

Appendix E: Maintenance Program Activities and Facilities Operations

Table of Contents

Illegal Connections/Illicit Discharges	1
Vegetation Control.....	13
Herbicide, Pesticide, and Fertilizer Applications	13
Maintenance Self-Audit Compliance Monitoring.....	20
Landslide Management Plan	30
Enhanced Storm Drain Inspection and Cleaning Activities	30
Slope Inspections.....	31
Trash and Litter Removal Activities	32
Drain Inlets/Culverts Inspected and Cleaned	33

Tables¹

Table E-1: Illegal Connections/Illicit Discharges Summary, Fiscal Year 2015-2016.....	1
Table E-2: Illegal Connections/Illicit Discharges	6
Table E-3: Chemical Usage Summary	13
Table E-4: Maintenance Facility Numeric Rating Summary By District	23
Table E-5: Maintenance Facility Alphabetic Rating Summary By District.....	24
Table E-6: Facility Rating Summary – T Family Activity FY2015–2016	26
Table E-7: Compliance Review Activity Numeric Ratings Summary – By District.....	27
Table E-8: Compliance Review Activity Numeric Ratings Summary – By Maintenance Family	28
Table E-9: Maintenance Crew Enhanced Storm Drain Inlet and Cleaning by District, Fiscal Year 2015-2016.....	30
Table E-10: Slope Inspection Summary, Fiscal Year 2015-2016.....	32
Table E-11: Summary of Maintenance Trash and Litter Removal Volumes (cubic yards) by District.....	32
Table E-12: Drain Inlets/Culverts Inspected and Cleaned, Fiscal Year 2015-2016	33

¹ Dashes (-) in this appendix’s tables indicate that data is not available.

Figures

Figure E-1: District Trends in Illegal Connections/Illicit Discharges.....	2
Figure E-2: Trends in Illegal Connections/Illicit Discharges Statewide.....	5
Figure E-3: Statewide Chemical Usage Summary.....	15
Figure E-4: District Chemical Usage Summary.....	17
Figure E-5: Maintenance Activity Compliance Numeric Rating Summary.....	21
Figure E-6: Maintenance Activity Compliance Alphabetic Rating Summary.....	22
Figure E-7: Statewide Compliance Review Facility Ratings Summary.....	25
Figure E-8: Compliance Review Activity Ratings Summary by District.....	29

Illegal Connections/Illicit Discharges

During the reporting period, 10 of 19 illegal connections/illicit discharges (IC/IDs) were resolved and 9 are in the process of being resolved. Unresolved incidents are being researched, improvements are in progress, or further monitoring is required to indicate that the discharge has been eliminated. IC/IDs are discussed in Section 8 of the Annual Report.

All IC/IDs are summarized in Table E-1.

Table E-1: Illegal Connections/Illicit Discharges Summary, Fiscal Year 2015-2016

District	# of Incidents	# In Progress	# Resolved from Prior Fiscal Years	# Resolved during Fiscal Year 2015-2016	# Referred to RWQCB or Local Agency
1	-	-	-	-	-
2	1	-	1	-	1
3	1	-	1	-	-
4	0	-	-	-	-
5	2	1	-	1	1
6	0	-	-	-	-
7	0	-	-	-	-
8	2	-	-	2	-
9	1	-	-	1	-
10	0	-	-	-	-
11	9	6	2	1	-
12	3	2	-	1	1
Total	19	9	4	6	3

RWQCB – Regional Water Quality Control Board

Figure E-1 shows the trends in illicit connections by District and Figure E-2 displays the statewide trends in illicit connections compared to the previous 12 years.

Figure E-1: District Trends in Illegal Connections/Illicit Discharges

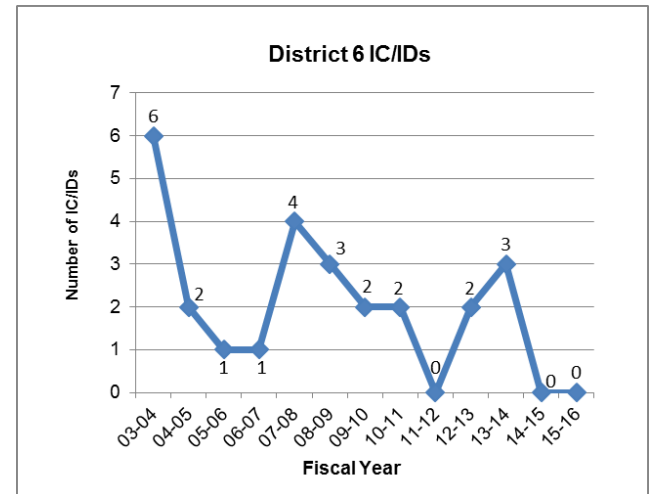
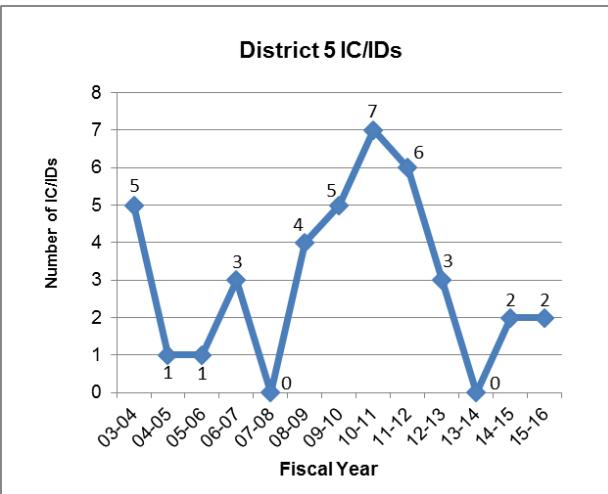
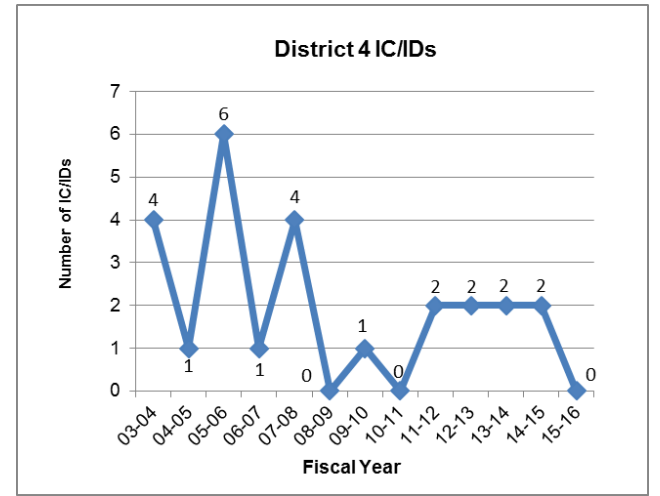
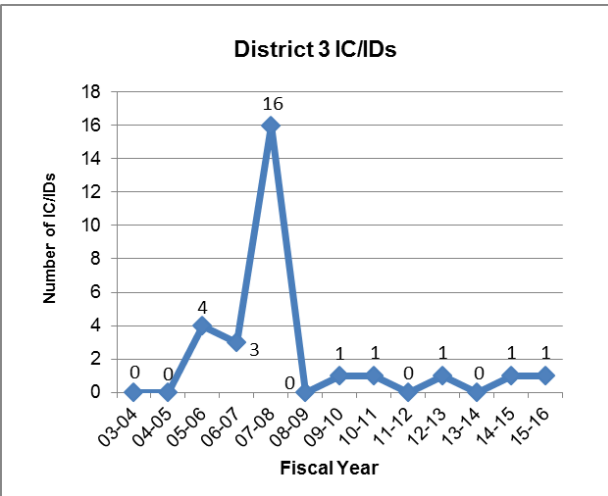
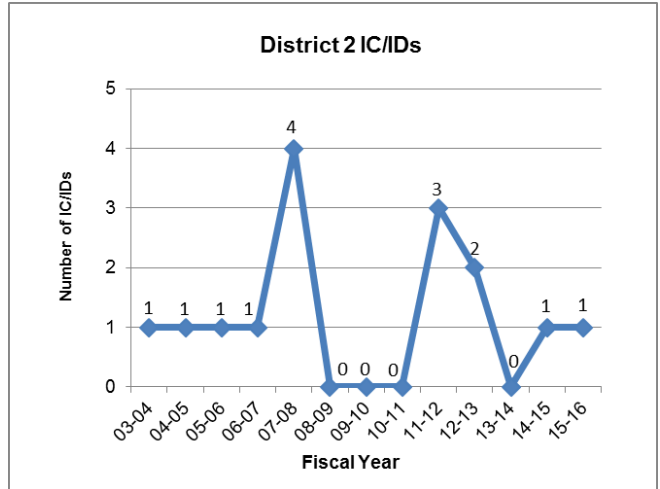
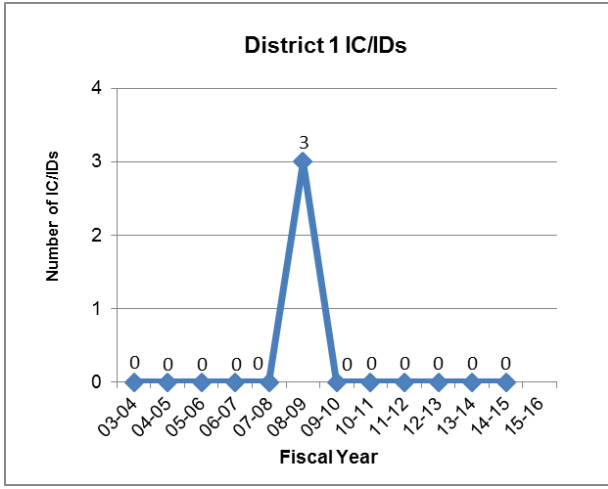
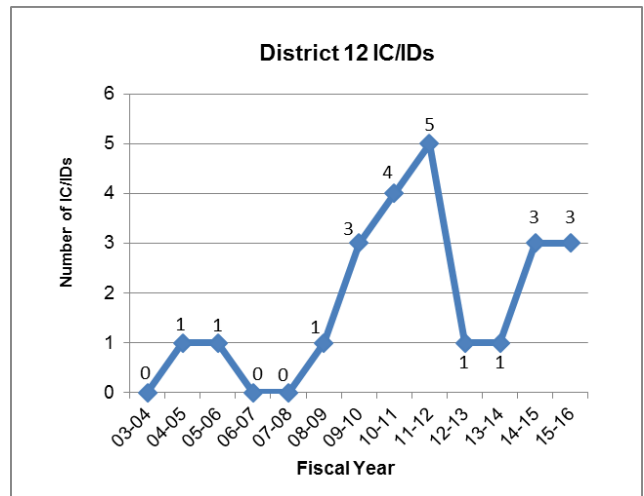
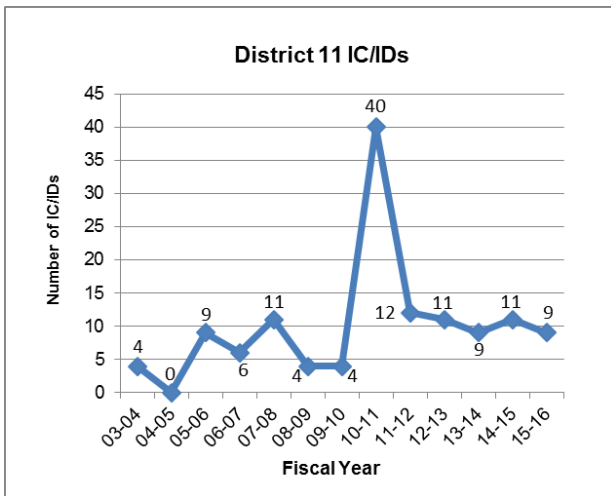
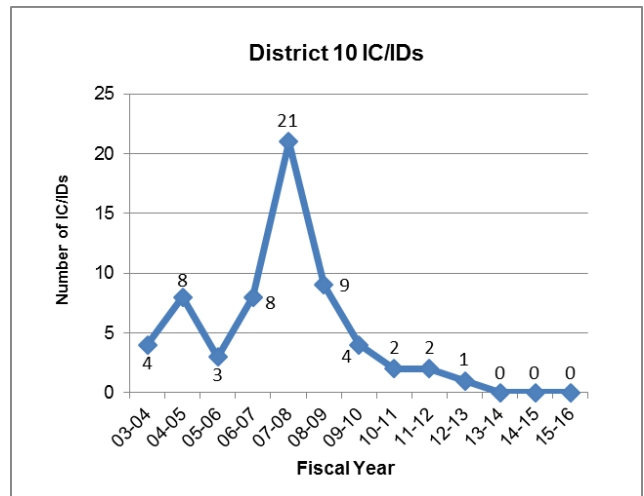
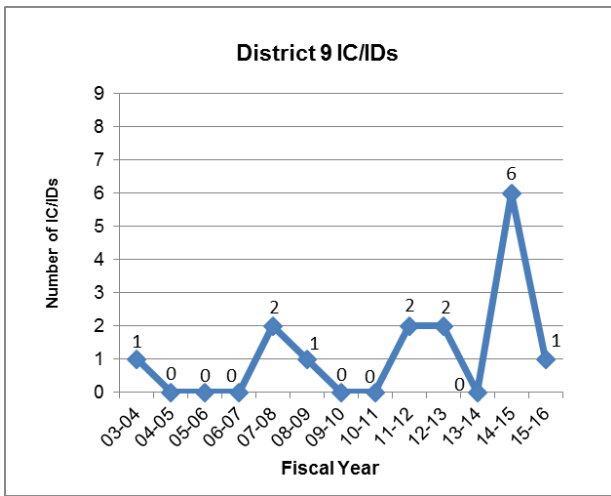
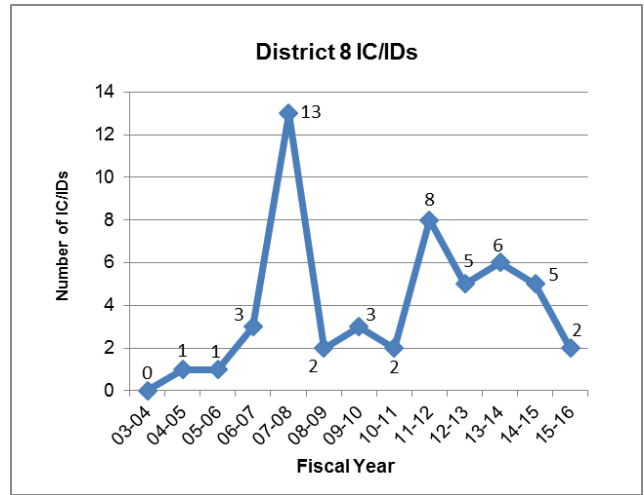
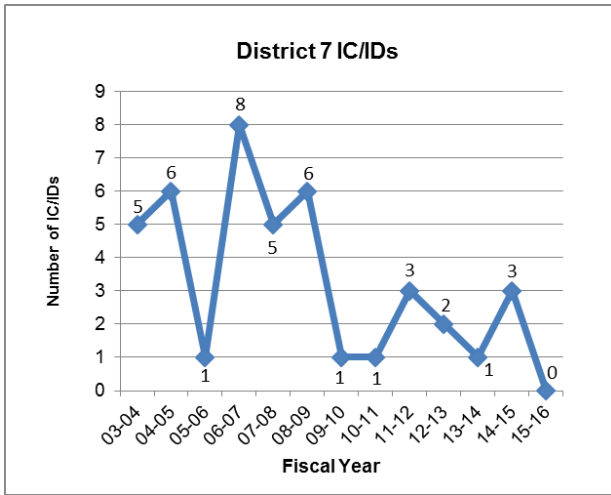


