STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
1263 S. Stewart Street
Carson City, Nevada 89712

STEVE SISOLAK
Governor

KRISTINA L. SWALLOW, P.E., *Director*

In Reply Refer to:

October 29, 2019

ANDREW DIXON
NDEP
BUREAU OF WATER POLLUTION CONTROL
901 S. STEWART ST. SUITE 4001
CARSON CITY, NV 89701

MS4 Permit NV0023329
Stormwater Management Program
FY 2019 Annual Report

Dear Mr. Dixon:

The Nevada Department of Transportation (NDOT) is submitting the Stormwater Management Program (SWMP) Annual Report per the requirements of Municipal Separate Storm Sewer Systems Permit No. NV0023329 effective August 10, 2018 (Permit). Contents describe NDOT's SWMP compliance activities performed during the time period July 1, 2018 through June 30, 2019 (i.e. State fiscal year 2019). Included in the Annual Report is an annual fiscal analysis as required per section DLV-Deliverable Schedule for Reports, Plans, and Other Submittals of the Permit.

As always, we appreciate your continued assistance. If you have any questions regarding this information, please do not hesitate to contact me at (775) 888-7889 or jmurphy@dot.state.nv.us.

Sincerely,

James D. Murphy, Acting Chief
Environmental Division

JDM/mvd

Enclosures

NEVADA DEPARTMENT OF TRANSPORTATION

STORMWATER MANAGEMENT PROGRAM

MS4 PERMIT NV0023329
ANNUAL REPORT FOR FISCAL YEAR 2019
JULY 1, 2018 – JUNE 30, 2019

Nevada Department of Transportation
Environmental Division
1263 South Stewart Street
Carson City, NV 89712

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. [40CFR§122.22(d)]

Date: 10/29/19

James D. Murphy
Acting Chief, Environmental Division

Table of Contents

Introduction

In response to the Nevada Department of Transportation's (NDOT's) request for a single National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer Systems (MS4) Permit for stormwater discharges from NDOT properties, facilities, and activities, the Nevada Division of Environmental Protection (NDEP) issued NDOT a statewide NPDES MS4 Permit (NV0023329) on February 23, 2004, which was subsequently reissued on July 7, 2010 and again on August 10, 2018 (Permit). A requirement of the Permit is the development and implementation of a Stormwater Management Program (SWMP).

NDOT has developed a Stormwater Management Plan (Plan) which serves as a "blueprint" for how its SWMP will be implemented. The SWMP is comprised of several sub-programs (i.e. plan or program elements) addressing stormwater pollution control as it relates to the planning, design, construction, and maintenance of NDOT's highway infrastructure statewide with the goal of minimizing stormwater pollutant discharges to the maximum extent practicable and satisfying Clean Water Act requirements.

Per *Section B.6.3* of the Permit, *"The Permittee [i.e. NDOT] shall submit the Annual Report to the Division [i.e. NDEP] by November 1 of each year of the permit term. Each Annual Report shall cover the period beginning July 1 of the previous year through June 30 of the current year [i.e. previous State fiscal year]."* Consequently, the objective of this annual report is to report on SWMP activities conducted during State fiscal year (FY) 2019 (Reporting Period) as they pertain to the requirements of the Permit. Information contained in this annual report coincides with NDOT's 2019 Draft Plan submitted to the NDEP in July of 2019.

SWMP Administration

Annual Review and Updating the SWMP

The NDOT is in the process of reviewing and updating its SWMP to address the requirements of the Permit. SWMP updates are reflected in the Draft Plan which is currently undergoing the review and approval process detailed in *Section B.5* of the Permit.[1] Consequently, there is nothing to report at this time. Subsequent annual reports will include information on SWMP updates as appropriate.

[1] A draft SWMP was submitted to the NDEP for review in July of 2019.

Annual Report

The NDOT submitted the FY 2018 Annual Report to NDEP on September 24, 2018.

Stormwater Manual Updates

The following manuals were reviewed during the Reporting Period. Updates to these manuals were deemed unwarranted.

- *Planning and Design Guide*
- *Construction Site Best Management Practices (BMPs) Manual*
- *Field Guide for Illicit Discharge Detection and Elimination*
- *Illicit Discharge Field Investigation Procedures Manual*
- *Maintenance Facility Stormwater Best Management Practices (BMPs) Manual*
- *Maintenance Source Site Stormwater Management Guide*[2]

The *Stormwater Operations and Maintenance Plan*[3] was reviewed during the Reporting Period with updates deemed warranted. Updates to this manual were initiated during the Reporting Period and are scheduled to be completed in FY 2020.

