduled for September 2019.

DELTA NUTRIENT RESEARCH PLAN

The purpose of the Delta Nutrient Research Plan is to identify and collect information needed to determine water quality objectives for nutrients in the Delta. The Central Valley Water Board approved the Delta Nutrient Research Plan (NRP) in August 2018.

STATUS OF DELTA NRP IMPLEMENTATION ACTIVITIES

Prop 1 Grant. Contracting is underway for a Prop 1 grant award for monitoring cyanobacteria toxins in water and sediment organisms. Differences in contracting between the awarding agency (Dept. Fish and Wildlife) and recipient (Water Boards) must be resolved before the award agreement is finalized.

Pilot Test. A pilot test of cyanobacterial bloom management at Discovery Bay is planned for late summer 2020. The project was postponed for the financial tracking to be completed. The project, which also includes an assessment of nutrient loads in Discovery Bay, is funded by a USEPA 205(j) grant.

Nutrient Monitoring. Staff are continuing monthly monitoring of nutrients in Discovery Bay with assistance from the Discovery Bay Community Foundation.

Biogeochemical Model. Development and testing of a biogeochemical model for the Delta and Suisun Bay is ongoing. Water Boards are providing funding to the San Francisco Estuary Institute (SFEI) for the model.

Phase I Nutrient Change Study. Data collection for the Sacramento River Nutrient Change Study Phase 1 occurred in mid-September. This study takes advantage of a 48-hour wastewater hold at the Regional San WWTP to evaluate effects of the short-term change in nutrients on phytoplankton and other parameters in three channels downstream of the WWTP. The project is funded by multiple entities, including Delta RMP, Regional San, USBR, and USGS.

Biostimulatory Objectives. Staff participated in regulatory and stakeholder group meetings hosted by State Water Board staff for the Biostimulatory Objectives/Protection of Biointegrity Policy Project. Nutrient thresholds that may be considered for application to streams on a Statewide basis will affect policy options and, ultimately, nutrient loads in the Delta.

The Delta NRP Stakeholder and Technical Advisory Group/Delta RMP Nutrients Subcommittee will meet in October. [Delta NRP Program documents and meeting information](https://www.waterboards.ca.gov/centralvalley/water_issues/delta_water_quality/delta_nutrient_research_plan/) are available at: (https://www.waterboards.ca.gov/centralvalley/water_issues/delta_water_quality/delta_nutrient_research_plan/).

SAN JOAQUIN RIVER DISSOLVED OXYGEN TMDL IMPLEMENTATION

In 2006-2007, an aeration facility was constructed on the Port of Stockton's West End Complex as part of the Stockton Deepwater Ship Channel/San Joaquin River (SDWSC/SJR) Dissolved Oxygen TMDL Implementation Program. Since 2011, the Port of Stockton has operated the aeration facility when dissolved oxygen concentrations are expected to fall below the dissolved oxygen water quality objective. From July 2, 2019 to August 31, 2019 there were no excursions below the dissolved oxygen water quality objective of 5 mg/L in the channel and operation of the aeration facility was not necessary. On September 1 the dissolved oxygen water quality objective increased to 6 mg/L in the Stockton Deepwater Ship Channel. From September 1, 2019 to September 10, 2019 there were no excursions and operation of the aerator was not necessary.

A new agreement for the funding and operation of the dissolved oxygen aeration facility was signed by participating members in June 2019. The new agreement extends the operating term from June 1, of 2019 to May 31, 2022. Parties to the agreement will provide \$200,000 up front for operations and maintenance of the facility with any unspent money available for operations in the third year of the agreement. If the remaining funds are insufficient to fund operations in the third year, the Port will ask signatory parties for what is necessary to fully fund anticipated costs.

Repairs and upgrades to a damaged pipe have been completed and the aerator is now fully operational for any upcoming decline in dissolved oxygen concentrations. More information on the SDWSC/SJR dissolved oxygen [TMDL Control Program](#) can be found at:

(https://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_project/san_joaquin_oxygen/index.html).

OLD AND MIDDLE RIVERS DISSOLVED OXYGEN IMPAIRMENT

A White Paper detailing the extent of the dissolved oxygen impairment in Old and Middle Rivers along with contributing factors to the impairment and possible Board actions has been compiled and is being circulated among staff for review.

DWR will be submitting a report detailing the temporary barriers' effects on dissolved oxygen in Old and Middle rivers to the Regional Water Board in October 2019 to meet a requirement of the Boards' 401 certification. Once staff has reviewed that report, it will be incorporated into the final white paper and circulated for interagency and public comment. The contents of the white paper will be presented to the Board as an informational item at a future Board meeting in 2020.

TMDL BASIN PLANNING

PESTICIDE BASIN PLANNING/TMDLS

CENTRAL VALLEY PYRETHROIDS BASIN PLAN AMENDMENT AND TMDL

On 8 June 2017 the Board adopted a Basin Plan Amendment which established a Control Program for Pyrethroid Pesticide Discharges throughout the Sacramento and San Joaquin River Basins, as well as Total Maximum Daily Loads (TMDLs) for pyrethroid pesticides in certain impaired water bodies. The State Water Board approved the Basin Plan Amendment on 10 July 2018. The Office of Administrative Law (OAL) approved the Amendment on 19 February 2019. On 22 April 2019, USEPA approved The TMDLs in the amendment. The Basin Plan Amendment, including the TMDLs, is now fully approved and effective.

Completion of baseline monitoring for pyrethroids by municipal stormwater and agricultural dischargers was originally required 2 years from the date of OAL approval, but this completion date has been extended as described below. Baseline monitoring for municipal or domestic wastewater dischargers will be conducted during their effluent characterization monitoring. The conditional prohibition established in the Control Program by the Amendment becomes effective 3 years from the date of OAL approval.

In July and August 2019, the Executive Officer sent letters to these dischargers clarifying expectations for baseline monitoring and extending the monitoring deadlines for municipal stormwater and agricultural dischargers by eight months to accommodate method development, time needed for monitoring and laboratory contracting, and dischargers annual monitoring cycles. Baseline monitoring for storm water and agricultural dischargers is now due to be completed by 19 October 2021. The letter also clarified that smaller municipal stormwater dischargers could forego baseline monitoring, consider existing data adequately representative, and instead direct resources towards development of a management plan to reduce pyrethroid pesticide discharges. Staff continue to work with dischargers through our regulatory programs to assist in compliance with these new requirements.

Staff also are continuing to work on the development of the Pyrethroid Research Plan which is a Board actions identified in the Pyrethroid Control Program to be completed by February 2021. The Research Plan will describe research and studies to inform future iterations of the Control Program. Staff have briefed stakeholders and the Regional Monitoring Program Steering Committee on the development of the research plan and begun to assemble a group of interested experts and stakeholders to develop the plan. More information is available on the [Central Valley Pyrethroid TMDL and Basin Plan Amendment Website](https://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_project_s/central_valley_pesticides/pyrethroid_tmdl_bpa/index.html) (https://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_project_s/central_valley_pesticides/pyrethroid_tmdl_bpa/index.html)

DIAZINON AND CHLORPYRIFOS REVIEW

Staff have completed an internal draft report reviewing diazinon and chlorpyrifos concentration data and other related information in the Central Valley Region. Preliminary results show that the improved practices and reduced uses that have followed the Board's control efforts, Department of Pesticide Regulation's pesticide use regulations, and other regulatory changes, have been effective at reducing concentrations. Concentrations of these pesticides are now nearly always below thresholds of concern. Staff plan on presenting these findings to the Board in early 2020, following a stakeholder review of the draft report and finalization of the report.

TRIBAL BENEFICIAL USES DESIGNATION

On 2 May 2017 beneficial use designations relating to California Native American tribes were established by the State Water Resources Control Board (State Water Board) through Resolution 2017-0027 which adopted Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California—Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions. The new beneficial use definitions are Tribal Tradition and Culture (CUL), and Tribal Subsistence Fishing (T-SUB) ("Tribal Beneficial Uses"). In addition, the State Water Board also defined a beneficial use for Subsistence Fishing (SUB) unrelated to California Native American Tribes. The SUB, T-SUB, and Commercial and Sportfishing (COMM) beneficial uses relate to the risks to human health from the consumption of fish or shellfish. In addition, the definition for CUL also includes consumption of aquatic resources to support cultural, spiritual, ceremonial, and traditional rights.

Through the 2018 Triennial Review, several tribes in the Central Valley have requested that the Central Valley Regional Water Quality Control Board (Central Valley Water Board) designate Tribal Beneficial Uses. On 6 December 2018 the Central Valley Water Board adopted Resolution R5-2018-0079 which approved the 2018 Triennial Review including Tribal Beneficial Uses as a priority project.

Subsequent to the Central Valley Regional Board identifying Tribal Beneficial Uses (TBU) as a priority project, Central Valley Water Board staff have initiated a "Tribal Beneficial Uses Working Group" with the other Regions and State Water Board Divisions to facilitate communication. Water Board staff have also begun to develop a process for designation of TBU and to solicit input from all the California Native American Tribes in the Central Valley as well as other stakeholders.

PIT RIVER EVALUATION

The 2018 Triennial Review identified Reassessment of Beneficial Uses and Water Quality Objectives in Specific Reaches of the Pit River as a priority project. To support this effort, the Modoc Resource Conservation District (MRCD) has expressed an interest in gathering available temperature-related water quality data and collecting additional data where data gaps exist. In order to assist MRCD with its effort, Water Board staff have drafted a guidance memo outlining the applicable regulatory processes

and requirements. Water Board staff will continue to assist MRCD with the development of a data gathering exercise.

Board staff have also scheduled an upper Pit River field meeting with MRCD and North Eastern California Water Association (NECWA) representatives on October 9th. The purpose of this meeting is to tour the upper Pit River watershed and discuss temperature data gathering plans and Board staff guidance outlined in the memo. Subsequent meetings are planned to discuss MRCD's data collection proposal, and to coordinate with the Pit River Tribe.

BIOSTIMULATORY BIOINTEGRITY POLICY DEVELOPMENT

The State Water Resources Control Board is proposing to adopt a statewide plan amendment addressing both biostimulatory substances and biointegrity. The amendment could include water quality objectives for Biostimulatory Substances, and/or guidance on implementing biostimulatory objectives. It may also include a plan to protect and restore biointegrity which could include biological objectives. State Board, with input from the Regional Water Boards, is considering which indicators and thresholds are most appropriate for California streams and how multiple indicators may be assessed.

The first phase of the project is focused on wadable streams. Future phases will cover larger waterbodies and estuaries. The first phase the scientific and technical aspect of the project has been mostly completed and the current focus is on policy development. State Board has hosted multiple policy development brainstorming sessions with the Regional Water Boards, the latest held on 13 August 2019. The Biostimulatory Biointegrity policy is in the early stages of development but preliminary draft approaches are beginning to take shape. Central Valley Water Board staff are participating in discussions with the State Board and other Regional Water Boards on the development and scope of this policy. Key decisions to be made include whether numeric or narrative objectives will be adopted for both biostimulatory substances and biointegrity, the waterbodies the policy will apply to, and how the policy would be implemented through new or existing program.

REGIONAL TEMPERATURE CRITERIA DEVELOPMENT

The 2018 Triennial Review identified Temperature Criteria and Objectives as a priority project to develop regionally applicable temperature criteria for the Central Valley. The report completed in FY18/19 that assessed the EPA Region 10 temperature criteria applicability for the Central Valley recommended the development of regionally based criteria. On 23 August, Water Board Staff met with Division of Water Rights, Division of Water Quality, San Francisco Bay Regional Water Board and the Delta Watermaster to discuss creating a joint long-term approach to address unresolved temperature criteria questions and uncertainties. Staff will continue to develop this joint approach over the coming months.