Figure E-1: District Trends in Illegal Connections/Illicit Discharges



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Trends in Illegal Connections/Illicit Discharges Statewide

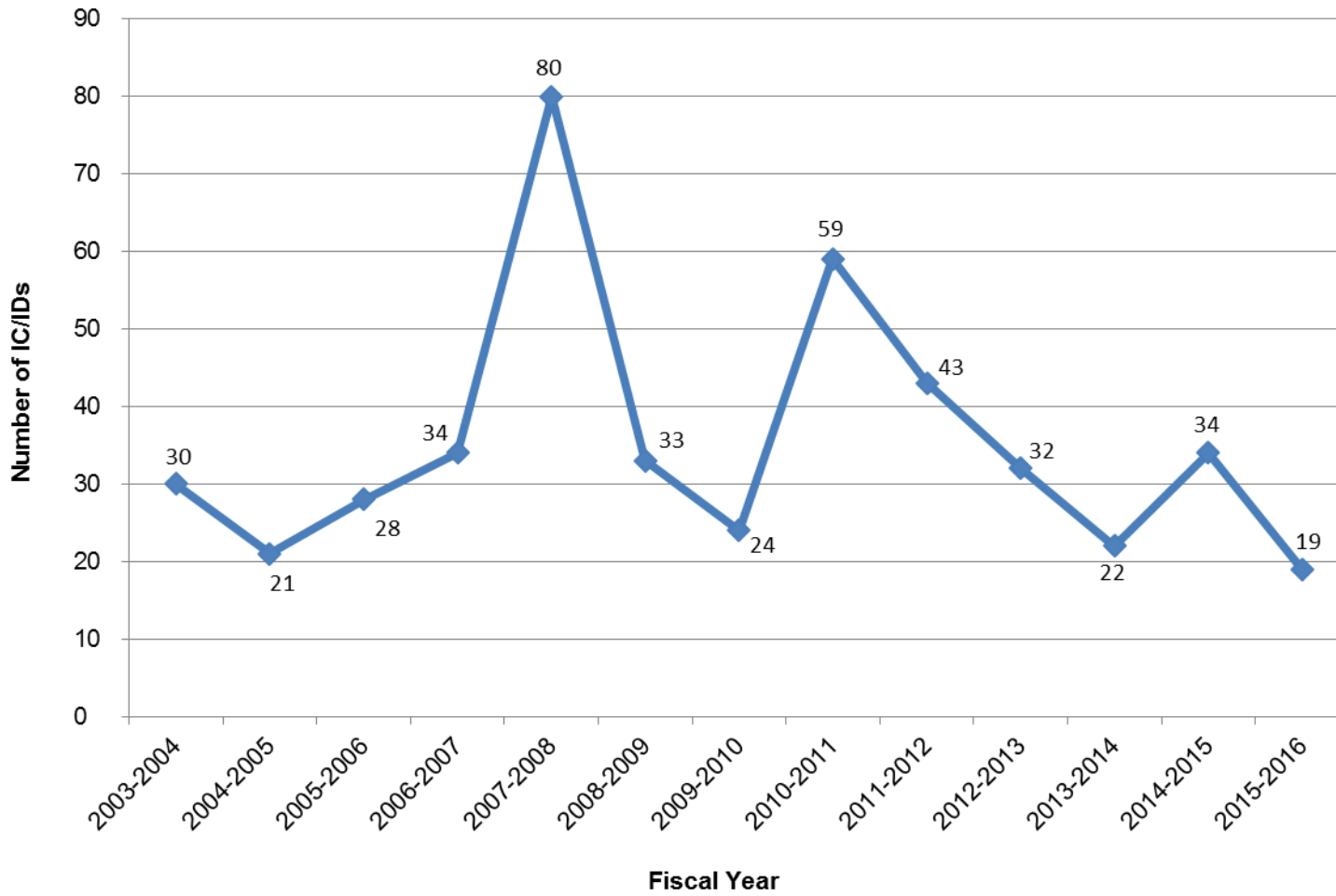


Figure E-2: Trends in Illegal Connections/Illicit Discharges Statewide

Table E-2 lists the details of the IC/IDs identified during the reporting period. IC/IDs are discussed in Section 8 of the Annual Report.