Shared Responsibility

The NDOT did not rely on other government entities to perform activities that would solely fulfill Permit obligations. However, the NDOT partnered with various agencies/entities during the Reporting Period in support of the SWMP. Highlights of these efforts are described below under Partnerships and Affiliations.

Stormwater Monitoring Plan

The NDOT submitted the final revised Stormwater Monitoring Plan to NDEP on June 5, 2019 for review and approval. The NDEP subsequently approved the revised Stormwater Monitoring Plan on June 20, 2019. A copy of the document is available upon request.

Stormwater Monitoring Summary

Stormwater monitoring was conducted per the NDEP approved Stormwater Monitoring Plan. A brief summary of NDOT's stormwater monitoring efforts is presented below.

Receiving Water Monitoring

[2] This document was developed during the Reporting Period.
[3] This document is expected to undergo significant revision.

- Boynton Slough: Monitoring was conducted in a joint effort with the Truckee Meadows Storm Water Permit Coordinating Committee (TMSWPCC). Twenty-two runoff events were monitored for various water quality constituents. Results will be summarized in the forthcoming Truckee Meadows Storm Water Monitoring Annual Report (scheduled for publishing in FY 2020).
- Clear Creek: Monitoring was conducted at two monitoring locations (Lower and Upper Clear Creek Monitoring Sites) in a joint effort between NDOT and the United States Geological Survey (USGS). Various water quality parameters were monitored at both sites. Overall, data recorded at both sites is highly variable. However, results suggest that turbidity at both sites is directly correlated with discharge. In addition to these studies, the NDOT operates a continuous real-time monitoring site to collect meteorological data for the Clear Creek watershed (there are no water quality results to report); and NDOT collaborated with NDEP to conduct a bioassessment of the stream reach within the Upper Clear Creek Monitoring Site (results were not made available at the time of reporting).
- Las Vegas Wash: Monitoring of various water quality constituents occurred upstream of the Sloan Channel. This site is co-located with a wet weather monitoring station operated by the Las Vegas Valley Stormwater Quality Management Committee. Results suggest that turbidity is directly correlated with discharge and specific conductance is highest during the "first flush" period of a runoff event.
- Steamboat Creek: Monitoring was conducted in a joint effort with the TMSWPCC. Twenty-two runoff events were monitored for various water quality constituents. Results will be summarized in the forthcoming Truckee Meadows Storm Water Monitoring Annual Report (to be published in FY 2020).

<u>Maintenance Facility Monitoring</u>

- NDOT's Las Vegas North Maintenance Facility: Facility generated stormwater runoff entering a drop inlet was monitored for various water quality parameters. Five runoff events were sampled with results displaying high variability. Data correlations were not evident.
- NDOT's Las Vegas South Maintenance Facility: Facility generated stormwater runoff flowing through a valley gutter was monitored for various water quality parameters. Five runoff events were sampled with results displaying high variability. Data correlations were not evident.
- Reno Maintenance Facility: Monitoring of facility generated stormwater flowing through a Contech CDS Treatment Vault was monitored for various water quality parameters. Thirty

runoff events were monitored at the vault's inlet with 11 runoff events monitored at the vault's outlet. The results of all events displayed high variability; consequently, data correlations were not evident.

Runoff Characterization Monitoring

- US-50 - Clear Creek Watershed: Stormwater runoff from US-50 was monitored for various water quality parameters. Thirteen runoff events were monitored with results displaying high variability. Data correlations were not evident.

Truckee Meadows Storm Water Permit Coordinating Committee Monitoring

- Truckee River Watershed Ambient and Storm Events: The NDOT partnered with the TMSWPCC to monitor various water quality parameters during storm events and baseflow conditions at 15 monitoring stations along or tributary to the Truckee River throughout the Truckee Meadows region. The TMSWPCC published a final monitoring report in January of 2019 with results indicating elevated concentrations of various water quality parameters (notably total nitrogen) at all monitoring locations during storm and baseflow sampling events. Total phosphorus and total dissolved solids were also high for select storm and baseflow sampling events. Findings are consistent with the previous monitoring report published in March of 2018.

Lake Tahoe Basin Monitoring

- Lake Tahoe Implementers Monitoring Program (IMP): Monitoring of various water quality parameters of stormwater runoff from SR-431 was performed within the inflow and outflow of 2 manufactured stormwater treatment devices (Contech Media Filtration System (MFS) and Jellyfish). A monitoring report published by the Tahoe Resource Conservation District (TRCD) in March of 2019 suggests the treatment devices can be effective at removing sediment and nutrients (specifically nitrogen and phosphorus); however, regular maintenance of the treatment devices is necessary for optimum pollutant removal.
- Road Rapid Assessment Methodology (Road RAM): In support of the Lake Tahoe TMDL, Road RAM is a field inspection method for quickly assessing pollutant (notably sediment) potential on roadways. Scores for SR-28 and SR-431 ranged from 1.8 to 4.0, respectively, which represent passing scores.