SALINITY AND CV SALTS

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/)

The Basin Plan Amendment (Salt and Nitrate Control Program BPA) with supporting Staff Report and Substitute Environmental Documentation was adopted on 31 May 2018. [The Final \(Resolution R5-2018-0034\) with Adopted Basin Plan Amendment language](#) can be found at the following location: (https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/#saltnitrate_cp_bpa).

The amendments must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law and for those portions subject to the Clean Water Act, by the USEPA. A public workshop to discuss the Salt and Nitrate Control Program was held at the State Water Board on 2 July 2019. A State Water Board hearing to consider approval of the amendments is expected within the next few months.

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 conduct Early Implementation Management Zone pilot studies in the Turlock and Kings River groundwater basins. Local dischargers and agencies are working together to characterize the basins and provide safe drinking water to users with elevated nitrate in groundwater supplies. An additional grant effort is focused on development of a workplan for the salinity Prioritization and Optimization Study.

CV-SALTS MEETING PARTICIPATION

On 15 August and 19 September 2019, Patrick Pulupa, Adam Laputz, Anne Littlejohn and Walter Plachta participated in the CV-SALTS Executive Committee meetings. Discussions focused on the Basin Plan Amendment Approval process, program implementation planning, and grant activities relating to the development of Management Zone pilot studies, the Salinity Prioritization and Optimization Study work plan and other Salt and Nitrate Control Program outreach activities.

On 29/30 July 2019, Anne Littlejohn, Walter Plachta, and Adam Laputz participated in steering committee meetings for the two Management Zone Early Implementation grant efforts in the Turlock and Kings River groundwater basins. Meetings focused on

evaluating draft Early Action Plans to supply replacement drinking water and Preliminary Management Zone Proposals.

On 13 August 2019, Anne Littlejohn and Water Plachta participated in the CV-SALTS Public Outreach and Education Committee conference call meetings. The meetings focused on developing outreach material (e.g. video, factsheets) for the public.

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 [Municipal and Domestic Supply \(MUN\) Beneficial Use Project](#) can be found at:

(https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/mun_beneficial_use/).

UNITED STATES BUREAU OF RECLAMATION (USBR)—MANAGEMENT AGENCY AGREEMENT (MAA)

MAA meetings with Central Valley Water Board staff and representatives for USBR, the Westside San Joaquin River Watershed Coalition, and the Grassland Water District are held quarterly. On 16 September 2019, Anne Littlejohn participated in the MAA meeting to discuss ongoing activities supporting the San Joaquin River Real Time Management Program activities (RTMP). On 1 July 2019, USBR released a draft Annual Work Plan for public comment. The due date for comments was 31 July 2019 and USBR received no public comments. The [final Management Agency Agreement \(MAA\) FY 2020 Annual Work Plan](#) (<https://www.usbr.gov/mp/ptms/docs/2020-annual-work-plan.pdf>) was approved by the Central Valley Water Board in September 2019.

SURFACE WATER AMBIENT MONITORING PROGRAM (SWAMP)

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. In addition, DNA source identification monitoring commenced in August 2019 at ten river sites and two urban runoff locations in the Lower American River. Initial results are expected in 2020.

SUMMER 2019 RECREATIONAL BENEFICIAL USE ASSESSMENTS

Each summer since 2007, the Central Valley Water Board has conducted Recreational Beneficial Use Assessments in popular recreational areas. Recreational beneficial uses are assessed using E. coli as an indicator of fecal pollution. This summer, the Central Valley Water Board is conducting weekly sampling in the Stockton Urban Waterways and the Upper San Joaquin River. Results are posted each week to an online map.

[Online maps and more information on these SWAMP projects](https://www.waterboards.ca.gov/centralvalley/water_issues/swamp/r5_activities/2019rbua/) are available at: (https://www.waterboards.ca.gov/centralvalley/water_issues/swamp/r5_activities/2019rbua/).

FOREST ACTIVITIES PROGRAM

GRANT

Staff continue to move The Post-Camp Fire Dixie Road Sediment Reduction Grant Project forward. Staff participated in a field inspection reviewing most of the proposed sites working with the Butte County RCD and PWA. The SOW has been completed for the Dixie Road grant however due to a possible addition to work and a justification for more money the SOW submittal is on hold until BCRCD/PWA submit a proposal for the additional work with cost estimates.

INSPECTIONS

Staff Completed 15 compliance inspections through the month of August.

ENFORCEMENT

Staff issued a Notice of Violation and Water Code section 13267 Order to Pacific Power and Light (PP&L) company to assess non-compliance with Water Code sections 13260 and 13376. PP&L installed several crossings post Delta fire without obtaining appropriate permits which resulted in discharging waste into waters of the state.

Staff issued a Notice of Violation to Colusa County for the Goat Mountain Road and unauthorized discharges of waste under Water Code section 13376. Staff has inspected the Goat Mountain Road multiple times over the past 5 years and has observed evidence of sediment being discharged directly into Little Stony Creek.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (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 Tables 1 and 2, below, summarize the Notices of Applicability that were issued to date for Fiscal Year 2019/2020 (1 July 2019 and 31 August 2019) for the General Waste Discharge Requirements/NPDES Permit for Limited Threat Discharges to Surface Water (Limited Threat General Order) and Waste Discharge Requirements for Municipal Waste Dischargers that Meet Objectives/Criteria at the Point of Discharge to Surface Water (Municipal General Order).

NPDES PERMIT TABLE 1 –LIMITED THREAT DISCHARGES TO SURFACE WATERS

Facility	General Order Permit Number
Combie Reservoir Sediment and Mercury Removal Project (amended NOA)	R5-2016-0076-019
Blue Oak Terrace Mutual Water Well #2 Project	R5-2016-0076-056
Sacramento Deep Water Ship Channel (amended NOA)	R5-2016-0076-036
Westlake Community Construction Dewatering Project	R5-2016-0076-057
Blue Oak Terrace Mutual Water Company Well #2 Project	R5-2016-0076-056

NPDES PERMIT TABLE 2 - MUNICIPAL GENERAL ORDERS

Facility	County	General Order Permit Number
City of Williams Wastewater Treatment Plant	Colusa County	R5-2017-0085-008

DAIRIES/CONFINED ANIMAL FACILITIES

INSPECTIONS

The Confined Animal Facilities Program's FY 2019-2020 performance target for facility inspections is 275. Staff have completed 19 inspections as of September 12th. Each year in July, staff receive more than 1,100 dairy annual reports and temporarily reduce the number of inspections and spend significant time reviewing the annual reports. However, the Program is on track to meet the inspection performance target for the year. During inspections, staff review the facility's nitrogen management plan, mortality management plan, annual reports, and evaluate production area and process wastewater ponds for compliance. On-site poultry facility inspections have been suspended during the current outbreaks of avian influenza and Newcastle disease.

PONDS INTERSECTING GROUNDWATER

In March 2019, Water Code section 13267 Directives were issued to 71 dairies in Merced County in areas where preliminary information indicated the depth to groundwater was less than 10 feet below the bottom of unlined dairy ponds. The depth to the bottom of the ponds was reported in Waste Management Plans submitted in 2010 as part of compliance with the Dairy General Order. However, many dairy ponds are not completely in-ground, but are rather surrounded by embankments that may be many feet high. Therefore, the actual depth of the bottom (invert) of the ponds below the ground surface was not known.

The directive required the height of the pond embankment above the land surface to be measured, and the depth of the pond invert below the land surface to be calculated, using the total pond depth information in the associated Waste Management Plan. This information was due 31 July 2019; to date we have received 62 responses. Some dairies have requested additional time to comply as the number of engineering firms available to do the surveying is limited. If a pond was determined to intersect groundwater, a remediation plan is due to the Board by 31 October 2019.

OIL FIELDS

WASTEWATER SURFACE PONDS

Staff continues to work on enrolling oil field operators under the Oil Field General Orders for Discharges to Land, and to evaluate closure plans for produced wastewater ponds. On 31 July 2019 a Notice of Applicability (NOA) for General Order Three was issued to Caleco, LLC for a pond in the Cymric Oil Field. An NOA for two ponds operated by Dole Enterprise, Inc. in the Midway Sunset Oil Field is pending.

On 2 August 2019, staff issued letters that concurred with the closure reports for two separate Chevron USA, Inc., pond facilities in the Kern River Oil Field.

On 3 July 2019, the Executive Officer issued a draft Monitoring and Reporting Program (MRP) for the Valley Water Management Company (VWMC) McKittrick 1-1 produced wastewater disposal facility. The MRP requires VWMC to establish a groundwater monitoring system and collect data to define the nature and extent of produced wastewater constituents in the environment.

On 27 August 2019 staff issued a letter containing a Directive Pursuant to California Water Code section 13267 (13267 Order) to Pentarch Petroleum. The 13267 Order request information regarding whether produced wastewater from the Deer Creek Oil Field being used to irrigate crops.

SPILL RESPONSE

Central Valley Water Board staff responds to oil field spills and upsets reported to the Office of Emergency Services (OES). Central Valley Water Board staff were notified of 14 events in July and August.

A spill of crude oil and oil field produced wastewater occurred on the 22 Government facility operated by Chevron USA, Inc. (Chevron) in the Midway Sunset Oil Field on 8 July. According to OES, a pipeline leak caused the discharge of approximately 0.86 barrels (bbl(s)) (36.12 gallons (gals)) of crude oil and 0.7 bbls (29.4 gals) of produced wastewater into a dry stream bed. On 8 July Chevron staff told Central Valley Water Board staff that the source pipeline is buried in an area covered with bushes and the exact location of the leak was not yet known. Chevron staff added that staff of the California Department of Fish and Wildlife- Office of Oil Spill Prevention and Response (CDFW-OSPR) were coming to inspect the spill site on 8 July. On 9 September, staff of Chevron told Central Valley Water Board staff that cleanup of the affected areas was completed and staff of CDFW-OSPR signed-off on the site cleanup on 25 July.

A spill of crude oil and oil field produced wastewater occurred on the Bonanza Creek Lease operated by Crimson Resource Management (Crimson) in the Bonanza Creek Oil Field on 10 July. According to OES, external corrosion on a subsurface flow line leaked approximately 4.5 bbls (189 gals) of crude oil and 2 bbls (84 gals) of produced wastewater into an area located within an almond orchard. Also, according to OES, the discharged fluids may have affected two almond trees. On 10 July Crimson staff told Central Valley Water Board staff that no dry stream beds or natural drainage courses were affected by the discharged fluids. Crimson staff added that cleanup of the affected areas is complete and that staff of the California Division of Oil, Gas, and Geothermal Resources (Division) will inspect the spill site on 10 July. Crimson staff provided Central Valley Water Board staff with photographs showing the pre- and post-cleanup conditions of the affected areas.

A spill of oil field produced wastewater occurred on the North Midway Lease operated by Berry Petroleum Company (Berry), in the Midway Sunset Oil Field on 11 July. According to OES, a computer malfunction (equipment failure) caused the discharge of approximately 60 bbls (2,520 gals) of produced wastewater from a tank into the secondary containment for the tank. On 11 July, Berry staff told Central Valley Water

Board staff that the discharged wastewater was entirely contained within the secondary containment. Berry staff added that the discharge had been stopped and the discharged wastewater was being recovered. Berry staff said that no dry stream beds or natural drainage courses have been affected by the discharged wastewater.

A spill of crude oil occurred on the Section 33 Lease operated by Aera Energy, LLC. (Aera), in the Belridge Oil Field on 12 July. According to OES, a leak from a stuffing box caused the discharge of approximately 3 bbls (126 gals) of crude oil to land. Aera staff told Board staff on 12 July that the discharged oil accumulated near a well head and some affected a dirt road. Aera staff added that no dry stream beds or natural drainage courses have been affected by the discharged oil and that cleanup of the affected areas was in progress.