Table E-2: Illegal Connections/Illicit Discharges

District	Date First Known to District	County	Route	Responsible Party Name or Type	Description of Connection or Discharge	Resolution Status	Abatement Date
1	-	-	-	-	-	-	-
2	6/4/2015 & 8/17/2015	Siskiyou	96	Adjacent Property Owner	Area Maintenance Supervisor noticed water entering the right of way (ROW), followed and determined the source was a broken septic system line on the adjacent property. On 8/17/2015, water was seeping from a cut bank on the same property.	Siskiyou County Environmental Health Department (SCEHD) was contacted and accompanied California Highway Patrol and Caltrans to inspect the leak on 7/2/15. Owner was told to repair the leak. On 8/17/15, maintenance workers observed water discharging from the cut bank below the original leak. The North Coast RWQCB was contacted and SCEHD. SCEHD agreed to follow-up and require the property owner to repair the leak.	2/4/2016
3	6/9/2015	Yolo	5	Ramos Oil, Keith Covelo	Concrete residue (surface dust) was identified in the existing conveyance flow-line, starting from the shared property line and proceeding to the inlet side of District's culvert invert. The discharge appeared to be the result of the improper use of concrete rubble (by the property owner) as a BMP to mitigate for erosion at the shared property line.	District staff met with the property owner on 7/16/15 to confirm and verify issues, previously identified, had been resolved. At that time, waste discharge remnants (on Caltrans property) had been removed, concrete rubble had been replaced with clean river rock, and the portion of culvert extending into Caltrans ROW had been removed.	7/16/2015
4	None	-	-	-	-	-	-
5	2/9/2016	Santa Barbara	101	Montecito Country Club	Montecito Country Club (Ty Warner Hotels and Resorts, LLC.) has a golf course situated on very steep slopes. The golf course was under renovation to install a Jack Nicolas Signature Golf Course. The Waste Discharger Identification number for this project is 3-42C374899. Due to a lack of any temporary sediment or erosion control	The incident began when a Hwy Maintenance worker began to investigate the source of muddy water flowing through the Caltrans storm drain system. Following the flows upstream, they encountered construction workers pumping sediment-laden water into the City of Santa Barbara's storm drain system, which connects to the Caltrans system. At that point, construction	Unknown

Table E-2: Illegal Connections/Illicit Discharges

District	Date First Known to District	County	Route	Responsible Party Name or Type	Description of Connection or Discharge	Resolution Status	Abatement Date
					BMPs, El Nino rain events resulted in the discharge of large quantities of sediment-laden water into the Caltrans storm drain system and subsequently to the Andree Clark Bird Refuge.	workers became confrontational and demanded that filming of the illegal operation cease. The matter was referred to the Central Coast RWQCB when it was evident that the illegal discharge was not a matter we could solve.	
5	5/20/2016	Santa Barbara	101	Plains All American Pipeline	Refugio Oil Spill, which occurred on May 19, 2015 when an underground pipeline (Line 901) belonging to Plains All American Pipeline ruptured and spilled approximately 101,000 to 140,000 gallons of oil, with an estimated 21,000 gallons reaching the ocean near Refugio State Beach near Santa Barbara, California. 21,000 gallons were discharged through the Caltrans storm drain system at this location to the beach.	<p>The Unified Command used a three-phase approach to address the cleanup efforts from the Refugio Oil Spill, which occurred on May 19, 2015 when an underground pipeline (Line 901) belonging to Plains All American Pipeline ruptured.</p> <p>Phase 1 was the active cleanup of oil from the affected water, shoreline, and soil. Phase 1 concluded on August 31, 2015. Phase 2 required that the shoreline meet specific clean up goals. When oil from the spill was discovered, it was cleaned up and the affected portion of shoreline was subjected to further monitoring.</p> <p>Shoreline Clean-up Assessment Teams have been conducting ongoing evaluations of the affected beaches since the beginning of the response.</p> <p>On January 22, 2016, it was determined that all beaches met all specific clean up goals for Phase 2.</p> <p>The final phase, Phase 3, is the monitoring phase. The Unified Command required:</p> <ul style="list-style-type: none"> • monitoring of affected beaches from Arroyo Hondo to Rincon Point for buried oiled that could be uncovered through sand erosion, 	1/22/16

Table E-2: Illegal Connections/Illicit Discharges

District	Date First Known to District	County	Route	Responsible Party Name or Type	Description of Connection or Discharge	Resolution Status	Abatement Date
						<ul style="list-style-type: none"> • periodic oil sampling conducted throughout the Santa Barbara response areas, • sampling of any oil found along the affected shoreline after the first significant storm event setting, and • implementation of cleanup objectives, unless Line 901 oil is found in areas where scientists determine that further cleanup would do greater harm to the environment versus natural recovery process. <p>In accordance with the Phase 3 monitoring plan, oil samples were collected during the week of May 9, 2016. For this sampling event, samples were obtained from 19 different locations along the Santa Barbara County coastline. The samples collected were split so that the U.S. Coast Guard, the California Department of Fish and Wildlife Office of Spill Prevention and Response, and Plains All American Pipeline, the Responsible Party, could independently test the samples. All samples collected were compared to the Refugio Oil Spill source, Line 901 oil from the pipeline, and all samples analyzed in May, yielded no match to the pipeline oil.</p>	
6	None	-	-	-	-	-	-
7	None	-	-	-	-	-	-
8	8/11/2015	Riverside	91	Ace Janitorial	Parking Lot run off	Resolved. On September 9 of 2015, California Highway Patrol Construction pumped 10 yards of 2-sack slurry sand into the sinkhole void and refilled the Caltrans side of the ROW. That week, Caltrans filled the voids, sealed the holes in the parking	9/21/2015

Table E-2: Illegal Connections/Illicit Discharges

District	Date First Known to District	County	Route	Responsible Party Name or Type	Description of Connection or Discharge	Resolution Status	Abatement Date
						lot with concrete, and redirected some of the water flow. As of September 21, 2015, the problem appears to be resolved.	
8	3/3/2016	San Bernardino	138	Rick's Café	Grey water from dishwasher	The owner was very apologetic and the Caltrans Rep was assured that no other discharges of any type would ever happen again. At this time, Caltrans feels that the problem has been resolved and that this IC/ID will not reoccur.	3/16/2016
9	12/24/2015	Kern	14, PM 49.5	unknown	A report that 50 gallons of laundry scour (label on plastic drums) was abandoned on the shoulder of southbound SR 14 at PM 49.5. It was determined to be cooking oil in the six 5 gallon containers, and 3 plastic bags with fluid that had leaked out onto the dirt shoulder.	Resolved. The Kern County Fire Department and Environmental Health Department were notified and Patriot Environmental was contracted to remove and dispose of the product from the ground surface and the state highway ROW. On 12/24/2015, the area was deemed clean and safe by the Caltrans District 9 Desert Superintendent.	12/24/2015
10	-	-	-	-	-	-	-
11	10/5/2015	San Diego	5	City of San Diego	Sediment discharge to State ROW	Installation of temporary "highline" drain (pipe carrying water under pressure so as not to require continuous downhill slope) and temporary "stilling basin energy-dissipater" (sediment settling and energy-dissipater pond at drain outlet) from City of San Diego drainage diversion project for homeowners on the east-facing slope of Mount Soledad, west of Interstate 5 (I-5), was completed on an emergency basis by city contractors due to water draining outside of the informal channel and onto Caltrans access road. Project also includes clearing/grubbing and removal of sediment from Mount Soledad deposited in the informal channel located west of access road. Work will extend downstream in the	Resolved

Table E-2: Illegal Connections/Illicit Discharges

District	Date First Known to District	County	Route	Responsible Party Name or Type	Description of Connection or Discharge	Resolution Status	Abatement Date
						channel to the area upstream of the Caltrans crossover culvert; therefore, no permits are needed.	
11	1/20/2011	San Diego	5	Chevron Gas Station (540 La Costa Ave., Encinitas)	Discharge from vegetated bioswale and heavy rains caused major slope damage	Resolved. Chevron applied for an encroachment permit.	Resolved
11	4/4/2011	San Diego	163	Maaco Collision Repair (5670 Kearny Villa Road)	Pipe still in place, at time of inspection no signs of any discharges from property.	No signs of discharges.	Resolved
11	8/1/2011	San Diego	5	Nursery type business (1412 MacKinnon, Encinitas)	Two Polyvinyl Chloride (PVC) pipes protruding from their ROW onto Caltrans' conveyance	Fixed portion of pipe, but north end discharging water and needs to be fixed	In Progress
11	4/4/2011	San Diego	8	BJS Rentals (1717 E Main St, El Cajon)	Previous tenant moved out, 4 pipes discharging onto Caltrans conveyance	Determine if an encroachment permit was sought for connecting to concrete lined ditch by current or previous tenant/owner.	In Progress
11	4/5/2011	San Diego	67	Superchargers (11982 Woodside Ave, Lakeside)	Three mechanics conducted car repair work on the parking lot; called the leasing agent but would not release the name of the owner; need to follow up.	Contacted the leasing manager a few times; he refused to give information about owner/lesser. Follow up to see if BMP management plan in place for facility.	In Progress
11	4/4/2011	San Diego	163	Deja Vu (5520 Kearny Villa Rd.)	Pipe still in place, at time of inspection no signs of any discharges from property.	Inspect during precipitation event to make sure there is no signs of discharge.	In Progress
11	4/4/2011	San Diego	163	EZ Haul Truck Rental (5624 Kearny Villa Rd.)	Pipe still in place, at time of inspection no signs of any discharges from property.	Site was checked by maintenance crew and there was no sign of any discharge in the water. Needs to inspect again during precipitation event.	In Progress
11	4/4/2011	San Diego	163	True Line Auto Center (5680 Kearny Villa Rd)	Need to determine if encroachment permit was sought, corrugated pipe tie-in to concrete lined trapezoidal ditch.	Determine if an encroachment permit was sought for connecting to concrete lined ditch on northbound SR 163 by current or previous tenant (Tool UP).	In Progress