Programmatic Elements

This section summarizes activities/tasks performed that are associated with the programmatic elements described in the Plan, focusing on the information specific to Permit reporting requirements. Included are evaluations as they pertain to the implementation of each program

element. A simple ranking system of *Excellent*, *Good*, *Fair*, or *Poor* is used to assess each Plan element with regards to implementation. For example, an *Excellent* rating indicates the program element is being implemented as intended with little to no limitation. A *Poor* rating indicates significant problems with implementing the program element as intended and appropriate action is needed to ensure Permit compliance.

Legal Authority

Nevada Revised Statutes

The NDOT did not submit any formal proposals to modify the Nevada Revised Statutes (NRS) regulating stormwater discharges into the MS4.

Standard Specifications

The NDOT's *Standard Specifications for Road and Bridge Construction* was reviewed. Changes to the document have been proposed and continue to undergo internal review. Proposed changes range from language clarification to modified contractor requirements on the NDOT's construction contracts.

Occupancy Permit Terms and Conditions

The NDOT's *Terms and Conditions Relating to Right-of-Way Occupancy Permits* was reviewed with changes made. Language changes were focused on post-construction BMPs, stormwater pollution prevention plans, runoff control plans, and the NDOT's Drainage Information Form.

Program Evaluation

This program is rated as *Good*.

The NDOT maintains the legal authority to enforce the SWMP through provisions in Section 408 of the NRS. The NDOT has developed internal specifications that provide guidance to contractors to help facilitate stormwater pollution control within the right-of-way. To this point, the NDOT has been successful educating and working with stakeholders to comply with NPDES permit requirements for construction and encroachment/temporary occupancy permit projects, and the NRS has served as a suitable deterrent to non-compliance.

Stormwater Education

The NDOT continued to conduct discipline specific stormwater trainings statewide. Tables 1 and 2 summarize these efforts.

The Stormwater Division released a new training course during the Reporting Period - "Stormwater Management for Equipment Shops."

Introduction to Stormwater

This web-based course presents the topic of stormwater management and awareness at its most fundamental level. Although all NDOT employees are encouraged to complete this course, only the Stormwater Division's Design Section staff are required to complete this course. At the time of reporting, 100% of those NDOT employees targeted to receive this training were current with their training requirements.

Maintenance Stormwater Training

This training course is specifically tailored toward the NDOT's District Maintenance Crews, providing an overview of BMP implementation at maintenance facilities and performing routine maintenance activities in the field. At the time of reporting, 75% of those NDOT employees targeted to receive this training were current with their training requirements.

Introduction to Construction Site Stormwater Management Training

This training course is geared specifically towards NDOT District Construction Crew personnel not tasked with performing stormwater inspections on NDOT construction sites as well as District Right-of-Way and Stormwater Division personnel overseeing occupancy permit compliance. At the time of reporting, 77% of those NDOT employees targeted to receive this training were current with their training requirements.

Water Pollution Control Manager Training

This course was developed in collaboration with the Southern Nevada branch of the Associated General Contractors of America/Nevada Contractor's Association. This course focuses on construction site stormwater management with the NDOT's construction contractors and select NDOT Construction Crew personnel as the primary target audience. At the time of reporting, 93% of those NDOT employees targeted to receive this training were current with their training requirements.

Stormwater Management for Equipment Shops

The NDOT's Stormwater Division released this training for the first time during the Reporting Period. This course is specifically tailored towards NDOT Equipment personnel tasked with performing equipment repairs at the NDOT's Major Maintenance Facilities. At the time of

reporting, 86% of those NDOT employees targeted to receive this training were current with their training requirements.

Miscellaneous Training

Pesticide and Fertilizer Application Training

Pesticide and fertilizer application training is provided as part of the Maintenance Stormwater Training module. Additionally, 105 NDOT employees completed supplemental pesticide applicator training provided by the Nevada Local Technical Assistance Program (4 classes) and the Nevada Department of Agriculture/University of Nevada Cooperative Extension (1 class) during the Reporting Period.

Other Training Opportunities

Stormwater Division personnel attended several stormwater conferences/professional meetings during the Reporting Period. The following highlights those events:

- International Erosion Control Association Conference (8 attendees);
- California Stormwater Quality Association Annual Conference (4 attendees);
- Tri-State Seminar (11 attendees);
- EPA Region 6 Conference (2 attendees);
- National Monitoring Conference (1 attendee);
- StormCon (6 attendees);

Ten Stormwater Division personnel attended Certified Inspector of Sediment and Erosion Control (CISEC) Training; 5 Stormwater Division personnel attended a peer exchange with Colorado Department of Transportation (CDOT) which included a tour of CDOT's state of the art stormwater training center.