A spill of crude oil and oil field produced wastewater occurred on the Section 25CF Lease operated by Chevron USA, Inc. (Chevron), in the Midway Sunset Oil Field on 14 July. According to OES, a broken polish rod on a well stuffing box caused the discharge of approximately 5 bbls (210 gals) of crude oil and produced wastewater onto land. The OES report also stated that the discharged fluids were contained, and cleanup would be conducted by a contractor. On 15 July Chevron staff told Central Valley Water Board staff that the discharge had been stopped and that no dry stream beds or natural drainage courses were affected by the spill. Chevron staff stated that cleanup was in progress and updated the discharged fluid totals to approximately 4.4 bbls (184.8 gals) of crude oil and 81.9 bbls (3,439.8 gals) of produced wastewater.

A spill of heavy crude oil occurred on the Belridge Lease operated by HBI Cat Canyon (HBI), in the Lost Hills Oil Field on 15 July. According to OES, a leak from the bottom of a tank caused the discharge of approximately 5 bbls (210 gals) of crude oil to the ground. The OES report also stated that no waterways were affected, and cleanup of the discharged fluids had been completed. On 15 July, HBI staff told board staff that all of the discharged oil was contained within the secondary containment of the source tank.

A spill of crude oil and oil field produced wastewater occurred on the Section 33 Lease operated by Chevron USA, Inc. (Chevron) in the Kern River Oil Field on 25 July. According to OES, a flow line leak caused the discharge of approximately 15.2 bbls (638.4 gals) of crude oil and 24.7 bbls (1,037.4 gals) of produced wastewater into a dry ravine. The OES report also states that the discharge has been stopped and the discharged fluids were fully contained. On 31 July, Chevron staff told Central Valley Water Board staff that the discharged fluids affected approximately a 150-foot section of a dry stream bed. Chevron staff added that cleanup of the affected areas was in progress. Chevron staff provided Central Valley Water Board staff with an incident briefing report for this spill that contained a site map and detailed information regarding the incident response and cleanup activities. On 9 September, Chevron staff told Central Valley Water Board staff that staff of the Division inspected the areas affected by the spill and signed-off on the cleanup on 12 August.

A spill of crude oil, produced wastewater, and drilling mud occurred on the Keene Lease operated by Sentinel Peak Resources California (Sentinel), in the Midway Sunset Oil Field on 2 August. According to OES, fluids were intermittently discharged into the ground near a well resulting in the discharge of approximately 2 bbls (84 gals) of crude oil and 60 bbls (2,520 gals) of drilling mud. On 2 August, Sentinel staff told Central Valley Water Board staff that fluids were intermittently and slowly seeping from the ground and that all seeping fluids were fully contained within an earthen berm. Sentinel staff also said that the source of the discharged fluids was not known and was being investigated. On 5 August, Sentinel staff told Central Valley Water Board staff that the seep was still active, discharging mostly mud, even though all steam stimulation within 600 feet of the surface expression has been shut down (including at the neighboring TRC facility). Sentinel staff added that the source of discharge was still under investigation in collaboration with the Division and that Sentinel personnel were monitoring the surface expression constantly. Sentinel staff continued to report updated discharge totals to OES periodically. On 3 September, Sentinel staff told Central Valley Water Board staff that the surface expression was still active and discharging less than 10 bbls (420 gals) of fluids per day (approximately 95% wastewater and 5% oil). Sentinel staff added that all of the discharged fluids were contained within an earthen berm and are being recovered. Sentinel staff also stated that there are no dry stream beds within thousands of yards of the surface expression. The latest discharge amount update was reported to OES on 10 September and states that approximately 486.5 bbls (20,433 gals) of oil, 2,306 bbls (96,852 gals) of wastewater, and 77 bbls (3,234 gals) of drilling mud were discharged from the surface expression up to that date.

A spill of crude oil and oil field produced wastewater occurred on 9 August near Well #3217A-1, which is operated by Aera Energy, LLC (Aera) in the South Belridge Oil Field. According to OES, a fitting leak on a flow line caused the discharge of approximately 5 bbls (210 gals) of crude oil and 15 bbls (630 gals) of produced wastewater. The OES report also stated that no water ways were affected. Aera staff updated the discharged fluids totals to approximately 3.9 bbls (163.8 gals) of oil and 131 bbls (5,502 gals) of produced wastewater.

A spill of softened produced wastewater occurred on the Section 5 Lease operated by Chevron USA, Inc. (Chevron), in the Kern River Oil Field on 12 August. According to OES, a valve on a soft water vessel was left open and soft water spilled into a dry stream bed. The OES report also stated that the discharged fluids were not recoverable, and no cleanup would be conducted.

A release of water occurred on the Section 36W Lease operated by Chevron USA, Inc. (Chevron) in the Cymric Oil Field on 16 August. According to OES, approximately 25 bbls (1,050 gals) of "uncontaminated ground water" was released intermittently to dry land. The OES report also stated that no water ways were affected. On 19 August, Chevron staff told Central Valley Water Board staff that the source of the release was unknown and that no oil was discharged. Therefore, no cleanup work will be conducted.

A spill of crude oil and oil field produced wastewater occurred on the Rosedale Ranch Lease operated by Crimson Resource Management (Crimson) in the Rosedale Ranch

Oil Field on 19 August. According to OES, a flow line leak caused the discharge of less than 1 bbl (42 gals) of crude oil and produced wastewater onto land. The OES report also stated that no waterways were affected and that the discharge was stopped, and cleanup was in progress.

A discharge of crude oil and oil field produced wastewater occurred on the Section 36W Lease operated by Chevron USA, Inc. (Chevron), in the Cymric Oil Field on 21 August. According to OES, approximately 5 bbls (210 gals) of crude oil and oil field produced wastewater were discharged due to a possible seep. The OES report also states that the source of the discharge was under investigation. On 22 August, Chevron staff told Board staff that discharge of fluids from the surface expression was ongoing. Chevron staff added that they were not certain regarding the nature of the surface expression location. Chevron staff continued to report discharge total updates to OES periodically. On 3 September, Chevron staff told Board staff that the discharged fluids are contained within an earthen berm on a production pad and are being recovered continuously. Chevron staff added that no dry stream beds or natural drainage courses are affected by the discharged fluids. On 9 September Chevron staff told Board staff that he has no information at this time regarding the source/cause of this surface expression. The latest discharged fluid amount update was reported to OES on 9 September reflecting approximately 7,010 bbls (294,420 gals) of crude oil and produced water combined.

A spill of crude oil and oil field produced wastewater occurred on the Conoco Lease operated by E & B Natural Resources (E&B) in the Poso Creek Oil Field on 28 August. According to OES, a tank leak caused the discharge of approximately 50 bbls (2,100 gals) of crude oil and produced wastewater onto land within a tank farm containment. The OES report also stated that cleanup of the affected areas will be conducted by a contractor. On 3 September, E&B staff told Central Valley Water Board staff that the discharged fluids were contained within a berm surrounding the source tank. E&B staff added that cleanup of the affected areas was completed and that no dry stream beds or natural drainage courses were affected by the discharged fluids.

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

FOOD SAFETY

During August 2019, Central Valley Water Board staff disseminated a draft version of the White Paper Outline and the Task 1 Report to the Panel and the public for review. The White Paper Outline is a report that is being prepared by Central Valley Water Board staff and is intended to provide an overview of the Food Safety Project. The Food Safety Project is comprised of three tasks, which include the identification of constituents that may be present in produced water used for irrigation, a literature review of constituents of interest, and the collection and analysis of crop samples. The Draft Task 1 Report was prepared by GSI Environmental, Inc. (consultant hired under the Food Safety Memorandum of Understanding) and provides a detailed summary of constituents that may be in produced water that are either naturally occurring or introduced to the system via additives used during petroleum exploration, production, or

treatment. The Draft Task 1 Report also identifies Chemicals of Interest, which is a subset of the total constituent list through an initial assessment of toxicological data. Constituents that are known to be toxic or have limited or no toxicological data were included in the Chemicals of Interest list, which will undergo further evaluation during the literature review under Task 2.

On 29 August 2019, Central Valley Water Board staff hosted a public Food Safety Meeting. The meeting consisted of the following: (1) update of the draft Task 1 Report, (2) update of the draft White Paper Outline, (3) discussion of recent crop samples, and (4) an overview of crop sample results. Central Valley Water Board staff received oral comments from the Panel and provided an opportunity for members of the public to ask questions and provide comments related to the Food Safety Project. Central Valley Water Board staff is working with the Panel to schedule another public Food Safety Meeting during the fourth quarter of 2019.

UIC PROGRAM

AQUIFER EXEMPTIONS

During the period from 28 June 2019 through 11 September 2019, staff (Staff) of the Underground Injection Control Unit (UIC) performed the following aquifer exemption activities:

Midway-Sunset Aquifer Exemption – Central Valley Board staff completed a review of the Division of Oil, Gas, and Geothermal Resources (Division) responses (including new figures, tables, and water quality data) to its joint questions regarding the request for an aquifer exemption expansion for injection into the Tulare B and Lower Tulare aquifers within the Midway-Sunset Oil Field. Staff provided additional comments/concerns to the State Water Board the Staff regarding the Division's responses.

UIC PROJECT REVIEWS

Staff issued two no-objection letters and technical memorandums for UIC projects in the Round Mountain Oil Field, and two UIC projects in the Five Points Extension and Paloma Oil Fields.

Staff sent its initial questions and concerns to the Division regarding potential impacts to groundwater quality from injection projects in the Greeley and Antelope Hills Oil Fields.

Staff sent the Division follow-up questions for three injection projects, one in the Asphalt Oil Field, one in the Bowerbank Oil Field, and one in the Kern River Oil Field.

Staff sent the Division a letter requesting the Division evaluate two adjacent UIC projects in conjunction because the projects are proposed in the same injection zone within the Kern Front Oil Field. The letter was accompanied by two staff memorandums (one per project) providing supporting technical information for the request.

Staff are preparing initial questions and concerns to the Division regarding potential impacts to groundwater quality from injection projects in the North Antelope Hills, Fruitvale, and Kern River Oil Fields.

SENATE BILL 4 (SB-4) PROGRAM

Since the last Executive Officer's Report, Board staff have completed one SB4 Well Stimulation Treatment (WST) Application package review and submitted written comments to the State Water Board. The Application package reviewed was for a location at or near where "protected groundwater" may or has been determined to be present. This Application package was for California Resources Elk Hills (CREH), Buena Vista Nose Oil Field. Nine previously reviewed Application packages were sent from the State Water Board to the Division of Oil, Gas, and Geothermal Resources. Nine other WST Application packages are under review.

Board staff have also reviewed two Addendums to groundwater monitoring related plans and submitted written comments to the State Water Board. The Addendums reviewed were as follows: California Resources Production Corporation's Addendum 10, Buena Vista Nose area; and Aera Energy LLC's 12 well Addendum for the Lost Hills Oil field. Comments from four previously reviewed Chevron Addendums were submitted to the Operators via the State Water Board. One workplan for Chevron U.S.A. Inc.'s Monitoring Well Rehab is under review for the Lost Hills Oil Field. Two Exclusions for CREH are under review for the Elk Hills Oil Field.

Central Valley Water Board staff have completed a review of CREH's groundwater monitoring reports for the North Coles Levee Oil Field and are currently re-drafting comments for the review of Aera's South Belridge Oil Field groundwater monitoring reports. A draft letter and technical memorandum for North Cole's Levee were submitted to State Water Board staff. The reports present groundwater sampling results associated with samples collected from locations where well stimulations were previously conducted. Groundwater monitoring reports for seven other locations are currently under review. Board staff participated in a meeting facilitated by State Water Board staff on 1 August 2019 with oil field operators that have submitted groundwater monitoring reports. The meeting included an informational discussion item on reporting requirements for the area-specific groundwater monitoring program.