Table E-2: Illegal Connections/Illicit Discharges

District	Date First Known to District	County	Route	Responsible Party Name or Type	Description of Connection or Discharge	Resolution Status	Abatement Date
12	11/3/2014	Orange	1	Adjacent Property Owner	Caltrans was called out to clean out mudflows that discharged onto Caltrans ROW from offsite clogging a storm drain on the Pacific Coast Highway. Subsequent investigation has determined that flows came from the Mission Hospital property at 31844 South Coast Highway, Laguna Beach, California.	A letter was sent to Mission Hospital Regional Medical Center to formally issue a Notice of Illegal Discharge and to cease any further discharges of sediment to Caltrans ROW. The San Diego RWQCB and the city of Laguna Beach's City Engineer were copied on the IC/ID letter. We have had no response and will follow up with the property owner.	Ongoing
12	4/26/2016	Orange	91	Adjacent Property Owner	Homeowner from 7281 Argentina Way, Buena Park was throwing dog excrement over the fence into Caltrans ROW and had connected a drain spout.	Homeowner was contacted, apologized, and offered to remove drain spout.	4/26/2016
12	9/11/2015	Orange	73	Lifetime Fitness, Laguna Niguel	Followed up with City of Laguna Niguel. Filed a complaint about water running onto city sidewalk and causing a safety issue. When Maintenance went to repair slope drain, they needed to cease any non-storm water runoff discharging into drain to make repairs and noticed an adjacent Fitness Center with a pool was discharging non-stormwater runoff into storm drain.	Maintenance staff noticed that water was discharging in front his facility again and emailed the City of Laguna Niguel. No response from the City.	Intermittent

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Vegetation Control

Herbicide, Pesticide, and Fertilizer Applications

The Division of Maintenance is required by the *NPDES Statewide Storm Water Permit Waste Discharge Requirements for State of California Department of Transportation* (Order No. 2012-0011-DWQ, NPDES No. CAS000003) (Caltrans Conformed NPDES Permit) to summarize its chemical use report forms to demonstrate the quantity of chemicals used during the previous reporting period by type of herbicide, by District and by month. Caltrans, as a public agency, is required to include in its reporting adjuvants and growth regulators if used. Caltrans' Chemical Use Data is included as Appendix F to this report.

All herbicide use recommendations are prepared by State of California licensed Pest Control Advisors in each District. To avoid the development of resistant strains, chemical products with slightly different formulations are allocated to Districts after reviewing their use history. This results in minor but noticeable fluctuations in active ingredient totals.

Table E-3 is a statewide summary of the amount of active ingredient applied by Caltrans, and indicates that 208,102 pounds of active ingredient were applied to 58,104 acres.

Table E-3: Chemical Usage Summary

District	Fiscal Year 2014-2015		Fiscal Year 2015-2016	
	Total Pounds Applied (Active Ingredient)	Acres Treated with Chemicals	Total Pounds Applied (Active Ingredient)	Acres Treated with Chemicals
1	818.3	199.9	910	195
2	6,471.1	1,345.8	7,794	2,152
3	23,431.6	6,254.9	23,630	6,026
4	24,047.2	7,990.8	23,848	7,267
5	9,607.6	3,306.3	8,648	3,687
6	29,203.6	6,312.2	22,086	4,272
7	35,721.9	10,742.8	39,236	15,250
8	13,439.3	2,504.1	21,159	4,986
9	843.8	544.3	650	351
10	23,136.6	4,703.7	21,098	4,806
11	16,075.7	2,965.5	23,214	5,616
12	14,586.4	4,095.5	15,829	3,495
Total	197,383	50,966	208,102	58,104

Figure E-3 shows the annual statewide trends of chemical use over the last 13 fiscal years. Figure E-4 shows the trends of chemical use per District compared to the previous 13 fiscal years. Chemical use is discussed in Section 8 of the Annual Report.

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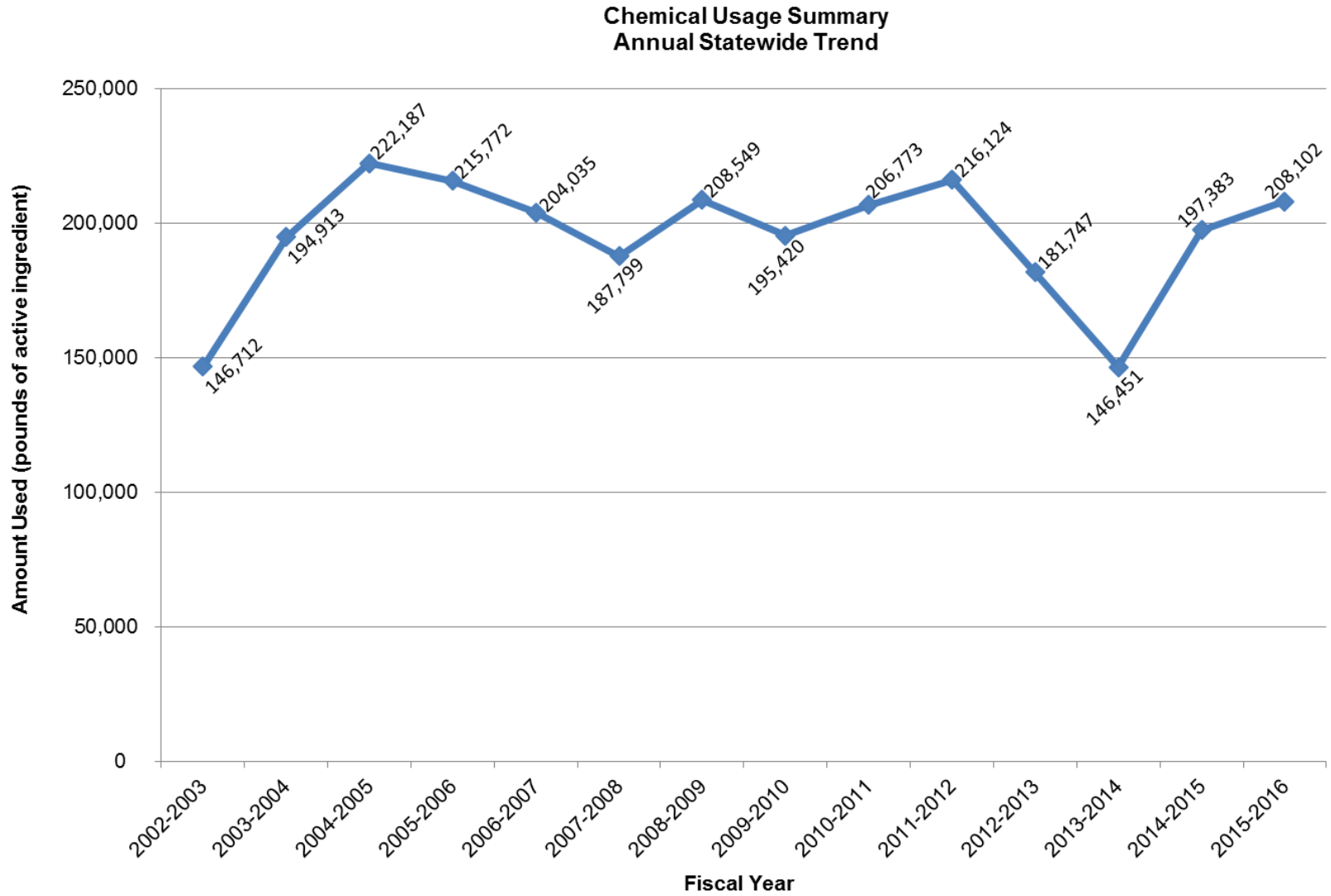


Figure E-3: Statewide Chemical Usage Summary

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Figure E-4: District Chemical Usage Summary