Stormwater Division personnel completed numerous online stormwater related training workshops/seminars throughout the Reporting Period as well.

Post-Construction Stormwater Management Training

The Stormwater Division's Design Section is required to complete a minimum of 3 credit/professional development hours of stormwater design related training annually. At the time of reporting, 100% of those employees were current with their training requirements.

Program Evaluation

This program is rated as *Excellent* with continued refinement as needed.

Discipline specific stormwater trainings continued to be offered to NDOT personnel and contractors statewide (Tables 1 and 2), including the new stormwater training course released during the Reporting Period "Stormwater Management for Equipment Shops." Thirty-one stormwater trainings were conducted with 457 NDOT employees and contractors trained statewide during the Reporting Period. Numerous Stormwater Division personnel completed supplemental training as well.

At the time of reporting, 83% of NDOT personnel were current with their respective training requirements. Given the number of employees, the variety of job responsibilities, outstretched duty station locations and various work schedules, 83% is considered a marked achievement.

The Stormwater Division will continue to evaluate training curriculum to identify needs and potential areas of enhancement, as well as continuing to explore opportunities for supplemental training.

Public Involvement/Participation

Stormwater Management Plan Review and Comment

A draft revised Plan was not made available for public review and comment (including hosting a public meeting). The NDOT is currently developing a revised Plan and upon its completion a draft version will be made available for public review and comment.[4]

Outreach and Education Events

NDOT participated in 36 public outreach and education events statewide, which included local community events, expos, conferences, farmer's markets, school events, and public meetings. Examples of events attended include:

- State of Nevada-Office of the Attorney General's "Bring Your Child to Work Day"
- Seeliger Elementary School STEAM/Family Night
- Truckee River Cleanup and Snapshot Days
- Lamoille Canyon 5th Grade Environmental Education Day
- GREENFest
- Lake Tahoe Summit
- Fallon I-15 Public Meeting

[4] A draft revised Plan was submitted to the NDEP for review in July of 2019.

Education materials (e.g. disposable dog waste bags, activity books, stickers, etc.) promoting NDOT's Stormwater Management Program are typically distributed at these events as well.

Website and Social Media

NDOT's Stormwater Program website received 2,608 Page Views and 2,135 Unique Page Views. Tables 3 and 4 summarize social media analytics. Additionally, 4 stormwater videos were uploaded to NDOT's YouTube channel.

Public Litter Removal Programs

The NDOT continued participation in the Adopt-A-Highway (AAH) and Sponsor-A-Highway (SAH) litter removal programs. The AAH program allows non-political organizations, volunteer groups, and individuals to participate in maintaining and enhancing Nevada's highways through community service at no cost to the group. The SAH program focuses on litter removal along urban freeway corridors. Firms and organizations seeking recognition for community service for litter removal efforts through this program may do so through pre-qualified contractors approved by the NDOT.

Results of AAH and SAH efforts are presented in Table 5.

Public Complaints

The NDOT's Stormwater Division received 1 stormwater pollution related public complaint. A housing development construction site in District II was discharging stormwater runoff during a rainfall event into the NDOT's right-of-way. The public citizen who submitted the complaint had concerns about the housing development being compliant with State discharge requirements. The NDOT's Stormwater Division performed a field investigation and deemed the discharge into its right-of-way as non-illicit and subsequently considered the matter closed. The matter was referred to NDEP for further consideration.

Partnerships and Affiliations

The NDOT partnered with several agencies/entities in support of the SWMP. Highlights of these partnerships (noting the primary Plan element the activity falls under, the agency/entity partner, and a brief description of the activity implemented) are described below.

- Public Education and Outreach
    - Continued to partner with the City of Elko to provide general stormwater education and outreach to elementary school students, faculty, and parents from the Elko region as part of the Lamoille Canyon Environmental Education Day event;