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 October 9th meeting, to be held in Modesto, will focus on drinking water well monitoring initiation in the Tulare Lake Basin and an update on the CV-SALTS Basin Plan Amendments. More information regarding the stakeholder meetings can be found on the Central Valley Water Boards' [ILRP – Stakeholder Meetings and Workgroups web page](#)

(https://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/regulatory_information/stakeholder_advisory_workgroup/index.html).

EXPERT REVIEW OF ESJWQC SURFACE WATER MONITORING FRAMEWORK

State Water Resources Control Board Order WQ-2018-0002 directed the Central Valley Water Board to convene an external expert review of the East San Joaquin Water Quality Coalition's surface water monitoring framework. The expert review process will be facilitated by Steve Weisberg of SCCWRP. A nine-member Advisory Group consisting of 3 agricultural representatives, 3 environmental protection representatives, and 3 Water Board representatives (both Central Valley Water Board and State Water Board) has been formed and held five meetings since May 2019. Five Panel members have been selected. The first public Panel Meeting is scheduled for 7-9 January 2020.

PROPOSED CHANGES TO GBP WDRS ORDER

On 2 August 2019, staff presented an information item to the Central Valley Water Board about the need for revisions to Waste Discharge Requirements for San Luis and Delta-Mendota Water Authority and the United States Department of the Interior Bureau of Reclamation (Order R5-2015-0094) to permit subsurface agricultural discharges from the Grassland Bypass Project beyond 31 December 2019. Staff is currently preparing the revised Order for Board consideration prior to the end of 2019.

ILRP COMPLIANCE, OUTREACH & ENFORCEMENT

DRINKING WATER WELL MONITORING OUTREACH

Outreach efforts continue for the new drinking water well monitoring requirements in the East San Joaquin Water Quality Coalition (ESJWQC). Staff recently sent out emails to remind those whose sample results exceeded the drinking water standard to send notification to the user(s) and Central Valley Water Board. All members of the ESJWQC will be sent a "Reminder to Sample" postcard by October 2019. Fresno staff is also preparing to send outreach packages to coalition members within the Tulare Lake Basin in October 2019 to inform them of their drinking water well monitoring requirements which start in 2020.

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 is used to focus and prioritize issuance of 13260 directives to appropriate entities. Growers may obtain coverage by joining an agricultural 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 July 1 – August 15
San Joaquin Co & Delta	3
Sacramento Valley	273
Total	276

NOTICES OF VIOLATION FOR FAILURE TO RESPOND TO 13260 DIRECTIVE

Notices of Violation (NOVs) were sent to un-enrolled farmland owners or operators 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.

Coalition Area	NOVs Mailed May 7 – July 1
San Joaquin & Delta	35
Sacramento Valley	27
Total	62

NOTICES OF VIOLATION FOR FAILURE TO SUBMIT FARM EVALUATIONS OR NITROGEN MANAGEMENT PLAN SUMMARY REPORTS

Notices of Violation (NOVs) were sent to coalition members for their failure to submit Nitrogen Management Plan Summary Reports by the Board-approved deadlines. The NOVs urge members to promptly provide their reports to their respective coalitions or potentially face monetary penalties.

Coalition Area	NOVs Mailed July 1 – August 15
San Joaquin & Delta	295
Tulare Lake Basin	410
Total	705

COALITION ENROLLMENT SUMMARY

All agricultural coalitions except for the CA Rice Commission are required to provide their membership lists by July 31st each year. The CA Rice Commission updates their coalition acreage annually using data generated through USDA/NASS. Below are tables showing enrollment acres and participant data for the last three years (2017, 2018, and 2019).

ILRP staff continues to conduct significant compliance and outreach efforts associated with obtaining appropriate enrollment in the program and will provide an information

item during the February 2020 Board meeting to update the Board on our efforts. There are fluctuations in irrigated agricultural acreage due to various factors, including land use conversions, ownership transfers, and regulatory coverage in other programs.

Table 1 of 6: Pre-Order Summary of Acres and Growers in the Sacramento, Delta, East and Western San Joaquin River Watershed Coalitions

Pre-Order Numbers	CA Rice Comm.	East San Joaquin	Grass-lands Drainage Area	Sac.Valley	San Joaquin County & Delta	Western San Joaquin River	Totals
Acres	544,468	535,653	N/A	1,183,491	348,200	467,625	3,079,437
Growers	2,500	2,225	N/A	7,888	3,256	2,450	18,319

Table 2 of 6: Summary of Enrolled Acres in Sacramento, Delta, East and Western San Joaquin River Watershed Coalitions from Membership Lists

Coalition Group	2017 Enrolled Acres	2018 Enrolled Acres	2019 Enrolled Acres
CA Rice Commission	536,000	499,000	499,000*
East San Joaquin	702,081	700,099	700,385
Grasslands Drainage Area	83,913	83,693	83,478
Sacramento Valley	1,332,327	1,319,710	1,304,820
San Joaquin County & Delta	516,357	512,036	517,873
Western San Joaquin River	431,453	423,216	419,768
Totals	3,602,131	3,602,131	3,525,324

Table 3 of 6: Summary of Enrolled Growers in Sacramento, Delta, East and Western San Joaquin River Watershed Coalitions from Membership Lists

Coalition Group	2017 Enrolled Growers	2018 Enrolled Growers	2019 Enrolled Growers
CA Rice Commission	2,500	2,500	2,500
East San Joaquin	3,416	3,336	3,106
Grasslands Drainage Area	100	98	93
Sacramento Valley	8,149	7,982	8,196
San Joaquin County & Delta	3,528	3,458	3,384
Western San Joaquin River	2,505	2,500	2,409
Totals	20,198	19,267	19,688

Table 4 of 6: Pre-Order Summary of Acres and Growers for the Tulare Lake and Western Tulare Lake Basin Coalitions

Pre-Order Numbers	Southern San Joaquin Water Quality Coalition (Buena Vista, Cawelo, Kaweah Basin, Kern River, Tule Basin, Westside)	Westlands	Totals
Acres	957,362	507,489	1,464,851
Growers	3,794	1,070	4,864

Table 5 of 6: Summary of Enrolled Acreage for the Tulare Lake and Western Tulare Lake Basin Coalitions from Membership Lists

Coalition Group	2017 Enrolled Acres	2018 Enrolled Acres	2019 Enrolled Acres
Buena Vista	32,930	33,383	33,331
Cawelo	33,818	34,454	34,891
Kaweah Basin	158,842	160,380	160,532
Kern River	528,687	528,340	528,859
Kings River	785,692	779,978	796,202
Tule Basin	224,264	231,084	231,460
Westside	98,136	106,079	107,024
Westlands	487,526	492,072	491,908
Total	2,349,895	2,365,770	2,384,287

Table 6 of 6: Summary of Enrolled Growers for the Tulare Lake and Western Tulare Lake Basin Coalitions from Membership Lists

Coalition Group	2017 Enrolled Growers	2018 Enrolled Coalition	2017 Enrolled Growers
Buena Vista	54	56	56
Cawelo	87	88	89
Kaweah Basin	1272	1242	1,235
Kern River	762	755	747
Kings River	4658	4223	4,082
Tule Basin	1012	967	947
Westside	42	43	42
Westlands	1289	1215	1,301
Total	9176	8589	8,499

Sacramento River Watershed Coalition Group

Pre-Order Numbers	CA Rice Comm.	East San Joaquin	Grass-lands Drainage Area	Sac. Valley	San Joaquin County & Delta	Western San Joaquin River	Totals
Acres	544,468	535,653	N/A	1,183,491	348,200	467,625	3,079,437

CALIFORNIA RICE COMMISSION

Surface water monitoring for the 2019 sampling season commenced on 28 May 2019. The results of sampling will be reported in the 2019 Annual Monitoring Report, due on 31 December.

SACRAMENTO VALLEY WATER QUALITY COALITION

ILRP Staff are working with UC Rangelands to reevaluate the Irrigated Lands Regulatory Program to be more relevant and meaningful for irrigated pasture and low-threat crops in the upper watersheds. Areas of evaluation include watershed and commodity specific reporting, and a pasture-specific economic analysis. In order to move forward, additional information is needed including pesticide use data, nitrogen/fertilizer use data, management practice data, geographic data, and economic analysis results.

On 1 August, Sacramento Valley Water Quality Coalition submitted the Monitoring Plan Update for the 2020 Water Year. The plan is under staff review.

On 28 August, staff provided a review of the Sacramento Valley Water Quality Coalition's 2018 annual reports. These include the Surface Water Monitoring Report,

Groundwater Monitoring Report, Chlorpyrifos and Diazinon TMDL Report, and the Management Plan Progress Report.

On 3 September, the Upper Feather River Watershed Group submitted a Reduced Monitoring/ Management Plan Verification Option Proposal. The proposal is under staff review.

SAN JOAQUIN RIVER WATERSHED COALITION GROUPS

EAST SAN JOAQUIN WATER QUALITY COALITION

On 1 August, the Coalition submitted the 2020 water year Monitoring Plan Update report, including an excel workbook of the monitoring schedule and the Pesticide Evaluation Protocol Results. The report is currently under staff review.

On 1 August, the Coalition submitted the Annual Report Management Practice Implementation and Nitrogen Application Report. Staff released the report on 9 September for public review and comment.

On 14 August, staff's review of the 2019 Annual Monitoring and Management Plan Progress Reports, covering the period 1 October 2017 through 30 September 2018, was provided to the Coalition. The Coalition complied with all MRP Order monitoring and reporting requirements.

On 29 August, staff received the Coalition's Quarterly Monitoring Data Report for the period 1 January 1 through March 31, 2019.

SAN JOAQUIN COUNTY AND DELTA WATER QUALITY COALITION

On 1 August, the SJD Coalition submitted its annual 2019 Monitoring Plan Update by the Order's deadline for the 2020 Water Year. The Monitoring Plan Update proposes the water quality monitoring schedule for the period between October 2019 and September 2020. The plan is under staff review.

On 6 August, staff completed its review of the SJD Coalition's Annual Monitoring Report and Management Plan Progress report covering the period October 2017 through September 2018. The groundwater trend monitoring results section of the AMR will be reviewed under a separate cover.

On 3 September, the Coalition submitted its September 2019 Quarterly Monitoring Report. The report contains electronic data, field sheets, site photos, and laboratory reports for the Quarterly Monitoring Report (January through March 2019).

WESTSIDE SAN JOAQUIN RIVER WATERSHED COALITION

On 16 August, the Water Board sent a review letter package to the Coalition for the 2017 Crop Year Nitrogen Management Plan Summary Report Analysis and Farm Evaluation Summary Report. The reports met all Order requirements.

On 19 August, the Executive Officer issued a letter to the Coalition requiring additional work related to identifying Coalition members who need a Sediment and Erosion Control Plan.

GRASSLAND DRAINAGE AREA COALITION

The 2018 Annual Monitoring Report was submitted on 28 May 2019. The report discusses the results of the first year of groundwater monitoring in the Grassland Drainage Area and proposes updates to the groundwater quality trend monitoring well network for 2019. The report review was mailed on 22 July 2019 and requires that the Grassland Drainage Area Coalition revise the report to address staff comments.

TULARE LAKE BASIN COALITION GROUPS

KERN RIVER WATERSHED COALITION AUTHORITY

On 3 July 2019, staff provided comments to the Kern River Watershed Coalition Authority's 19 April 2019 Surface Water Monitoring Plan – Revision 2. Conditional approval of the monitoring plan was given with the stipulation that the Coalition's assess potential agricultural impacts along the South Fork of the Kings River, upstream of Lake Isabella.

WESTLANDS WATER QUALITY COALITION

On 15 August, staff met representatives of the Westlands Water Quality Coalition for a quarterly update meeting. The meeting's discussion topics included the Groundwater Quality Trend Monitoring results, Stormwater Quality Monitoring Plan, Coalition outreach activities, 2020 Water Year Monitoring Plan Update, the 2018 Water Year Annual Report, and Nitrogen Management Plan Summary Report.