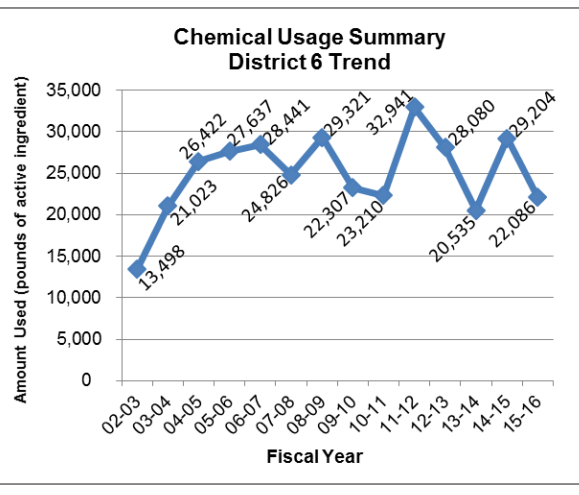
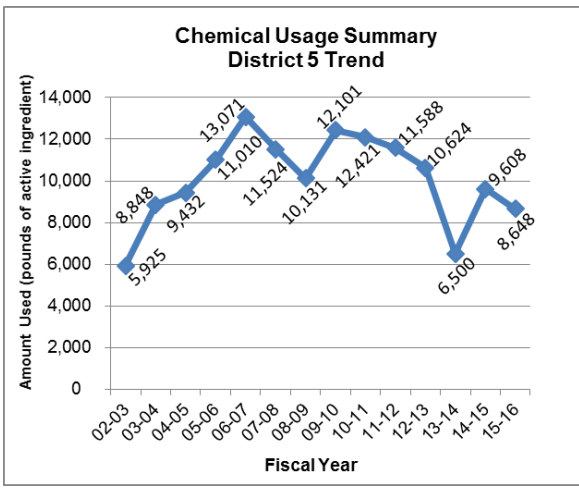
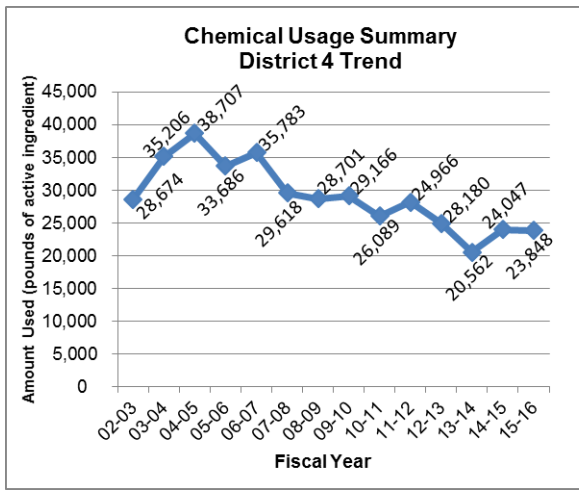
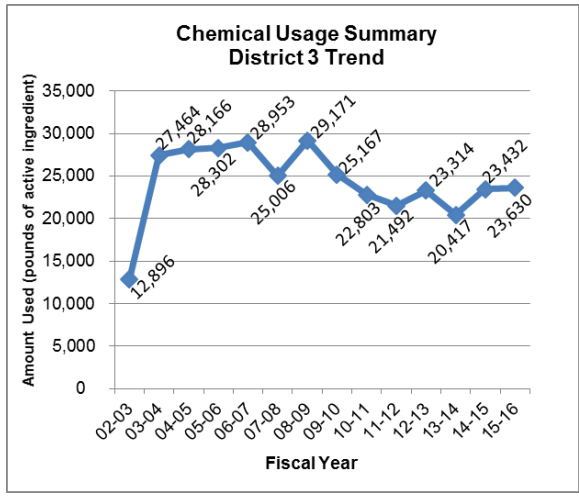
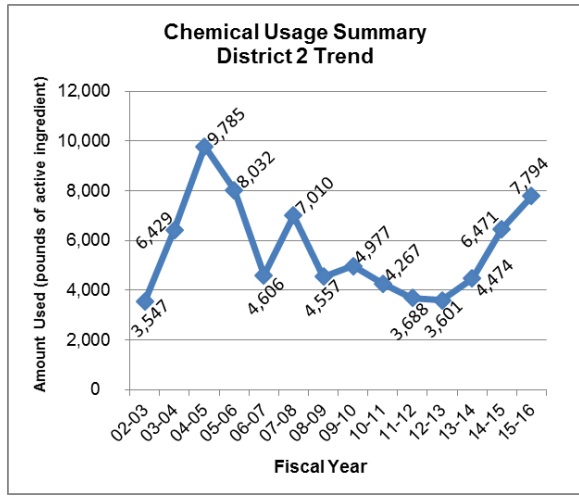
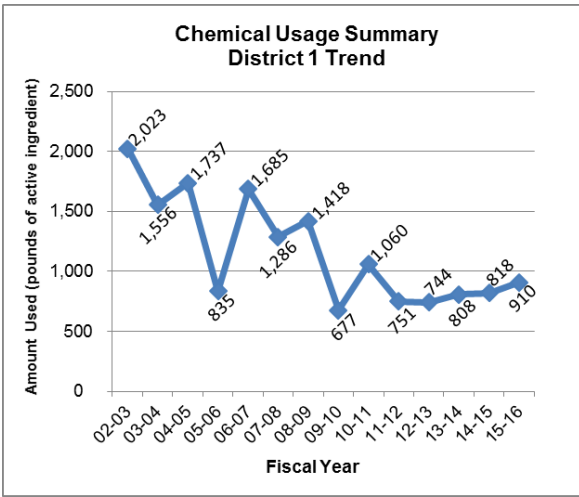
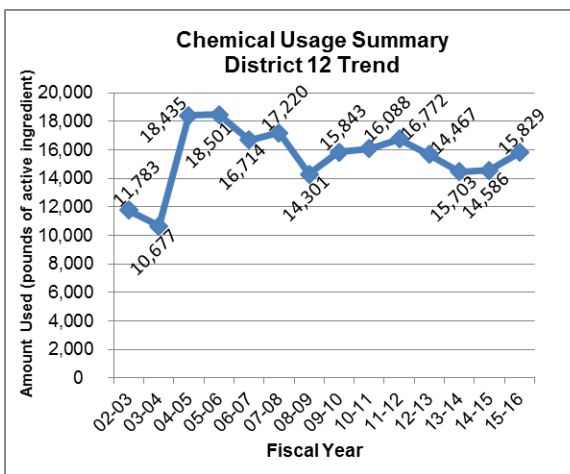
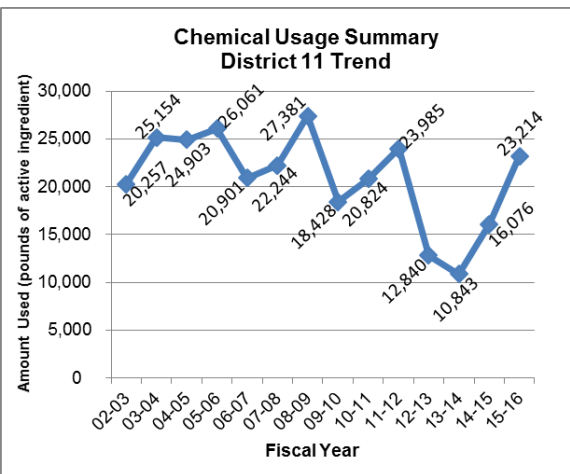
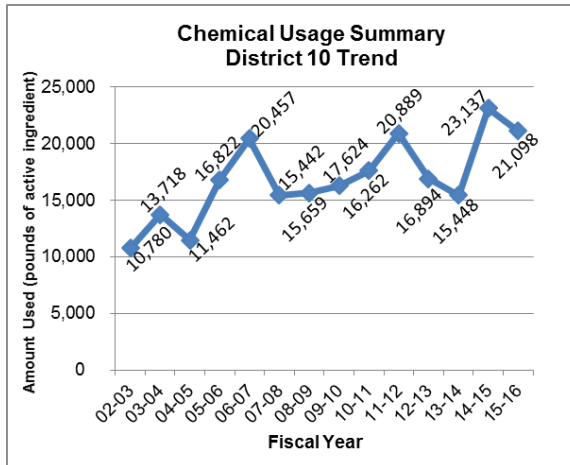
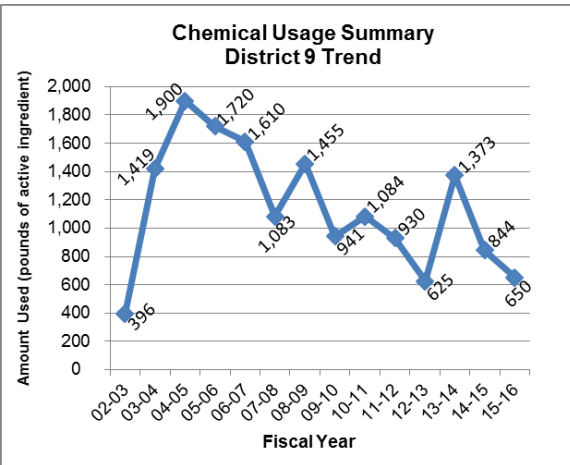
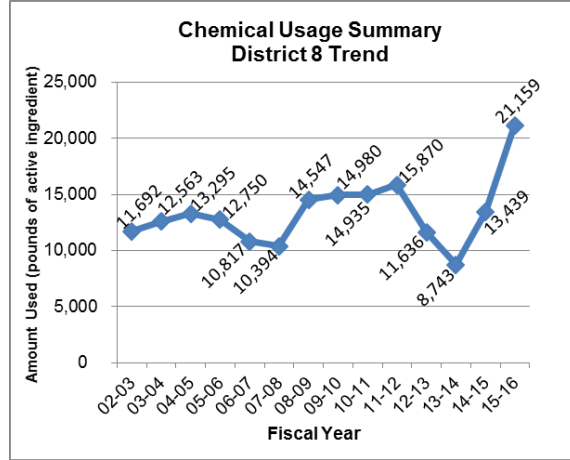
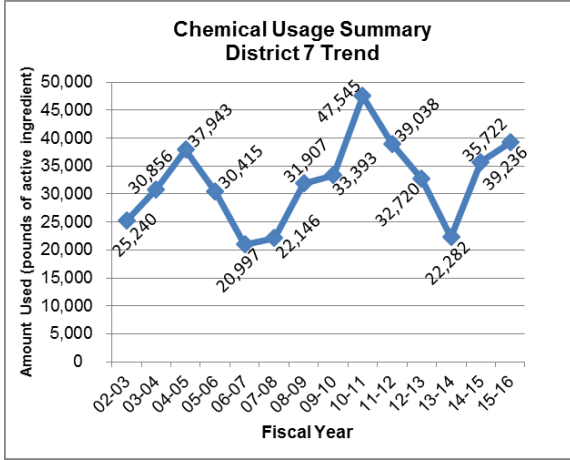


Figure E-4: District Chemical Usage Summary



For detailed route segment location information, and the products and quantities applied statewide, refer to the Chemical Use Data (Appendix F) on the CD.

On a statewide basis, Caltrans increased its chemical use from 197,383 pounds of active ingredient to 208,102 pounds during the fiscal year. The following explains why seven Districts had increases from the previous reporting period:

- District 1 had an additional 92 pounds of active ingredient usage. It was the result of an effort to control a new invasive weed moving into the district from Oregon. The weed, Shiny Geranium, is moving through Del Norte and Humboldt counties and the district is attempting to contain it.
- District 2 had a year over year increase in active ingredient and it was for the most part weather related. Due to increased rainfall this year, the weed pressure was greater and more emphasis was placed on maintaining fire strips. In addition, there were more crack weed and touchup applications.
- District 3 has been aggressively attacking noxious weeds, which have been on the move. Some Agricultural Departments have experienced a decrease in their noxious weed campaign due to economic times, which has increased the chemical demand on Caltrans. In particular Russian Thistle, Ailanthus, Johnson grass and Dittrichia have been a few of the focus weeds. We have also stepped up our use of deposition agents in the name of safety and concentrating the active ingredient on the target organism. Chemical acreage requirements have increased due to road expansion and fire safety needs. Chemical rotations for resistance management always play a role in our active ingredient consumption, as we incorporate changes yearly.
- District 4 decreased its chemical use in fiscal year 2015-2016 from the previous fiscal year.
- District 5 decreased its chemical use in fiscal year 2015-2016 from the previous fiscal year.
- District 6 decreased its chemical use in fiscal year 2015-2016 from the previous fiscal year.
- District 7. Sporadic and erratic rain events spawned unseasonal weed germination at multiple times during the period in question necessitating more frequent application than were called for in the plan. Additionally, a new spray crew and new routes were added to the plan after the plan was locked for the year. The combination of those factors was the tipping points that put us over the top.
- District 8 has an increased inventory, as landscape projects come to the end of their plant establishment period and the district needs to apply herbicides for maintaining the areas. Increased rainfall from previous year caused excessive weed growth that needed to be controlled. Spray equipment is now operational; previous year was down for long period, which resulted in less area that could be treated. There are more employees able to perform spray operations than previous year because of the addition of two new landscape crews for the district. More landscape supervisors have followed my advice to do more spraying than last year to reduce worker exposure to traffic. There has been an increase in noxious weeds that require treatment compared to previous years.
- District 9 decreased its chemical use in fiscal year 2015-2016 from the previous fiscal year.
- District 10 decreased its chemical use in fiscal year 2015-2016 from the previous fiscal year.
- District 11 active ingredient usage exceeded last year due to additional rainfall at the ideal time for germination, which resulted in a major outbreak of Russian thistle district-wide. A major effort was made to suppress the outbreak and reduce the seed bank. In addition and for the same reason, there was a district-wide effort to control crack weeds after an increased amount of public complaints were received.