    - Continued to provide construction site stormwater education and outreach at the Clark County Regional Flood Control District's annual Stormwater Training for Construction Contractors event;
    - Continued to serve as Team Leaders for the Thomas Creek monitoring site as part of NDEP's Truckee River Snapshot Day;
    - The NDEP assisted in the RFP review process for the NDOT's School Stormwater Pollution Prevention Plan Project Request for Proposal;
- Stormwater Education
    - The Southern Nevada branch of the Associated General Contractors of America/Nevada Contractor's Association (AGC) continued to assist with facilitating the NDOT's Water Pollution Control Manager Training;
    - Teamed up with the Clark County Water Reclamation District to construct and promote their new interactive stormwater online model set to launch in FY 2020;
    - Continued to partner with the Nevada Division of State Parks to distribute NDOT stormwater activity books at various Nevada State Park Visitor Centers;
- Water Quality Monitoring
    - Continued to partner with the City of Reno with stormwater and receiving water characterization efforts in the Truckee Meadows region;
    - Continued to partner with the Tahoe Resource Conservation District for the characterization of stormwater runoff in the Lake Tahoe Basin as part of the Lake Tahoe IMP;
- Multiple Plan Elements
    - Continued to serve on the Nevada Water Innovation Institute's Board of Advisors;

Program Evaluation

This program is rated as *Excellent* with refinement as needed.

NDOT's Stormwater Division continues to implement a diverse, robust program using social media platforms, providing face-to-face public participation/interaction, having a dedicated stormwater website, and distributing various educational materials (notably the distribution of an estimated 5,000 in-house developed activity books). The Stormwater Division shifted its focus with video posting from YouTube to Facebook Live, Facebook Stories, and Instagram as social media platforms seem to be more effective channels for reaching NDOT's audience.

Maps and Outfalls

Major Outfalls

The NDOT's Stormwater Division continues to update and refine storm sewer asset mapping information. At the time of reporting, the NDOT has inventoried and mapped 49 major outfalls statewide.

Program Evaluation

This program is rated as *Excellent* with continued refinement as needed.

Migrating storm sewer asset information into a GIS environment has paid off in terms of enhanced information tracking and documentation and overall MS4 understanding. The primary challenge is understanding how GIS capabilities can be fully integrated with the NDOT's stormwater operations and finding timely solutions to software and hardware issues.

The Stormwater Division continues to evaluate GIS capabilities for enhancement opportunities, notably in-field functionality and data storage.

Discharges to Water Quality Impaired Waters

Impacts to Impaired Waters

Evaluations to determine whether stormwater discharges from the Permit Area (i.e. state and interstate highways and their rights-of-way as well as NDOT owned and/or operated maintenance facilities and material source sites) significantly contribute (directly or indirectly) to the listing of a waters of the U.S. on the current Nevada 303(d) List of Impaired Waters were previously completed as part of the 2013 Plan (Revised December 2017). The NDEP has not published a new 303(d) List of Impaired Waters since the publishing of the revised 2013 Plan; consequently, NDOT has not performed any new annual evaluations. It was concluded from previous evaluations that the NDOT is not a significant contributor (directly or indirectly) to the listing of any waterway on the current 303(d) List of Impaired Waters.

Because the NDOT is not a significant contributor (directly or indirectly) to the impairment of a 303(d) Listed Water, annual BMP evaluations were not conducted either.

Impacts to TMDL Waterways

The Lake Tahoe TMDL is the only TMDL that identifies NDOT as a party responsible for implementation of pollutant controls. Specifically, "load allocations" have been established for Lake Tahoe with respect to fine sediment. The NDOT entered into an Interlocal Agreement (ILA) with NDEP in November of 2016 for the implementation of the Lake Tahoe TMDL, a requirement

of which is the submittal of a report summarizing the NDOT's load reduction activities undertaken during the previous water year to meet target credit milestones. The NDOT submitted the Water Year 2018 Annual Report to NDEP on May 22, 2019. A copy of the report is available upon request.

Waste load allocations have not been developed for the NDOT's stormwater discharges for any other NDEP approved TMDL.

Program Evaluation

The program is rated as *Excellent* with continued refinement as needed.

The Stormwater Division continues to evaluate projects for potential impacts to 303(d) listed waterways, despite NDOT not being a significant contributor to their listing (directly or indirectly). Appropriate mitigation measures are incorporated into the project's design as appropriate.

The NDOT continues to demonstrate compliance with the Lake Tahoe TMDL ILA.

Construction Site BMPs

Construction Site Best Management Practices (BMPs) Manual

This document was reviewed by Stormwater Division staff during the Reporting Period; however, updates were not warranted.

Stormwater Guidance Manual for Construction Projects

This document continued to be developed during the Reporting Period.

NDOT's Construction Contractors

NDOT awarded 61 construction contracts during the Reporting Period, of which 25 obtained coverage under the stormwater Construction General Permit (CGP) issued by NDEP (Table 6). Conversely, NDOT closed out 37 construction contracts during the Reporting Period, of which16 obtained coverage under the CGP issued by NDEP (Table 7).