OTHER PROJECTS

DATA MANAGEMENT

ILRP staff continues to route water quality monitoring data through Surface Water Ambient Monitoring Program (SWAMP) for transfer to California Environmental Data Exchange Network (CEDEN) and is current with its CEDEN uploads. CEDEN transfers occur approximately once per month. After ILRP staff performs a completeness check, SWAMP staff loads coalition monitoring data to CEDEN. Four coalitions send data

directly to the Central Valley Regional Data Center for transfer to CEDEN in May each year.

In August, ILRP staff performed an audit by comparing the data submitted to SWAMP in 2019 versus the records available in CEDEN. ILRP staff discovered that a number of records were not successfully being transferred to CEDEN from SWAMP. SWAMP staff explained that CEDEN was having software issues. The data has been successfully transferred to the SWAMP data warehouse, but the CEDEN software is not completely syncing with the SWAMP dbase. State Water Board staff is investigating this issue.

GRASSLAND BYPASS PROJECT

On 25 April 2019, the Annual Monitoring Report for the Grassland Bypass Project was submitted to the Central Valley Water Board. The report covers surface water monitoring conducted from 1 January through 31 December 2018. A review letter and memorandum were provided to the Dischargers on 8 July 2019 requiring revisions to the Annual Monitoring Report. Staff will review the revisions upon submittal.

NORMAN'S NURSERY

On 21 September 2018, the Executive Officer approved the site-specific nitrate management plan for Norman's Nursery Linden facility. Norman's Nursery Linden and the SJ Delta Coalition are jointly implementing a Management Plan to address surface water and groundwater nitrate exceedances observed during 20 years of monitoring under MRP 97-811. Groundwater and surface water quality monitoring has been conducted according to the management plan since approval, and the first management plan progress report was submitted on 1 May 2019. Assessment of the first year's monitoring data is due on 1 May 2020.

RICE PESTICIDE PROGRAM

Thiobencarb monitoring for the 2019 sampling season commenced on 30 April. The results of monitoring will be submitted in the 2019 Annual Monitoring Report, due on 31 December, and followed by the submittal of management practice recommendations for the 2020 sampling season.

The Annual Rice Pesticide Program Stakeholder meeting is scheduled to be held on 6 November 2019 at the Central Valley Water Board office in Rancho Cordova.

NON-POINT SOURCE (NPS)

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 enforcement orders to each

responsible party to obtain this information. On 9 January 2019, a 13267 Order was issued to the Irrigated Agriculture responsible party. On 30 May 2019, Irrigated Agriculture submitted their response to staff. Staff is in the process of reviewing the response to determine load allocation compliance. On 22 August 2019, a Time Schedule Order request was submitted on behalf of Lake County MS4 co-permittees. The Time Schedule Order is currently being drafted and will include a schedule of when the permittees will be in compliance with their point source allocation. Staff will continue to send Orders to the other responsible parties throughout 2019.

On 15 August 2019, Jennifer LaBay and Board Member Schneider attended the Blue-Ribbon Panel for the Rehabilitation of Clear Lake Meeting. The focus of the meeting was on Committee process and an initial discussion on Committee recommendations for the legislative report, due January 1, 2020. The next meeting of the Committee is scheduled for September 26, 2019. Meeting details are 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](https://resources.ca.gov/clear_lake/). (resources.ca.gov/clear_lake/).

Staff is also coordinating with agencies, organizations, and Tribes in Lake County to develop a joint brochure focused on educating residents about nutrient management and steps they can take to reduce nutrient impacts/erosion into Clear Lake. Central Valley Water Board is acting as lead in this effort. The brochure is tentatively scheduled to be available to the public in early fall 2019.

More information about the Clear Lake Nutrient Control Program can be found on the [Clear Lake Nutrient TMDL webpage](https://www.waterboards.ca.gov/clear_lake_nutrients/index.html). (https://www.waterboards.ca.gov/clear_lake_nutrients/index.html).

CANNABIS

GENERAL ORDER ENROLLMENT AND DEVELOPMENTS

The Central Valley Regional Cannabis General Order (Regional General Order) was rescinded at the 7 June 2019 Central Valley Water Board Meeting, with an effective date of 30 June 2019. At the time of rescission, approximately 259 enrollees lost coverage under the Regional General Order. Several of the enrollments that were administratively terminated have been prioritized for further follow up to ensure proper remediation has occurred, due to their continued threats to water quality.

Staff have been actively reviewing and processing enrollments under the Statewide General Order and have been continuing to conduct outreach and enrollment enforcement efforts to ensure eligible cultivators enroll in the Statewide General Order.

Table 1. Summary of the Statewide General Order enrollments in the Central Valley Region to date.

(CE = Conditionally exempt, enrolled in the Statewide Cannabis Waiver of Waste Discharge Requirements.)

County	CE	Tier 1L	Tier 1M	Tier 1H	Tier 2L	Tier 2M	Tier 2H	Total Active Enrollments
Calaveras	2	13	2	-	2	2	-	21
Colusa	1	1						2
Contra Costa	1	-	-	-	-	-	-	1
Fresno	4	-	-	-	-	-	-	4
Lake	11	72	3	-	54	1	-	141
Merced	4	-	-	-	-	-	-	4
Nevada	8	137	3	1	3	-	-	152
Sacramento	125	-	-	-	-	-	-	125
Shasta	9	-	-	-	-	-	-	9
Siskiyou	4	-	-	-	-	-	-	4
Sierra	-	2	-	-	-	-	-	2
Kern	1	-	-	-	-	-	-	1
Solano	2	-	-	-	-	-	-	2
Stanislaus	14	6	-	-	2	-	-	22
Tulare	6	-	-	-	-	-	-	6
Yuba	1	-	-	-	-	-	-	1
Yolo	2	19	-	-	45	-	-	66
Totals	195	250	8	1	106	3	0	563

OUTREACH

On August 15th, staff participated in an outreach event hosted by the El Dorado County Cannabis Growers Association to provide future enrollees with information on the process for enrollment and requirements for cultivators under the Statewide General Order. El Dorado county is not open to receive applications currently, however the county is anticipating accepting applications in the fall of 2019. Approximately 33 attendees were present.

On August 21st, staff attended an outreach event in Nevada county hosted by the Nevada County Cannabis Alliance. During the event staff discussed the enrollment process and requirements of the Statewide General Order requirements. Approximately 20 attendees were present.

COMPLIANCE AND ENFORCEMENT - ENROLLMENT ENFORCEMENT

On August 15th, approximately 100 Water Code Section 13260 directive letters were issued to cultivators in Nevada County. Staff will continue to follow up with these cultivators to ensure they enroll in the Statewide General Order or take appropriate enforcement action as necessary.

COMPLIANCE

On August 22nd, staff performed a permit compliance inspection in Lake county. Between September 4th and 5th, staff performed 30 compliance inspections in Nevada county.

ENFORCEMENT

Between July 29th and August 2nd, staff performed 24 enforcement inspections in Yuba and Nevada Counties. The inspections were performed as part of larger coordinated efforts between the California National Guard and several counties throughout the State. Several agencies were involved, including: several Sheriff's offices, local code enforcement, CDFW, and Cal Cannabis.

On August 16th, staff performed an enforcement inspection alongside CDFW wardens and scientists in Madera county.

On August 19th, staff performed a follow up enforcement inspection alongside CDFW wardens and scientists in Yuba county.

On August 20th, staff performed an enforcement inspection alongside CDFW wardens and scientists in Calaveras county.

GOVERNOR'S OFFICE CANNABIS ENFORCEMENT CONVENINGS

Throughout September 2019 the Governor's office has scheduled several convenings of law enforcement agencies, cannabis licensing agencies, and state agencies engaged in cannabis related enforcement. The meetings are being held to discuss and better understand issues related to illegal cannabis cultivation at the local level and best practices identified to address the illegal activity. At meetings scheduled within the Central Valley Region, one Central Valley Region Cannabis staff will be participating in the meetings alongside a representative from the State Board Office of Enforcement.

CYANOBACTERIA BLOOMS UPDATE

Cyanobacteria and harmful algal blooms (HABs) have become a common occurrence in water bodies across the state and the U.S. This issue has led to the question "Are harmful algal blooms affecting our surface waters?" In 2016, the California Water Quality Monitoring Council developed the [California Harmful Algal Blooms Portal](#)

(mywaterquality.ca.gov/habs/) on their [My Water Quality webpage](http://mywaterquality.ca.gov/index.html) (mywaterquality.ca.gov/index.html).

The purpose of the HABs Portal is to provide information to the public in an easy-to-understand manner on the health and environmental effects of HABs in California’s lakes, reservoirs, rivers and estuarine waters. The portal includes information such as how to identify and report a bloom, healthy habits the public can practice that will protect themselves and their pets from a HAB, and a web page on control and treatment of blooms for water resource managers. The State Water Board’s Surface Water Ambient Monitoring Program implements this Freshwater HAB (FHAB) Program. The Central Valley Water Board participates in the state’s FHAB Program by investigating and responding to reports of suspected HABs.

CALENDAR YEAR 2019 – CENTRAL VALLEY HAB

The cyanobacteria bloom season is well underway in the Central Valley. Our region investigated suspicious blooms in Amador, Butte, Calaveras, Contra Costa, Kern, Lake, Lassen, Madera, Merced, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Tehama, Tuolumne, and Yuba counties. A summary of cyanobacteria blooms for the period of July to September 2019 is provided in Table 1.

Table 1. Cyanobacteria Bloom Summary: JULY – SEPTEMBER 2019

Summary of Cyanobacteria Bloom since previous EO Report	Number of Blooms
Suspected Blooms Investigated	13
Confirmed Blooms	9
Continuing Blooms from previous EO Report	5
Distinct Water Bodies with Confirmed Blooms	13
Human Illnesses Reported (under investigation)	4
Animal Impacts Reported (under investigation)	

GRANTS

CLEAN WATER ACT §319(H) NONPOINT SOURCE GRANT SOLICITATION

Approximately \$4 million is available for the 2020 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 will be used to address post-fire recovery needs in areas

affected by fire, as indicated in the emergency proclamations by the Governor, the 2020 Nonpoint Source Program Preferences include post-fire recovery projects.

The 2020 solicitation for proposals will be available September 24 through December 17, 2019. [For more information, please visit the NPS website](http://www.waterboards.ca.gov/water_issues/programs/nps/319grants.shtml) (www.waterboards.ca.gov/water_issues/programs/nps/319grants.shtml).

CLEAN WATER ACT §319(H) NONPOINT SOURCE ON-GOING GRANTS:

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. (Closing 4/30/2021)

IMPLEMENTATION OF BEST MANAGEMENT PRACTICES IN THE DELTA: A COMPREHENSIVE PESTICIDE MANAGEMENT PROJECT TO IMPROVE WATER QUALITY (\$399,407)

The Delta Conservancy will develop, certify, and implement Farm Water Quality Improvement Plans through the Fish Friendly Farming Program to reduce the generation and transport to waterbodies of agricultural chemicals, sediment, and nutrients from sites within the Sacramento-San Joaquin Delta. (Closing 8/22/2022)

TIMBER REGULATION AND FOREST RESTORATION FUND ON-GOING GRANTS:

PONDEROSA WAY ROAD ASSESSMENT AND SEDIMENT REDUCTION PLAN (PHASE 1) (\$300,000)

The Tehama County Resource Conservation District 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. A time extension has been approved for this grant extending the closing date by 9 months. A project site has been chosen and work is to be implemented and completed before this winter. (Closing 2/28/2020)

PONDEROSA WAY ROAD ASSESSMENT AND SEDIMENT REDUCTION PLAN (PHASE II) (\$500,000) –

The Tehama County Resource Conservation District 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 demonstration project in the Project Area. Proposed demonstration projects were on United States Forest Service property which would have required NEPA documentation, which was not considered given the short time frame to complete. Private timber land is currently being considered for implementing the demonstration project. (Closing 4/30/2020)

BATTLE CREEK WATERSHED BASED PLAN (\$492,438)

The Battle Creek Watershed Conservancy has developed a Watershed-Based Plan and will implement a sediment reduction demonstration project in the Battle Creek Watershed. (Closed 6/30/2019)

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 4/30/2020)

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 4/30/2020)

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 10/31/2021)

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. (Closing 2/28/2021)

DEER CREEK NORTH YUBA RIVER WATERSHED ASSESSMENT AND SEDIMENT REDUCTION PLAN (\$255,100)

American Rivers Inc. 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. A final draft of the grant agreement has been reviewed and an executed agreement is due soon. Eligible work start date: 03/01/2019; proposed closing date: 02/28/2022. (Not Executed)

AMERICAN RIVER HEADWATERS RESTORATION (\$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. (Closing 3/30/2022)

PUBLIC/DISADVANTAGED COMMUNITY/TRIBAL OUTREACH

(An asterisk in front of an entry below denotes “Outreach to Disadvantaged Communities” or “Outreach to Tribes”.)