- District 12. Over the past few months, D-12 has acquired areas back from construction. This gave us more areas to spray. In addition, in the previous year, our spray crew's rig was in the shop for most of the spray season. So, many of the areas were not treated. When the rig was returned, the spray crew went back to the normal spray schedule, which bumped up usage.

There were no Pesticide Violations issued statewide during the fiscal year. For more information on pesticide application violations, see the California Department of Pesticide Regulation's website, <http://www.cdpr.ca.gov/docs/enforce/admnacts/cvlpnlty.htm>.

Maintenance Self-Audit Compliance Monitoring

A third party (consultant) reviewed maintenance facilities and activities for compliance with the requirements of the Draft SWMP and the Statewide NPDES Permit. Caltrans' goal is to inspect a minimum of 10 maintenance activities per District and a minimum of 20% of maintenance facilities per year. Each review consists of a documentation audit and a site inspection. The required review frequency for each facility is at least once every 5-year period. The Division of Maintenance staff provided support to the consultant and facilitated the inspections. Appendix E contains the statistical information from the reviews. There were neither release nor discharge to surface water of pollutants from any of the facility during the reporting period.

At each facility, the following areas were reviewed for compliance:

- Building and Grounds Maintenance
- Storage of Hazardous Materials (Working Stock)
- Material Storage Control (Hazardous Waste)
- Outdoor Storage of Raw Materials
- Vehicle and Equipment Fueling
- Vehicle and Equipment Cleaning
- Vehicle and Equipment Maintenance and Repair
- Aboveground and Underground Tank Leak and Spill Control
- Presence and adequacy of a facility pollution prevention plan (FPPP).

Appendix G lists the facilities that were inspected during the fiscal year, as well as the inspections that occurred in the past 12 fiscal years. Table E-4 below shows the numeric facility ratings by District.

This year Caltrans developed a new Self-Audit Compliance Monitoring rating system. The system is described in the *Caltrans Annual Maintenance and Operation Compliance Review Plan*, CTSW-PL-16-299.02.1 dated June 2016.

The new Maintenance Activity Numeric Compliance rating system consists of a numeric component, 1 through 5, as shown below in Figure E-5.

Rating	Description
Rating 1	<p>No release observed. Appropriate BMPs implemented and effective.</p> <p>No deficiencies noted. <u>All of the following conditions</u> must be met for a Rating 1:</p> <ul style="list-style-type: none"> • No release to surface water or outside the Caltrans' right-of-way. • Appropriate BMPs are properly implemented for this activity and are 100% effective (i.e., installed and maintained so as to be functional).
Rating 2	<p>No release observed. Appropriate BMPs implemented but are less than 100% effective.</p> <p><u>All of the following conditions</u> must be met for a Rating 2:</p> <ul style="list-style-type: none"> • No release to surface water or outside the Caltrans' right-of-way. • Appropriate BMPs are implemented for this facility; however, they are less than 100% effective. <p>The BMPs that require repair or maintenance are documented and discussed with the facility manager or representative.</p>
Rating 3	<p>No release observed. Appropriate BMPs not implemented.</p> <p><u>All of the following conditions</u> must be met for a Rating 3:</p> <ul style="list-style-type: none"> • No release to surface water or outside the Caltrans' right-of-way. • Appropriate BMPs have not been implemented for this facility. <p>A corrective action plan is required.</p>
Rating 4	<p>Release (observed or evidence of a recent release) from the facility to outside the Caltrans' right-of-way.</p> <ul style="list-style-type: none"> • Release outside the Caltrans' right-of-way. <p>This condition requires immediate corrective action and initiation of the Maintenance ERP Level 2. A corrective action plan is required.</p>
Rating 5	<p>Discharge (observed or evidence of a recent discharge) from the facility to surface water.</p> <ul style="list-style-type: none"> • Discharge to surface water. <p>This condition requires immediate corrective action and initiation of the Maintenance ERP Level 2. Report discharge on an Incident Report form. A corrective action plan is required.</p>

Figure E-5: Maintenance Activity Compliance Numeric Rating Summary

Maintenance activities that receive a 1 or 2 Rating (i.e., BMPs are implemented and are effective or less than 100% effective) are considered to be compliant with the stormwater requirements. The BMPs that require repair or maintenance are documented and discussed with the Maintenance Supervisor or representative.

In contrast, a 3, 4, or 5 Rating (i.e., BMPs not implemented, release to outside the Caltrans' ROW, or discharge to surface water) indicates the need for immediate corrective action and may initiate a Level 2 Maintenance Enforcement Response Program. If an activity received a 3, 4, or 5 Rating, the corrective action(s) is implemented immediately prior to the auditor leaving the activity location and a revisit is not conducted. If additional training is required, training is conducted and documented on a BMP Tailgate Meeting Form upon return to the maintenance facility.

Facilities are evaluated based on the appropriateness and effectiveness of implemented Maintenance BMPs, the potential for pollutant discharge and administrative compliance. An alphanumeric rating will be used to score the overall facility effectiveness. The appropriateness and effectiveness of the maintenance BMPs is evaluated using a numerical rating. Administrative compliance is evaluated using an alphabetic rating, as shown below in Figure E-6.

Table 3-4: Maintenance Facility Alphabetic Rating (Administrative Compliance)

Rating	Description
Rating A	<p>Overall administrative BMP compliance and documentation is current and available.</p> <p><u>All of the following conditions</u> must be met for a Rating A:</p> <ul style="list-style-type: none"> • Hard copy of the Permit. • FPPP – Certification Page information is current. • FPPP Section 3.0 (facility BMPs, Non-Hazardous Materials Storage, Hazardous Materials Storage) information is current. • >90% (70-78) BMP Tailgate Meeting logs are current and documentation is available for the past 3 years. • >90% (32-36) monthly facility storm water inspection reports (i.e., FPPP Monthly Stormwater Compliance Inspection form) have been completed and are available. At a minimum, the last 3 years of inspection checklists from the initial date the FPPP was certified should be retained.
Rating B	<p>Overall administrative BMP compliance and documentation moderately implemented.</p> <p><u>All of the following conditions</u> must be met for a Rating B:</p> <ul style="list-style-type: none"> • FPPP – Certification Page is not current or Section 3.0 (facility BMPs, Non-Hazardous Materials Storage, Hazardous Materials Storage) information is not current. • 50 - 90% (39-69) BMP Tailgate Meeting logs are current and documentation is available for the past 3 years. • 50 - 90% (18-31) monthly facility storm water inspection reports (i.e., FPPP Monthly Stormwater Compliance Inspection form) have been completed and are available. At a minimum, the last 3 years of inspection checklists from the initial date the FPPP was certified should be retained.
Rating C	<p>Overall administrative documentation inadequate.</p> <p>To meet the Rating C, <u>one of the following conditions</u> must be met:</p> <ul style="list-style-type: none"> • FPPP – Certification page missing. • Section 3.0 (facility BMPs, Non-Hazardous Materials Storage, Hazardous Materials Storage) information missing. • <50% BMP (0-38) BMP Tailgate Meeting logs are current and documentation is available for the past 3 years. • <50% (0-17) monthly facility storm water inspection reports (i.e., FPPP Monthly Stormwater Compliance Inspection form) have been completed and are available. At a minimum, the last 3 years of inspection checklists from the initial date the FPPP was certified should be retained.

Figure E-6: Maintenance Activity Compliance Alphabetic Rating Summary

Table E-4 shows the numeric rating summary of facilities reviewed by District.

Table E-4: Maintenance Facility Numeric Rating Summary By District

District	No. of Facilities Reviewed	Appropriate BMPs Implemented				Appropriate BMPs not Implemented		Release from Facility		Discharge to Surface Water	
		And Effective		<100% Effective							
		1 Rating		2 Rating		3 Rating		4 Rating		5 Rating	
1	28	12	43%	15	54%	1	4%	0	0%	0	0%
2	28	7	25%	20	71%	1	4%	0	0%	0	0%
3	24	5	21%	19	79%	0	0%	0	0%	0	0%
4	34	13	38%	19	56%	2	6%	0	0%	0	0%
5	30	14	47%	16	53%	0	0%	0	0%	0	0%
6	30	12	40%	9	30%	9	30%	0	0%	0	0%
7	17	5	29%	8	47%	4	24%	0	0%	0	0%
8	26	3	12%	14	54%	9	35%	0	0%	0	0%
9	12	8	67%	2	17%	2	17%	0	0%	0	0%
10	16	4	25%	5	31%	7	44%	0	0%	0	0%
11	10	1	10%	6	60%	3	30%	0	0%	0	0%
12	7	1	14%	5	71%	1	14%	0	0%	0	0%
TOTAL	262	85	32%	138	53%	39	15%	0	0%	0	0%

Table E-5 shows the letter rating summary of facilities reviewed by District.

Table E-5: Maintenance Facility Alphabetic Rating Summary By District

District	No. of Facilities Reviewed	Overall administrative BMP compliance and documentation is current and available		Overall administrative BMP compliance and documentation is moderately implemented		Overall administrative BMP compliance and documentation inadequate.	
		A Rating		B Rating		C Rating	
1	28	13	46%	12	43%	3	11%
2	28	20	71%	7	25%	1	4%
3	24	17	71%	4	17%	3	13%
4	34	11	32%	16	47%	7	21%
5	30	30	100%	0	0%	0	0%
6	30	14	47%	5	17%	11	37%
7	17	8	47%	5	29%	4	24%
8	26	8	31%	4	15%	14	54%
9	12	7	58%	0	0%	5	42%
10	16	13	81%	0	0%	3	19%
11	10	0	0%	4	40%	6	60%
12	7	1	14%	2	29%	4	57%
TOTAL	262	142	54%	59	23%	61	23%

Figure E-7 summarizes the results of maintenance facility compliance inspections.