Construction Site Stormwater Inspections

NDOT Construction Sites

Oversight inspections continued to be performed by NDOT Construction Crew personnel on 62 construction contracts statewide (40 of which obtained CGP coverage). In addition, construction site stormwater inspections (i.e. quality assurance inspections) were performed by NDOT Stormwater Division personnel on 35 construction contracts statewide. Table 8 summarizes

these efforts. Please note that the inspections performed by NDOT personnel are in addition to the inspections performed by the NDOT's contractor (i.e. the CGP "Operator").

The Stormwater Division is unaware of any formal enforcement action taken by the NDEP on any of these construction sites.

NDOT CGP Transfer Sites

Construction site stormwater inspections were performed by NDOT Maintenance Crew and NDOT Stormwater Division personnel on 8 construction sites where CGP coverage was transferred from the NDOT's contractor to the NDOT (i.e. NDOT is the now the CGP "Operator"). Table 9 summarizes these efforts.

The Stormwater Division is unaware of any formal enforcement action taken by the NDEP on any of these construction sites.

Right-of-Way Occupancy Permit Construction Sites

Oversight construction site stormwater inspections were performed by District Permits and Stormwater Division personnel on select temporary occupancy permit projects statewide. These inspections are in addition to the inspections required of the permittee. Due to software limitations of the database system housing occupancy permit information, inspection related information is not readily available for inclusion in this annual report.

Program Evaluation

This program is rated as *Good* with minor refinement needed.

Implementation of this programmatic element continues to be a strength of the SWMP. Contractor SWPPPs were reviewed for completeness and construction site stormwater oversight inspections were performed to ensure compliance with the NDOT's contract specifications for stormwater compliance. No formal enforcement action was taken by the NDEP against the NDOT or its contractors for construction site stormwater non-compliance. The primary challenge remains consistent program implementation both internally and amongst numerous stakeholders.

Encroachment permit projects (i.e. non-NDOT construction activities performed within the right-of-way) continue to be monitored by the Stormwater Division and the Districts. The primary challenge continues to be consistent communication between the encroachment permittee and the appropriate District Permits Office.

The Stormwater Division continues to review and modify (as necessary) contract language and encroachment permit terms and conditions to ensure construction activities are in alignment with the SWMP. The Stormwater Division will work with the Districts and the Right-of-Way Division to address the inspection documentation challenges.

New Development and Redevelopment Planning

Planning and Design Guide

This document was reviewed by Stormwater Division staff during the Reporting Period; however, updates were not warranted.

Stormwater Operations and Maintenance Plan

This document was reviewed by Stormwater Division staff during the Reporting Period. Revisions to the document are underway with a final revised document expected for release in FY 2020.

Program Evaluation

This program is rated as *Good* with refinement needed. Revisions to the Stormwater Operations and Maintenance Plan will clarify procedures to Maintenance personnel for the inspection and subsequent maintenance of storm sewer assets.

The Stormwater Division reviewed 124 proposed NDOT projects, which included performing a Stormwater Project Design Requirements (SPDR) analysis to evaluate the type of permanent BMP(s) to be considered for an NDOT project. In addition, a Water Quality Investigation Report (WQIR) was also prepared for many projects to provide more detailed information on a project's potential impact to a receiving waterway and permanent BMP consideration.

Illicit Discharge Detection and Elimination

Illicit Discharge Reporting

The Stormwater Division was notified of 54 illicit discharge incidents (Table 10), with 46 incidents reported via NDEP Spill Reports, 7 incidents reported verbally, and 1 incident reported via telephone. It's worth noting that NDOT Maintenance personnel reported 11 of the 54 incidents while performing routine day-to-day activities.

Field Guide for the Detection and Elimination of Illicit Discharges

This document was reviewed by Stormwater Division staff during the Reporting Period; however, updates were not warranted.

Illicit Discharge Response

All 54 potential illicit discharge incidents underwent an investigation performed by Stormwater Division personnel. Through investigative efforts it was determined that 7 of the 54 reported incidents occurred outside of the Permit area with the appropriate municipal/jurisdictional authority being notified. Information pertaining to the investigations is logged within the IDDE Response Database maintained by the Stormwater Division.

The NDOT's on-call hazardous materials cleanup contractor responded to 17 incidents during the Reporting Period, 9 of which were reported to the Stormwater Division via NDEP Spill Reports and subsequently investigated as potential illicit discharge incidents.

Illicit Discharge Field Investigation Procedures Manual

This document was reviewed by Stormwater Division staff during the Reporting Period; however, updates were not warranted.

IDDE Response Database

The Stormwater Division continued to maintain this database, documenting all illicit discharge incidents within the Permit area. Information entered into the database includes location of the incident and action taken to eliminate the illicit discharge in question.

Upon review of the incident information in the IDDE Response Database, no IDDE "hotspots" have been identified.