On 27 June, Sue McConnell, Susan Fregien and Rebecca Tabor attended the Sacramento Valley Water Quality Coalition’s Management Advisory Committee meeting to give a brief update on current efforts within the Irrigated Lands Regulatory Program.

On 9 July, Eric Warren attended the Madera County Farm Bureau Water Forum, hosted at the Madera VFW Hall. Forum discussions included Waters of the U.S. vs. Waters of the State, CV-SALTS & Water Quality, Biops & San Joaquin Valley Blueprint, SGMA in Madera County, Metering Technology, and Water Markets.

On 17 July, Alex MacDonald presented at the Aerojet Community Advisory Group’s bi-monthly meeting. The presentation included an update on 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. Alex also provided a summary of the annual groundwater report for the Western Groundwater Operable Unit focusing primarily on capture zone analysis and data gaps.

On 25 July, Alex MacDonald, James Taylor and Walter Floyd presented updates on the Aerojet Superfund Site and the Former McClellan AFB Superfund Site to a technical meeting of the Sacramento Groundwater Authority. These updates are provided up to four times per year to the water purveyor group that services Sacramento County from the American River north to the Sacramento County line.

On 25-26 July, Sue McConnell, Susan Fregien, Lynn Coster, Rebecca Tabor and UC Rangeland staff attended a field tour, annual member meeting, and staff meeting in Goose Lake. The purpose of the trip was to demonstrate management practices utilized

on upper watershed ranching operations, and to get stakeholder input on our current efforts to address irrigated pasture and low threat commodities in the upper watersheds.

*On 29/30 July 2019, Anne Littlejohn, Walter Plachta, and Adam Laputz participated in steering committee meetings for the two Management Zone Early Implementation grant efforts in the Turlock and Kings River groundwater basins. Meetings focused on evaluating draft Early Action Plans to supply replacement drinking water and Preliminary Management Zone Proposals.

*On 7 August, Omar Mostafa attended a Terra Bella community evening meeting regarding odor complaints from disadvantaged community groups and members.

*On 13 August, Anthony Toto attended the Fresno Environmental Reporting Network (FERN) task force meeting to review and provide updates regarding environmental complaints lodged by various disadvantaged community groups and members. It was announced that on 24 July, Governor Newsome signed SB 200 at the house of the 1st resident that detected drinking water problems in Tombstone. After a discussion on industrial hemp, Anthony forwarded information from the California Department of Food and Agriculture to the chair of FERN. More information on the [California Industrial Hemp Program](https://www.cdffa.ca.gov/plant/industrialhemp/index.html) can be found at (<https://www.cdffa.ca.gov/plant/industrialhemp/index.html>).

*On 14 August, Anthony Toto participated (via conference call) in the Kings IVAN Reporting Network task force meeting to review and provide updates regarding environmental complaints lodged by various disadvantaged community groups and members.

On 16 August, Janis Cooke participated in a meeting hosted by the Delta Science Program to discuss status and information gaps related to effects of Regional San's wastewater treatment plant upgrade. Participants included the Delta Science Program and Interagency Ecological Program lead scientists, Regional San science team, USGS, State Water Contractors, and other stakeholders.

*On 22 August, Anthony Toto participated in a conference call of the State Board's Environmental Justice Round Table. Anthony provided a report on the new Executive Officer's report with * indicating EJ/DAC/Tribal outreach. Committee members were impressed.

On 26 August, Sue McConnell, Susan Fregien, and Ashley Peters toured the Grassland Drainage Area to observed infrastructure and proposed locations for modifications to the Grassland Bypass Project that will be implemented under the proposed Long-Term Storm Water Management Plan. The current WDRs (Order R5-2015-0094) for the Grassland Bypass Project do not permit discharges beyond 31 December 2019 and are currently being revised by staff to address discharges beyond that date.

On 28 August, Sue McConnell, Susan Fregien and Rebecca Tabor attended an Upper Feather River Watershed Group meeting in Sierra Valley with UC Rangeland staff. The purpose of the meeting was to get stakeholder input on our current efforts to address irrigated pasture and low threat commodities in the upper watersheds.

*On 3 September, Anthony Toto participated (via conference call) in the Kern Environmental Enforcement Network (KEEN) task force meeting to review and provide updates regarding environmental complaints lodged by various disadvantaged community groups and members. The McKittrick Oil Spill was a topic of discussion, two links were distributed for updates: [Cymric Oil Field Surface Expressions](https://www.conservation.ca.gov/dog/Pages/Chevron-Cymric-oil-spill.aspx) (<https://www.conservation.ca.gov/dog/Pages/Chevron-Cymric-oil-spill.aspx>) and [Cymric Oil Field Incident](https://calspillwatch.wordpress.com/tag/cymric-oil-field-incident/) (<https://calspillwatch.wordpress.com/tag/cymric-oil-field-incident/>). Community members are concerned about disposal of contaminated soil near residential areas.

*On 10 September, Anthony Toto attended the Fresno Environmental Reporting Network (FERN) task force meeting to review and provide updates regarding environmental complaints lodged by various disadvantaged community groups and members. Melissa Cregan gave a presentation on the roles and responsibilities of the Fresno County Agricultural Commissioner.

On 10 September, Alex MacDonald participated in a panel provided an overview of Per- and Poly-fluorinated Alkyl Substances (PFAS) to the San Francisco Bar Association. The four-member panel presented technical information on chemical characteristics, fate and transport, sampling and analytical techniques, sources, occurrence and treatment of PFAS. There were also presentations on current regulatory processes dealing with PFAS and risk communication.

On 11 September, Alex MacDonald presented at the Aerojet Community Advisory Group's bi-monthly meeting. The presentation included an update on 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. A majority of the meeting was spent discussing the upcoming field work for the cleanup of Area 40 being overseen by the State (Regional Board and DTSC).

*On 11 September, Anthony Toto participated (via conference call) in the Kings IVAN Reporting Network task force meeting to review and provide updates regarding environmental complaints lodged by various disadvantaged community groups and members. Martha Sanchez of California Department of Pesticide Regulation made a presentation on California System for Pesticide Incident Reporting (CASPIR), which is a mobile app to report pesticide incidents. The app is linked to the count agricultural commissioners. CASPIR offers a convenient way to report pesticide illness, incident or concern, quickly, 24 hours-a-day.

GENERAL UPDATES TO THE BOARD

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.

In FY 18/19, 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 Aquatic Science Center (ASC) has provided the DRMP Technical Advisory Committee with a 70% draft QAPP and Sampling and Analysis Plan for discussion at their 9 May 2019 meeting. ASC is working to complete the QAPP and Sampling and Analysis Plan and submit the deliverables to the CECs Subcommittee for comment. The DRMP allocated \$35,000 to fund sampling planned for Year 1 of the Work Plan in FY 19/20 with additional funding for Year 1 activities to be provided by Supplemental Environmental Project funding. Ambient CEC sampling is planned to begin in FY 19/20 after the QAPP and Sampling and Analysis Plan is approved.

CARR FIRE

Redding office staff continues to work with the Western Shasta Resource Conservation District to implement sediment and erosion control measures in priority watersheds burned in the Carr Fire last year. To date approximately 660 acres have been treated. Design and permitting for eight culvert replacements is nearing completion, and construction will begin shortly. An additional round of water quality monitoring is planned for the first major rain event this fall.

CAMP FIRE

Staff has continued to engage in multi-agency discussions with CalOES, Cal Recycle, DWR, and other interested agencies regarding post-fire response for the Camp Fire and discussing lessons learned to better approach a rapid watershed protection protocol for future incidents. General discussion topics with these agencies include: Rapid BMP implementation, administrative processes, agency costs, removal of BMP's, and effectiveness of BMP's used.

On 15 August 2019, Central Valley Water Board staff coordinated a Camp Fire Surface Water and Groundwater Quality Monitoring Group meeting to update the attendees on surface water sampling results, groundwater sampling results and the ongoing efforts to continue water quality sampling into the 19/20 wet season. The group received updates on current research efforts being led by CSU Chico and USGS, an update on soil sampling results from the director of the Debris Removal Operations, and an update from the multiagency Natural and Cultural Resources Recovery Group on potential aid that can be offered for monitoring and restoration activities in impacted watersheds. A key topic of the meeting focused on the large amount of soil tracked on local roadways, recently disturbed ground lacking BMP's, ground disturbance due to tree removal

activities near watercourses, and the need for post debris removal BMP implementation. Due to the effectiveness of the Camp Fire Surface Water and Groundwater Monitoring Group meetings agency attendees agreed to continue the coordination meetings during the 19/20 wet season.

On 28 August 2019, staff met with U.S. Army Corp of Engineers (USACE) officials to discuss a Scope of Work contained in USACE proposed “Planning Assistance to States Comprehensive Post Wildfire Butte Creek Watershed Recovery Plan” (Planning Assistance Document). The USACE Planning Assistance Document outlines the USACE involvement in recovery efforts within the Butte Basin from the Camp Fire. Staff discussed the plausibility of the Scope of Work and Time and Cost Estimate contained the USACE Planning Assistance Document.

On 3 September 2019, staff provided CalOES a brief summary and initial conclusions of our surface water results and short and long-term impacts of the Camp Fire on water quality within the Lower Butte Creek watershed. This was provided after a request from CalOES to assist with establishing their Infrastructure Impact and Recovery Report for the Camp Fire.

Staff continues to lead discussions with Dr. Michelle Newcomer with Lawrence Berkley National Laboratory, Department of Water Resources, and Butte County officials for a long-term surface water and groundwater monitoring/modeling project of the Butte Creek Basin to address groundwater quality impacts stemming from the Camp Fire. Dr. Newcomer has secured a PhD student that will begin their research in the Spring of 2020 and will work in conjunction with Department of Water Resources and Butte County for groundwater sampling, and with the Central Valley Water Board for surface water quality information within the Butte Creek Basin.

EMERGENCY RESPONSE ACTIVITIES

The Central Valley Water Board routinely receives and responds to the Governor’s Office of Emergency Services (OES) Hazardous Material Spill Reports (Spill Reports). The Redding office has tasked four staff in our office in receiving and if necessary, responding to these OES spill reports. Table 1 provides a summary of spill reports received by the Central Valley Water Board’s Redding office between 5 July and 10 September 2019.

Table 1 - Spill Reports Received by the Central Valley Water Board’s Redding Office Between 5 July and 10 September 2019.

Total Spill Reports Received	Total Spill Reports that Required No Action	Total Spill Reports that Required Follow up	Total Spill Reports that Required Further Actions
26	21	5	3

Activities related to spill reports that required follow up generally included the gathering of additional information from reporting parties and follow up with local agencies.

Activities associated with spills that required further action were generally related to permitted facilities and were forwarded to appropriate program staff for additional follow up under their respective programs.