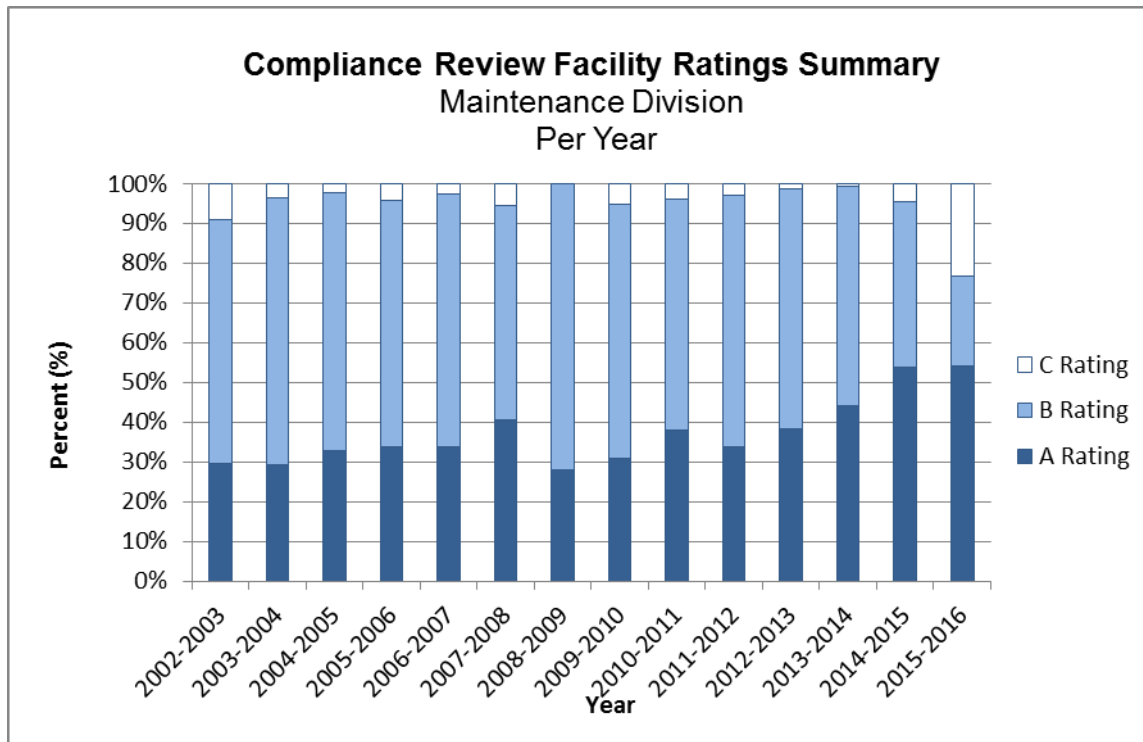


Figure E-7: Statewide Compliance Review Facility Ratings Summary

Maintenance activities are organized into several Families (Families A to T) as specified in Caltrans’ Stormwater Quality Handbook, Maintenance Staff Guide (CTSW-RT-02-057), October 2009 (interim, revised September 2012), and consistent with Caltrans’ methods of planning and implementing these activities. They represent typical maintenance tasks that may potentially affect stormwater. The 62 maintenance activities are grouped into 14 Families that represent tasks of similar nature. Certain BMPs are commonly applied to all maintenance activities and are defined as general BMPs. Maintenance of Caltrans facilities is tracked in the T Family, Management and Support. Nine hundred eighty-four activities that belong to the T Family were evaluated during facility compliance reviews. Table E-6 summarizes the T Family activities reviewed and their numeric ratings.

Table E-6: Facility Rating Summary – T Family Activity FY2015–2016

T Family Activity	No. of Activities Reviewed	Compliant						Non-Compliant			
		Appropriate BMPs Implemented				Appropriate BMPs not Implemented	Release from Facility		Discharge to Surface Water		
		and Effective		100% Effective							
		1 Rating	2 Rating	3 Rating	4 Rating	5 Rating					
Building and Grounds Maintenance	262	120	46%	116	44%	26	10%	0	0%	0	0%
Storage of Hazardous Materials (Working Stock)	128	61	48%	61	47%	6	5%	0	0%	0	0%
Material Storage Control (Hazardous Waste)	106	90	85%	12	11%	4	4%	0	0%	0	0%
Outdoor Storage of Raw Materials	178	106	60%	57	32%	15	8%	0	0%	0	0%
Vehicle and Equipment Fueling	75	72	96%	3	4%	0	0%	0	0%	0	0%
Vehicle and Equipment Cleaning	72	66	92%	6	8%	0	0%	0	0%	0	0%
Vehicle and Equipment Maintenance and Repair	82	49	60%	31	38%	2	2%	0	0%	0	0%
Aboveground and Underground Tank Leak and Spill Control	81	75	93%	5	6%	1	1%	0	0%	0	0%
TOTAL	984	639	65%	291	30%	54	5%	0	0%	0	0%

The team performed 198 inspections of activities, averaging 16.5 individual maintenance activities per District. The results indicated the following:

- 198 activities (100%) received a Rating of 1 or 2.
- No activity received a Rating of 3.
- No activity received a Rating of 4.
- No activity received a Rating of 5.

Table E-7 summarizes the compliance review activity numeric ratings by District.

Table E-7: Compliance Review Activity Numeric Ratings Summary – By District

District	No. of Activities Reviewed	Appropriate & Effective BMPs		Appropriate BMPs, Not 100% Effective		Appropriate BMPs Not Implemented		Release Outside of Caltrans ROW		Release to Surface Water	
		1 Rating		2 Rating		3 Rating		4 Rating		5 Rating	
1	12	12	100%	0	0%	0	0%	0	0%	0	0%
2	13	12	92%	1	8%	0	0%	0	0%	0	0%
3	17	17	100%	0	0%	0	0%	0	0%	0	0%
4	25	24	96%	1	4%	0	0%	0	0%	0	0%
5	13	12	92%	1	8%	0	0%	0	0%	0	0%
6	18	18	100%	0	4%	0	0%	0	0%	0	0%
7	26	24	92%	2	8%	0	0%	0	0%	0	0%
8	24	21	88%	3	12%	0	0%	0	0%	0	0%
9	9	9	100%	0	5%	0	0%	0	0%	0	0%
10	10	10	100%	0	8%	0	0%	0	0%	0	0%
11	14	14	100%	0	5%	0	0%	0	0%	0	0%
12	17	17	100%	0	0%	0	0%	0	0%	0	0%
TOTAL	198	190	96%	8	4%	0	0%	0	0%	0	0%

Table E-8 summarizes compliance review activity numeric ratings by Maintenance Family.

Table E-8: Compliance Review Activity Numeric Ratings Summary – By Maintenance Family

Maintenance Family	No. of Activities Reviewed	Appropriate & Effective BMPs		Appropriate BMPs, Not 100% Effective		Appropriate BMPs Not Implemented					
						No Release		Release Outside of Caltrans ROW		Release to Surface Water	
		1 Rating	2 Rating	3 Rating	4 Rating	5 Rating					
A Family – Flexible Pavement	5	4	80%	1	20%	0	0%	0	0%	0	0%
B Family – Rigid Pavement	0	0	100%	0	0%	0	0%	0	0%	0	0%
C Family – Slope/Drain/Vegetation	84	80	95%	4	5%	0	0%	0	0%	0	0%
D Family – Litter/Debris/Graffiti	27	27	100%	0	0%	0	0%	0	0%	0	0%
E Family – Landscaping	33	31	94%	2	6%	0	0%	0	0%	0	0%
F Family – Environmental	6	5	83%	1	17%	0	0%	0	0%	0	0%
G Family - Public Facilities	0	0	100%	0	0%	0	0%	0	0%	0	0%
H Family – Bridges	6	6	100%	0	0%	0	0%	0	0%	0	0%
J Family - Other Structures	2	2	0%	0	0%	0	0%	0	0%	0	0%
K Family – Electrical	9	9	100%	0	0%	0	0%	0	0%	0	0%
M Family – Traffic Guidance	19	19	100%	0	0%	0	0%	0	0%	0	0%
R Family – Snow and Ice Removal	1	1	100%	0	0%	0	0%	0	0%	0	0%
S Family – Storm Maintenance	3	3	100%	0	0%	0	0%	0	0%	0	0%
T Family – Management and Support ¹	3	3	100%	0	0%	0	0%	0	0%	0	0%
TOTAL	198	190	96%	8	4%	0	0%	0	0%	0	0%

A History of Maintenance Facility Inspections from the 2002-2003 fiscal year to the 2015-2016 fiscal year is included in Appendix G on the CD. The maintenance compliance monitoring program is discussed in Section 8 of the Annual Report.

Figure E-8 summarizes compliance review activity ratings per District.