Routine Outfall Screening and Field Investigations

Dry weather inspections were performed at 20 of the possible 49 major outfalls within the Permit area. Additionally, inspections were performed at 16[5] of the documented 492 non-major outfalls within the Permit area. Please note that the total number of outfalls is subject to change due to factors such as new construction, data verification, etc.

No illicit discharges were discovered during these inspections.

Program Evaluation

This program is rated as *Excellent* with continued refinement as needed.

NDEP Spill Reports distributed to the Stormwater Division from NDEP comprised nearly 85% of the total incidents reported, continuing to demonstrate the value of collaborating with NDEP. There were no incidents reported through the NDOT's Stormwater Program webpage, suggesting

[5] A portion of the 16 may include major outfalls.

website reporting may not be a preferred means for public reporting. Nearly 20% of the incidents were reported from NDOT Maintenance personnel, demonstrating that internal IDDE related training efforts are effective.

All potential illicit discharge incidents reported to Stormwater Division staff underwent investigation with most being considered closed matters from NDOT's perspective. Those incidents that remain open matters continue to be monitored.

The Stormwater Division has identified discrepancies with outfall data. Efforts to correct the data are underway which should result in more accurate inspection numbers for future annual reports.

Industrial Facility Monitoring and Control

Monitoring Prioritization and Sampling

The NDOT's Stormwater Division continued to perform monitoring (i.e. assessments) of industrial facilities that exhibit the potential to directly discharge stormwater runoff into the Permit area (Table 11). All industrial facilities underwent a field inspection; discharge sampling did not occur during any of the field inspections. To date, no industrial facility has been identified as contributing significant pollutants to the Permit area.

Except for material source sites (i.e. Non-Metallic Mineral Mining and Dressing Facilities), the NDOT does not own or operate industrial facilities. Consequently, industrial facility monitoring was performed at non-NDOT sites. Plan activities pertaining to Non-Metallic Mineral Mining and Dressing Facilities are described below.

Industrial Facility IDDE

Illicit discharges were not identified during any inspection. In addition, no enforcement action was brought against any industrial facility for illicit discharges into the Permit area during the Reporting Period.

Program Evaluation

This program is rated as *Good* with refinement needed.

Nearly 100 inspections of industrial facilities were performed statewide by Stormwater Division staff. In addition to industrial facilities with direct stormwater pipe-pipe connections to the Permit area, inspections were expanded to include many facilities that have the potential to directly discharge stormwater into the Permit area via sheet flow.

Nearly 86% of the assessments performed were re-assessments. SARA 313 sites continue to be priority areas as they comprised nearly 93% of the new assessments performed.

The Stormwater Division has identified opportunities for program enhancement in the areas of communication with industrial facility owners/operators, follow-up for potential illicit discharge incidents, and internal documentation.

Non-Metallic Mineral Mining and Dressing Facilities

Inventory

NDOT has identified 13 material source sites subject to Permit coverage (Figure 1), all of which were classified as "Inactive Mining Phase" sites during the Reporting Period.

The number of Permit covered sites is subject to change annually due to a variety of factors (e.g. re-assessment, site relinquishment/site development, ongoing inventory evaluation, etc.). Site classification is predicated on the manner of use; consequently, site classification numbers are also subject to change annually.

Material Source Site Stormwater Management Guide

This internal document, which provides guidance for BMP implementation at material source sites, was published during the Reporting Period.

Stormwater Pollution Prevention Plans

There were no "Mine Development Phase" or "Active Mining Phase" sites identified during the Reporting Period; consequently, SWPPPs for these sites were not developed.

SWPPPs for "Inactive Mining Phase" sites were not developed for the 13 sites identified. Please note that the NDOT has within 3 years of the Permit effective date to develop SWPPPs for "Inactive Mining Phase" sites.

Stormwater Inspections

Comprehensive stormwater inspections were performed at all 13 "Inactive Mining Phase" sites. Tables 12 and 13 summarize the results of those inspections. Six issues consisting of the need for trash/debris cleanup (categorized as General Housekeeping deficiencies) were noted, all of which were subsequently corrected.

Program Evaluation

This program is rated as *Good* and still developing.

Evaluations to determine which material source sites are appropriate for Permit coverage will continue into FY 2020.

Maintenance Facilities

Facility Pollution Prevention Plan

The Facility Pollution Prevention Plan (FPPP) underwent minor revision during the Reporting Period. Highlights of these revisions are summarized below.

- Changed the inspection frequency for Major facilities and inactive stockpiles;
- Improved direction for the routing of inspection documentation;
- Added BMP recommendations for select facilities;
- Incorporated inspections/maintenance information for specific stormwater treatment devices;
- Provided basic BMP examples for common compliance issues;
- Added maps for select facilities;
- Added new spill reporting guidelines;

Changes will go into effect FY 2020.