On 5 September 2019, staff attended a Local Emergency Planning Committee (LEPC), Region III meeting in Red Bluff, Tehama County. The purpose of the LEPC meetings is to provide a forum for emergency management agencies, responders, industry and the public to work together to evaluate, understand, train about, coordinate and communicate chemical hazards in the community and develop hazmat emergency plans, which provide information about chemicals in the community to citizens, government agencies and emergency responders. Due to the pending retirement of Scott Zaitz who is currently the Environmental Primary for LEPC Region III, George Low has been nominated to replace Scott Zaitz as the new Environmental Primary. A vote to confirm new committee members will take place at the next LEPC meeting which is currently scheduled for 7 November 2019.

E&J GALLO WINERY, FRESNO COUNTY

On 3 July 2019, E&J Gallo Winery submitted a vadose zone monitoring workplan. The workplan proposes to install soil moisture monitoring equipment at two of the land application areas to collect data from this year's grape processing season. Regional Board staff concurred with the workplan in a 12 July 2019 letter. By 31 January 2020, Gallo shall submit the results of the study along with recommendations for additional work as appropriate.

PERSONNEL AND ADMINISTRATION

STAFFING UPDATES - JULY 1, 2019 – AUGUST 30, 2019

PROMOTIONS:

Christine Croyle, SSM1

LEAVE OF ABSENCE:

Rebecca Asami, EG

Bethany Soto, ES

Marilyn Petruescu, EG

Glenn Meeks, SR EG

RETIREMENT:

James Brownell, EG

SUMMARY OF POSITIONS:

Total Authorized Positions: 275.7

Total Vacant Positions: 23.5

Sacramento

Authorized Positions: 148

Vacancies: 9.5

Fresno

Authorized Positions: 76

Vacancies: 9

Redding

Authorized Positions: 51.7

Vacancies: 5

Separations:

Brandon Diaz, SSA

Kim Sellards, Supervising EG

Temporary Positions:

Kira Smith, Scientific Aid

New Hires:

Joy Burns, Seasonal Clerk

Benjamin Wangberg, Scientific Aid

Eraldo Melara, Scientific Aid

Gina Weber, Scientific Aid
 Isabella Bencomo, Scientific Aid
 Elizabeth Salazar, Scientific Aid

TRAINING UPDATES - JULY 1, 2019 – AUGUST 30, 2019

Class Title	Number of Attendees
4-Hour Field Safety Training	1
8 Hour ASBOG Review and 4 Hour CSE Review	1
Advanced CEQA	3
AED/CPR: American Heart Association Heartsaver AED Training	29
American Heart Association First Aid Training	14
Analytical Laboratory Training	1
Basic Supervision for Supervisors - Part I	1
California Water Data Science Symposium	2
CEQA Update	1
CHP Active Shooter Response Training	3
Civil Engineering PE Exam Review Course	1
CIWQS Training	7
Crop Specialty Tour	1
Defensive Driver Training	26
EEO: Workplace Rights and Responsibilities	4
ESRI User Conference3	3
Ethics Training for State Officials	1
Field Safety Training	2
Fish Passage Workshop	1
Highly Effective Professional Writing	4
Maintaining a Respectful Work Environment	3
Odor at Compost Facilities	1
QSP/QSD Certification Course	1
SCI350 Leadership and Ethics in the Geosciences	1
Soils Science Training - Shasta County	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
17-084-150, Amendment 1	Air Shasta Rotor and Wing, Inc.	Helicopter inspection services, Redding Office	05/24/2018	09/30/2020	\$60,000
19-046-160	TBD	Fixed wing aircraft - Aerial surveillance services	5/1/2020	4/30/2023	\$60,000

WATER QUALITY STUDY/PLANNING

Contract Number	Contractor Name	Description	Start Date	End Date	Amount
16-046-150, Am. 1	UC Davis	Study to develop reference toxicity values for herbicides/fungicides present in Delta for native algal species.	2/13/2017	02/12/2020	\$375,000
16-074-150, Am. 3	Lawrence Berkeley National Lab	Plant, soil and water testing	04/28/2018	03/31/2019	\$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	Department 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

Contract Number	Contractor Name	Description	Start Date	End Date	Amount
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 Assoc. 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
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	4/17/2019	01/30/2021	\$249,806

Contract Number	Contractor Name	Description	Start Date	End Date	Amount
		Joaquin (ESJ) River Watershed General Waste Discharge Requirements			
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	3/31/2022	\$95,000
19-033-150	California Department of Water Resources	Support for Sacramento Water Coordinated Monitoring.	TBD	3/31/2022	\$525,000
19-062-150	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

FUTURE BOARD ACTIVITIES

DECEMBER 2019 BOARD MEETING

NPDES PROGRAM– PERMITTING

- City of Lodi White Slough WPCF Rescission
- Bear Valley Water District WWTF Amendment
- City of Turlock Regional WQCF Amendment
- Cold Water CAAP General Order Renewal
- Town of Discovery Bay WWTP Renewal
- City of Stockton RWCF Renewal
- Linda County WWTP Amendment
- City of Alturas WWTP Renewal

WASTE DISCHARGE REQUIREMENTS (WDR) PROGRAM – DISCHARGE TO LAND

- Tejon Mountain Village Water Resource Recovery Facility, New WDRs
- Gunner Ranch Wastewater Treatment Facility, New WDRs
- Malaga WWTF, New WDRs

IRRIGATED LANDS REGULATORY PROGRAM

- Updated Grasslands Bypass Project WDRs to regulate stormwater discharges from agricultural lands.

FEBRUARY 2020 BOARD MEETING

NPDES PROGRAM – PERMITS

- Merced WWTF Renewal
- Stallion Springs Community Services District WWTF Rescission

WASTE DISCHARGE REQUIREMENTS (WDR) PROGRAM – DISCHARGE TO LAND

- Tasteful Selections, New WDRs
- Setton Pistachio and Porterville Citrus, Revised WDRs

- City of Biggs WWTF, NPDES to WDR conversion
- North State Rendering, updated WDRs

IRRIGATED LANDS REGULATORY PROGRAM

- Informational item on ILRP enrollment status and next steps.

APRIL 2020 BOARD MEETING

NPDES PROGRAM – PERMITTING

- City of Turlock Regional WQCF Renewal
- City of Manteca WQCF Renewal
- Malaga WWTF Rescission
- Sequoia/Kings Canyon National Parks Rotenone Application (New Permit)
- Sixteen to One Mine Renewal
- Sierra Pacific Industries Burney Division Sawmill Renewal

IRRIGATED LANDS REGULATORY PROGRAM

- Informational item to discuss tentative Irrigated Lands WDRs to implement CV SALTS.

WASTE DISCHARGE REQUIREMENTS (WDR) PROGRAM – DISCHARGE TO LAND

- City of Madera Wastewater Treatment Facility, Revised WDRs
- Olson Meats, updated WDRs
- Packers Bay Marina, updated WDRs

STORM WATER AND WATER QUALITY CERTIFICATION PROGRAM

- General Order for Dredging Activities not requiring a Federal Permit/General 401 Certification for Dredging Activities requiring a Federal Permit

PENDING ACTIONS BUT NOT YET SCHEDULED FOR A BOARD MEETING

STORM WATER AND WATER QUALITY CERTIFICATION PROGRAM

- Clearlake Nutrient TMDL TSO – Phase II MS4 (EO Signature)

NPDES PERMITS

- Collins Pine Chester Sawmill Renewal
- City of Galt WWTP & Reclamation Renewal
- City of Rio Vista Northwest WWTF Renewal
- Sac City Combined WW Collection/TRT System Renewal
- Mountain House WWTP Amendment
- Mariposa Public Utility District WWTF Renewal

WASTE DISCHARGE REQUIREMENTS (WDR) PROGRAM - DISCHARGE TO LAND

- Barrel 10 Winery (Revised WDRs)
- Butte College WWTF (Revised WDRs)
- City of Corcoran WWTF (Revised WDRs)
- City of Sutter Creek (Revised WDRs)
- City of Galt (Revised WDRs)
- City of Huron (WWTF)
- City of Kettleman WWTF (Revised WDRs)
- City of Lodi (Revised WDRs)
- City of Lone WWTF (Amended WDRs)
- City of Manteca WWTF (Revised WDRs)
- City of Modesto WWTF (Revised WDRs)
- City of Richgrove WWTF (Revised WDRs)
- Mule Creek State Prison (Amended WDRs)
- Dairy General Order (Revised WDRs)
- E&J Gallo Madera (Revised WDRs)
- E&J Gallo Liberty Winery (New WDRs)

- E&J Gallo Livingston (Revised WDRs)
- Exeter Ivanhoe Citrus (Revised WDRs)
- Farmersville WWTF (Revised WDRs)
- Former Pilkington Glass Manufacturing Facility (Revised WDRs)
- Greenville WWTF (Revised WDRs)
- Golden Feather School District, Spring Valley School (Revised WDRs)
- Maxwell PUD (Revised WDRs)
- Mokelumne Rim Vineyards (Revised WDRs)
- Redding Regional Septage (Revised WDRs)
- Sun Maid Raisins Orange Cove (Revised WDRs)
- Wonderful Pistachios (Revised WDRs)

SIGNIFICANT CENTRAL VALLEY WATER BOARD PLANS, PERMITS & 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, approved by the State Water Board on 10 July 2018, and approved by OAL on 19 February 2019. The non-TMDL elements of the Amendment are now fully approved and effective. USEPA approved the TMDLs in the Amendment on 23 April 2019.

MERCURY IMPLEMENTATION PLAN FOR RESERVOIRS

Staff from the San Francisco Bay Water Board, the Central Valley Water Board, and the State Water Board's Division of Water Quality 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 a statewide TMDL and implementation plan. The scientific peer review is complete. Project sponsors are discussing options for regulatory approach.

CV-SALTS BASIN PLAN AMENDMENTS

Salt and Nitrate Management Plan posted [CV Salts facts and information](https://www.cvsalinity.org/) at: (<https://www.cvsalinity.org/>) at the end of 2016 and formally submitted to the Central Valley Water Board on 12 January 2017. Board accepted receipt of SNMP on 9 March 2017 and directed staff to begin Basin Plan Amendment. Central Valley Water Board

adopted a Central Valley-wide Salt and Nitrate Control Program on 31 May 2018. Supporting policies included a revised Variance and Exceptions Policy; Drought and Conservation Policy; Offsets Policy; and clarification on the use of Secondary MCLs to protect the Municipal and Domestic Supply (MUN) use. Staff preparing to bring amendments to the State Board, OAL and USEPA for approval.

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, requirements for land application areas consistent with the Irrigated Lands Regulatory Program requirements, and to include updated requirements adopted in the Bovine General Order R5-2017-0058. Staff is drafting revisions for Board considerations at future meeting.

WATER QUALITY OBJECTIVES FOR AMMONIA

Scoping meetings held on 15, 16 and 22 March in Rancho Cordova, Fresno and Redding, respectively. Agency meeting held 24 May. Toxicity testing in progress to provide information for criteria development.

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

The BPA was adopted 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. A follow-up adoption hearing has not been scheduled. Amendments would also need approval by OAL and as appropriate, USEPA.