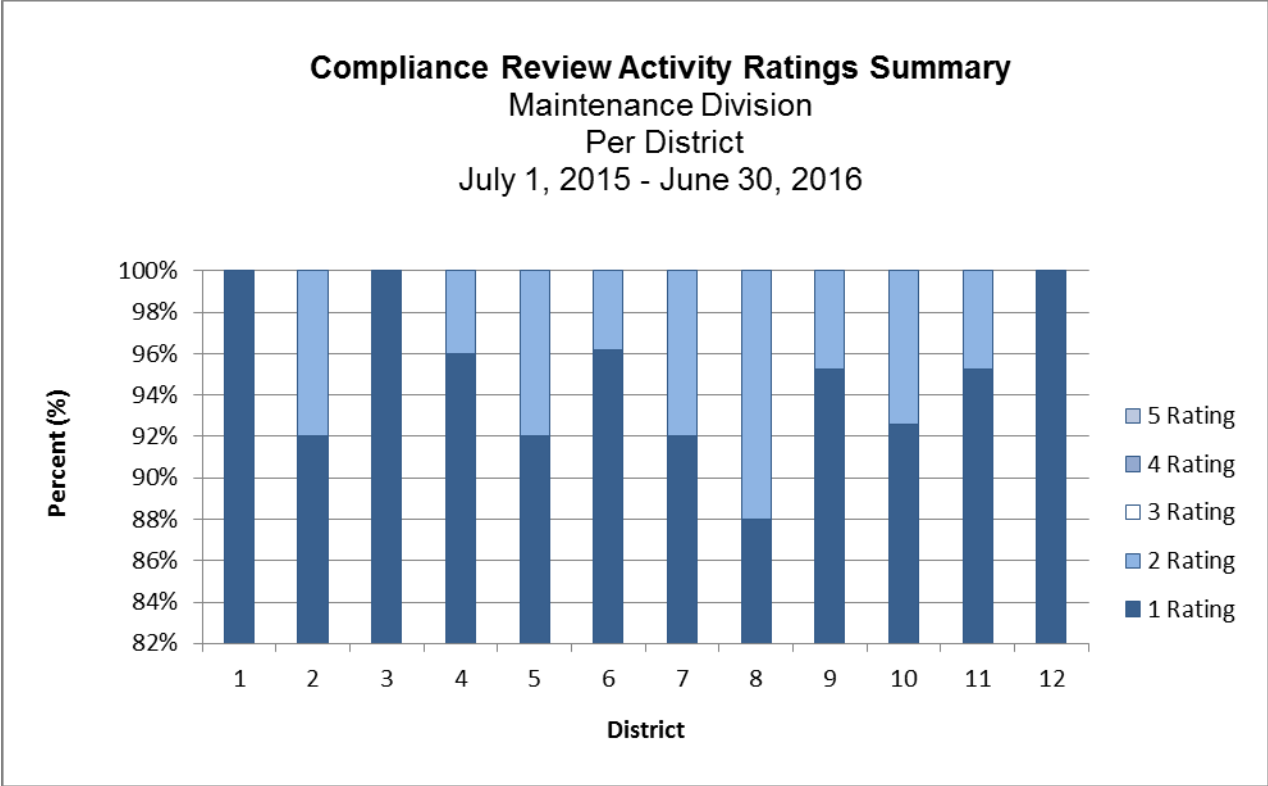


Figure E-8: Compliance Review Activity Ratings Summary by District

A History of Maintenance Facility Inspections from the 2002-2003 fiscal year to the 2015-2016 fiscal year is included in Appendix G on the CD. The Maintenance compliance monitoring program is discussed in Section 8 of the Annual Report.

Landslide Management Plan

Enhanced Storm Drain Inspection and Cleaning Activities

The Division of Maintenance implements an Enhanced Annual Storm Drain Inlet Inspection and Cleaning Program in the metropolitan areas of Los Angeles and Ventura (District 7), Orange (District 12), and San Diego (District 11) counties.

Table E-9 summarizes the number of drain inlets inspected and cleaned by Division of Maintenance crews.

Table E-9: Maintenance Crew Enhanced Storm Drain Inlet and Cleaning by District, Fiscal Year 2015-2016

District	County	Route	Post Mile	Number of Drain Inlets Inspected	Number of Drain Inlets Cleaned
7	LA	1	0-55.1	500	479
7	LA	2	14.5-21.6	82	68
7	LA	5	40.1-48.0	312	250
7	LA	10	1.8-47.8	232	195
7	LA	14	25.1-32.2	159	152
7	LA	60	1.3-30.1	287	252
7	LA	71	0.8-4.6	64	57
7	LA	72	0.19-6.6	37	37
7	LA	90	0.81-2.43	58	58
7	LA	91	7.3-19.6	316	300
7	LA	101	0.39-37.1	727	624
7	LA	110	0.95-24.4	894	700
7	LA	118	2.1-13.8	343	335
7	LA	210	3.2-46.6	765	729
7	LA	405	0.3-48.4	1344	1197
7	LA	605	0.2-14.3	561	526
7	LA	710	9.1-24.1	355	342
District 7 Subtotal				7,036	6,301
11	IMP	7	0-1.18	57	0
11	IMP	8	0-96.98	802	280
11	IMP	86	0-17.99	333	259
11	IMP	98	0-57.01	130	26
11	IMP	111	0-65.39	261	189
11	IMP	115	3.2-35.23	111	85
11	IMP	186	0-2.12	3	0
11	SD	5	0-72.36	2927	810
11	SD	8	0-77.77	1522	983
11	SD	15	0-54.25	2925	2559
11	SD	52	0-17.6	206	114

**Table E-9: Maintenance Crew Enhanced Storm Drain Inlet and Cleaning by District,
Fiscal Year 2015-2016**

District	County	Route	Post Mile	Number of Drain Inlets Inspected	Number of Drain Inlets Cleaned
11	SD	54	0-14.2	280	264
11	SD	56	0-17	118	109
11	SD	76	0-52.31	151	410
11	SD	78	0-95.31	504	167
11	SD	94	0-53.03	556	0
11	SD	125	0-65.37	362	150
11	SD	163	0-30.40	256	87
11	SD	805	0-11.66	1756	1313
11	SD	905	0-28.87	448	223
District 11 Subtotal				13,708	8,028
12	ORA	5	0-40.7	631	59
12	ORA	22	0.75-13.1	226	7
12	ORA	55	0-17.6	585	0
12	ORA	57	10.07-20.0	162	10
12	ORA	133	0-8.9	91	3
12	ORA	405	0.23-9.8	200	0
12	ORA	1	5.79-19.7	66	8
12	ORA	73	26.0-26.2	8	8
12	ORA/LA	39	0-22.6	56	0
District 12 Subtotal				2,025	95

Slope Inspections

Caltrans' Division of Maintenance has an ongoing program in accordance with Caltrans' NPDES Permit Section E.2.h.3)a)iii) and the Draft SWMP to inspect roadside vegetated slopes for erosion. This requirement is led by District Maintenance Stormwater Coordinators who are members of the Maintenance Stormwater Advisory Teams (MSWAT).

The inspections are conducted on a five-year cycle. In addition to the Draft SWMP mandated program, the Division of Maintenance conducts a storm patrol and erosion control program.

Maintenance Supervisors and delegated staff patrol the state's highway system to inspect for any issues related to safety, facility preservation and erosion control due to storm events. The Division of Maintenance also investigates public complaints related to stormwater damage during these times.

These inspections and patrols typically generate erosion control projects. The Division of Maintenance will normally conduct minor storm damage repair on projects in which the cost does not exceed \$1,000 per site or \$15,000 per mile. Major storm damage repair projects exceed these cost levels.

Table E-10 summarizes the slope inspections conducted by District Maintenance Stormwater Coordinators during the fiscal year.

Table E-10: Slope Inspection Summary, Fiscal Year 2015-2016

District	Total Shoulder Miles	Total Shoulder Miles Inspected	Minor Repair Needs Found	Major Repair Needs Found
1	2,611	-	-	-
2	4,727	36	7	5
3	4,172	27	0	0
4	4,355	1,422	16	13
5	3,583	449	4	1
6	6,372	-	-	-
7	3,510	232	11	7
8	6,327	1,118	26	0
9	1,978	503	-	0
10	3,309	0	0	0
11	3,085	1,218	5	2
12	942	-	-	-
Total	44,971	5,005	69	29

Trash and Litter Removal Activities

Caltrans collects trash through several activities that District Maintenance personnel perform on a regular basis. These activities include storm drain maintenance, roadway sweeping, District crew/California Conservation Corps (CCC) collection, the Caltrans Parolee Program, the Adopt-A-Highway Program, and public education emphasizing trash and litter prevention. Table E-11 shows the amount of trash and litter removed from Caltrans' activities.

Table E-11: Summary of Maintenance Trash and Litter Removal Volumes (cubic yards) by District

District	Storm Drain Maintenance	Road Sweeping	District Crew/CCC Collection	Caltrans Parolee Program	Caltrans Adopt-A-Highway Program	Public Education
1	100	3,617	1,931	-	336	182
2	556	1,707	3,082	-	334	68
3	7,069	18,159	2,227	7,000	1,705	286
4	1,264	9,672	23,842	8,567	965	544
5	2,182	2,934	4,215	-	1,250	223
6	1,801	4,174	7,753	5,315	684	171
7	7,390	12,024	9,468	5,807	1,542	589
8	2,207	5,323	18,288	5,661	1,419	805
9	105	2,086	252	-	274	33
10	1,787	3,695	1,429	4,420	815	295

Table E-11: Summary of Maintenance Trash and Litter Removal Volumes (cubic yards) by District

District	Storm Drain Maintenance	Road Sweeping	District Crew/CCC Collection	Caltrans Parolee Program	Caltrans Adopt-A-Highway Program	Public Education
11	6,825	6,918	10,283	5,016	995	382
12	2,084	5,216	4,627	-	1,515	176
Total	33,370	75,525	87,397	41,786	11,834	3,754

Drain Inlets/Culverts Inspected and Cleaned

Over 106,258 drainage system facilities were inspected and cleaned as needed during fiscal year 2015-2016. Drainage system maintenance is discussed in Section 8 of the Annual Report.

Table E-12 summarizes the drain inlets and culverts inspected and cleaned during the fiscal year.

Table E-12: Drain Inlets/Culverts Inspected and Cleaned, Fiscal Year 2015-2016

District	Total # of Drain Inlets	Total # of Drain Inlets/Culverts Inspected	Total # of Drain Inlets/Culverts Cleaned
1	26,547	8,205	2,516
2	36,576	18,194	15,424
3	36,956	13,981	12,521
4	55,875	15,539	12,793
5	37,049	12,207	9,370
6	50,242	9,339	5,962
7	29,735	25,454	16,561
8	41,150	11,241	7,912
9	11,213	1,484	409
10	33,285	13,820	9,772
11	24,158	22,823	10,823
12	13,739	6,784	2,197
Total	396,525	159,069	106,258

Detailed Division of Maintenance Drain Inlet Inspection and Cleaning Data for the fiscal year are contained in Appendix I to this report.

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