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 similar permits to cover NPS activities on USFS and BLM managed lands with the potential to affect water quality. The Central Valley Water Board's MS4 permit is being used as a model. 6 initial public outreach meetings were held from October through early December 2017. [Project information can be found here:](http://www.waterboards.ca.gov/lahtontan/water_issues/programs/nps/federal_lands/)
(http://www.waterboards.ca.gov/lahtontan/water_issues/programs/nps/federal_lands/)

ATTACHMENT A

ATTACHMENT A – SANITARY SEWER OVERFLOW SUMMARY Sanitary Sewer Overflow (SSO) Spills – 1 July 2019 and 15 August 2019

Spill Cause	Count of Spill(s)	Percent (%)
Grease Deposition (FOG)	32	46%
Other (specify below)	13	19%
CS Maintenance Caused Spill/Damage	5	7%
Debris-General	3	4%
Pump Station Failure-Mechanical	3	4%
Root Intrusion	3	4%
Debris from Construction	2	3%
Debris-Wipes/Non-Dispersables	2	3%
Operator error	2	3%
Pump Station Failure-Controls	2	3%
Debris-Rags	1	1%
Pipe Structural Problem/Failure	1	1%
Pipe Structural Problem/Failure - Installation	1	1%
Total	70	100%

Sanitary Sewer Overflow (SSO) Spills (TOTAL COUNTS) – 1 July 2019 and 15 August 2019

Office	Category 1	Category 2	Category 3	Total
5F	2	1	6	9
5R	0	0	2	2
5S	2	3	54	59
Total	4	4	62	70

ATTACHMENT A

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

Sanitary Sewer Overflow (SSO) Spills (DETAILS) – 1 July 2019 and 15 August 2019

REGION	AGENCY	Collection System	Spill Event ID	Spill Category	Spill Location	COUNTY	Did Spill Reach Surface Waters? (Yes/No)	Spill Volume (Gallons)	Volume that Reached Surface Waters (Gallons)	Spill Date	Spill Cause
5S	Colfax City	Colfax CS	860183	Category 1	Lift Station 5 Canyon Way, Colfax, CA	Placer	Yes	153180	119017	7/24/2019	Pipe Structural Problem/Failure
5S	Placerville City	Hangtown Creek CS	859958	Category 1	3094 Cedar Ravine Rd/ placerville ca/	El Dorado	Yes	72	72	7/19/2019	Pipe Structural Problem/Failure - Installation
5F	USDI National Park Service Sequoia & Kings Canyon	Cedar Grove CS	859616	Category 1	Cedar Grove Sheep Creek Campground MH #13 and Sentinel Campground MH #21	Fresno	Yes	400	60	7/5/2019	Other (specify below)

ATTACHMENT A

REGION	AGENCY	Collection System	Spill Event ID	Spill Category	Spill Location	COUNTY	Did Spill Reach Surface Waters? (Yes/No)	Spill Volume (Gallons)	Volume that Reached Surface Waters (Gallons)	Spill Date	Spill Cause
5F	USDI National Park Service Sequoia & Kings Canyon	Cedar Grove CS	860062	Category 1	Cedar Grove - Sheep Creek Campground MH #17	Fresno	Yes	2520	50	7/24/2019	Debris-Wipes/Non-Dispersables
5F	Atwater City	Atwater CS	859787	Category 3	East Bellevue Road	Merced	No	840	0	7/15/2019	Pump Station Failure-Mechanical
5F	Clovis City (SSO)	Clovis City CS	860483	Category 3	Santa Ana ave West of Clovis Ave	Fresno	No	10	0	8/9/2019	Debris from Construction
5F	Fresno County	City of Fresno CS	860895	Category 3	2151-55	Fresno	No	103	0	7/2/2019	Pipe Structural Problem/Failure
5F	Fresno County	City of Fresno CS	860896	Category 3	3159-55	Fresno	No	458	0	7/29/2019	Pipe Structural Problem/Failure - Installation
5F	Los Banos Urban Area SW System	Los Banos City CS	859615	Category 3	Cresthills Sewer Lift Station	Merced	No	52	0	7/7/2019	Pump Station Failure-Controls
5F	Tuolumne Utilities District	Tuolumne Utilities District CS	859662	Category 3	Manhole at 20445 Eureka Dr	Tuolumne	No	400	0	7/2/2019	Pipe Structural Problem/Failure - Installation
5F	USDI National Park Service Sequoia & Kings Canyon	Clover Creek CS	859952	Category 2	Lodgepole MHE #2	Tulare	No	1200	0	7/20/2019	Debris-Wipes/Non-Dispersables

ATTACHMENT A

REGION	AGENCY	Collection System	Spill Event ID	Spill Category	Spill Location	COUNTY	Did Spill Reach Surface Waters? (Yes/No)	Spill Volume (Gallons)	Volume that Reached Surface Waters (Gallons)	Spill Date	Spill Cause
5R	Red Bluff City	Red Bluff CS	859637	Category 3	south main / sutter / 99west	Tehama	No	635	0	7/8/2019	Pump Station Failure-Mechanical
5R	Redding City	Redding City CS	860253	Category 3	Manhole M6-75, near 1875 Sonoma St	Shasta	No	200	0	7/8/2019	Other (specify below)
5S	Antioch City	City Of Antioch CS	859943	Category 3	320 Burbank Rd Antioch Ca	Contra Costa	No	5	0	7/18/2019	Root Intrusion
5S	Antioch City	City Of Antioch CS	860177	Category 3	4500 Horseshoe Cir Antioch CA	Contra Costa	No	93	0	7/30/2019	Root Intrusion
5S	Antioch City	City Of Antioch CS	860329	Category 3	3120 Milner rd Antioch Ca	Contra Costa	No	24	0	8/6/2019	Root Intrusion
5S	Antioch City	City Of Antioch CS	860386	Category 3	3116 Milner Rd Antioch CA	Contra Costa	No	1	0	8/11/2019	Root Intrusion
5S	Davis City	Davis CS	859585	Category 3	1106 STANFORD DRIVE	Yolo	No	50	0	7/1/2019	Root Intrusion
5S	Davis City	Davis CS	859962	Category 3	1331 Drake Dr/	Yolo	No	35	0	7/8/2019	CS Maintenance Caused Spill/Damage
5S	Davis City	Davis CS	860379	Category 3	750 F street	Yolo	No	20	0	8/8/2019	Root Intrusion
5S	Escalon City	Escalon Treatment Plant CS	860156	Category 2	25100 River rd/ Escalon, CA 95320	San Joaquin	No	1000	0	7/27/2019	Other (specify below)
5S	Folsom City - Environmental	City Of Folsom CS	860523	Category 3	322 Turn Pike Drive	Sacramento	No	3	0	8/12/2019	Pipe Structural Problem/Failure

ATTACHMENT A

REGION	AGENCY	Collection System	Spill Event ID	Spill Category	Spill Location	COUNTY	Did Spill Reach Surface Waters? (Yes/No)	Spill Volume (Gallons)	Volume that Reached Surface Waters (Gallons)	Spill Date	Spill Cause
	& Water Resources Dept										
5S	Lakeport City	City Of Lakeport CS	860209	Category 3	610 First St	Lake	No	10	0	8/1/2019	Debris-General
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	859997	Category 2	247835	Sacramento	No	1220	0	7/19/2019	Debris-Rags
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860847	Category 3	247262	Sacramento	No	2	0	7/9/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860848	Category 3	247327	Sacramento	No	2	0	7/10/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860849	Category 3	247057	Sacramento	No	4	0	7/6/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860850	Category 3	248429	Sacramento	No	3	0	7/29/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860851	Category 3	248522	Sacramento	No	5	0	7/31/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860852	Category 3	247053	Sacramento	No	10	0	7/6/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860853	Category 3	247318	Sacramento	No	5	0	7/10/2019	Debris-General

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REGION	AGENCY	Collection System	Spill Event ID	Spill Category	Spill Location	COUNTY	Did Spill Reach Surface Waters? (Yes/No)	Spill Volume (Gallons)	Volume that Reached Surface Waters (Gallons)	Spill Date	Spill Cause
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860854	Category 3	248361	Sacramento	No	7	0	7/28/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860855	Category 3	246995	Sacramento	No	23	0	7/4/2019	Debris-General
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860856	Category 3	247068	Sacramento	No	7	0	7/7/2019	Debris-General
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860857	Category 3	247734	Sacramento	No	491	0	7/15/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860858	Category 3	247000	Sacramento	No	80	0	7/4/2019	Debris-General
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860859	Category 3	247498	Sacramento	No	319	0	7/12/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860860	Category 3	247528	Sacramento	No	74	0	7/14/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860861	Category 3	248095	Sacramento	No	12	0	7/24/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860862	Category 3	247036	Sacramento	No	4	0	7/5/2019	Debris-General

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5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860863	Category 3	247517	Sacramento	No	11	0	7/13/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860864	Category 3	247531	Sacramento	No	3	0	7/14/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860865	Category 3	248129	Sacramento	No	108	0	7/23/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860866	Category 3	248366	Sacramento	No	4	0	7/28/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860867	Category 3	246938	Sacramento	No	12	0	7/3/2019	Debris-General
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860868	Category 3	247268	Sacramento	No	10	0	7/9/2019	Debris-General
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860869	Category 3	247736	Sacramento	No	202	0	7/15/2019	Debris-General
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860870	Category 3	247562	Sacramento	No	2	0	7/15/2019	Operator error
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860871	Category 3	246965	Sacramento	No	5	0	7/3/2019	Debris-General

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5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860872	Category 3	247049	Sacramento	No	162	0	7/5/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860873	Category 3	247145	Sacramento	No	27	0	7/8/2019	Debris-General
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860874	Category 3	247195	Sacramento	No	6	0	7/8/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860875	Category 3	247226	Sacramento	No	10	0	7/9/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860876	Category 3	247165	Sacramento	No	4	0	7/8/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860877	Category 3	248049	Sacramento	No	1	0	7/24/2019	Operator error
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860878	Category 3	247096	Sacramento	No	2	0	7/8/2019	Debris-General
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860879	Category 3	247223	Sacramento	No	17	0	7/9/2019	Root intrusion
5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860880	Category 3	247735	Sacramento	No	8	0	7/17/2019	Root intrusion

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5S	Sacramento Area Sewer District	Sacramento Area Sewer District CS	860881	Category 3	248132	Sacramento	No	130	0	7/24/2019	Debris-General
5S	South Placer MUD	South Placer Mud CS	860398	Category 3	5311 Par Place Rocklin	Placer	No	19	0	7/9/2019	Root Intrusion
5S	South Placer MUD	South Placer Mud CS	860399	Category 3	2815 Hillcrest Rd Rocklin	Placer	No	64	0	7/9/2019	Root Intrusion
5S	Stockton City MUD	City of Stockton MUD CS	859555	Category 2	6439 Inglewood Avenue (Inglewood Apts/)	San Joaquin	No	3386	0	7/2/2019	Grease Deposition (FOG)
5S	Stockton City MUD	City of Stockton MUD CS	859556	Category 3	2902 Anita Street Stockton Ca	San Joaquin	No	3	0	7/1/2019	Root Intrusion
5S	Stockton City MUD	City of Stockton MUD CS	860002	Category 3	136 McKelvey Dr Stockton Ca	San Joaquin	No	33	0	7/18/2019	Root Intrusion
5S	Stockton City MUD	City of Stockton MUD CS	860167	Category 3	2005 N/ El Dorado Street Stockton Ca	San Joaquin	No	10	0	7/24/2019	Pipe Structural Problem/Failure
5S	Stockton City MUD	City of Stockton MUD CS	860181	Category 3	9227 Kelley Dr Stockton Ca	San Joaquin	No	38	0	7/27/2019	Grease Deposition (FOG)
5S	Town of Discovery Bay CSD	Discovery Bay CS	859756	Category 3	Intersection of Cambridge & Worthing Way in Discovery Bay, CA/	Contra Costa	No	150	0	7/11/2019	Debris-Wipes/Non-Dispersables

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5S	Vacaville City DPW	Easterly CS	859788	Category 3	429 Morales Court	Solano	No	33	0	7/15/2019	Root Intrusion
5S	Vacaville City DPW	Easterly CS	859919	Category 3	131 Ramos St/	Solano	No	8	0	7/19/2019	Debris-Rags
5S	Vacaville City DPW	Easterly CS	859981	Category 3	430 West St/	Solano	No	3	0	7/23/2019	Pipe Structural Problem/Failure