Table 14 lists the Maintenance Facilities covered under the FPPP. Table 15 summarizes FPPP compliance activities. Table 16 summarizes various stormwater pollution control Maintenance tasks performed at FPPP covered Maintenance Facilities.

Maintenance Facility BMPs Manual

This document was reviewed by Stormwater Division staff during the Reporting Period; however, updates were not warranted.

Maintenance Facility Stormwater Inspections

Tables 17 and 18 summarize comprehensive inspection efforts performed by Stormwater Division staff at Maintenance Facilities statewide. Inspections are performed at the frequencies specified in the FPPP. Routine visual inspections performed are undocumented.

Hard copies of the Maintenance Facility annual comprehensive stormwater inspections are available upon request.

Maintenance Facility Releases

Table 18 summarizes equipment leak/spill issues observed during Maintenance Facility comprehensive routine stormwater inspections performed by the Stormwater Division. In

addition, 6 Reportable Release Incidents (RRIs) were documented and reported to the Stormwater Division. No leaks/spills qualified for reporting under NDEP's Spill Reporting guidelines.

Program Evaluation

This program is rated as *Good* with refinement needed.

The Stormwater Division has identified opportunities to enhance communication with Maintenance Facility staff regarding FPPP implementation and improve inspection documentation and incident tracking/follow-up.

The NDOT's Stormwater Division will develop procedures to improve the documentation and reporting of RRIs.

Public Street Maintenance

Highway Maintenance

Tables 19 thru 25 summarize stormwater quality related Maintenance Crew tasks in select MS4 areas of the state as well as statewide. Please note for the following tasks:

- Repair Fill and Cut Slopes: Material is removed and utilized onsite (i.e. recycled) or removed and hauled offsite.
- Remove Debris and Pick-Up Trash Bags: Trash collected as part of the Adopt-A-Highway program may be incorporated within this task.
- Dry-Chemical Anti-Icing Agent: A variety of products may be used, notably Ice Slicer.
- Treated Lane Miles (Brine) and (MgCl): Applied as pre-treatment.
- Bridge Treatment (KCH_3COO): Applied on 4 bridge structures along I-580 (WA ~ 9.5 to 14.5).

As part of these routine maintenance activities, 4,916 pipes[6] and 765 drop inlets were inspected. Due to discrepancies with the storm sewer asset database, exact numbers for inspections of other storm sewer system assets (e.g. sand/oil interceptors) cannot be provided.

No sweeper waste was recycled, and all waste material removed from the Permit Area was properly disposed of.

[6] A generic term that refers to a variety of structural conveyance structures notably culverts, reinforced concrete boxes, arch pipes, etc.

Stabilization of 3:1 Slope Area

The NDOT's Stormwater Division continued to evaluate projects (i.e. slope assessments) during the design phase to identify slopes 3:1 or greater in need of erosion control measures. Parameters that are typically evaluated include severity of erosion, the extent of sediment migration, and whether the inclusion of additional post-construction stabilization measures (i.e. above and beyond current design measures) are warranted. Recommendations for mitigation measures for erosion control are submitted to NDOT's Design Division for consideration (as appropriate).

Construction contract 3701 (closed out during the Reporting Period) underwent slope stabilization measures on 5 slope assessment areas.

Storm Sewer System Inspection and Maintenance Guide

This document continues to be developed with the anticipation it will be completed and published in FY 2020.

Program Evaluation

This program is rated as *Excellent* with refinement needed.

The Stormwater Division has identified discrepancies with storm sewer asset inventory information. Maintenance of the data is ongoing and efforts to correct the data are underway.

District Maintenance personnel continue to provide a high level of service statewide while performing stormwater pollution control related tasks despite the multitude of challenges faced.

Pesticide and Fertilizer Application

Application Practices

Tables 19 thru 24 summarize the quantities of fertilizer applied by District Maintenance Crews statewide. Overall, fertilizer application was applied in limited amounts statewide with the bulk of the material applied as part of landscaping efforts within the Washoe County MS4 area. Additionally, 12 construction contracts closed out during the Reporting Period reported the use of soil amendments consisting of various products such as humic substances, mycorrhizae, etc. in lieu of traditional fertilizer products.

Tables 25 and 26 summarize herbicide quantities and products applied by District Maintenance Crews and contractor personnel statewide.

Applicator Training

NDOT's Maintenance Crews continue to receive training for the application of herbicides and fertilizers through the Maintenance Stormwater Training Module as well as supplemental training when available (refer to the Stormwater Education section of this annual report).

Vegetation Control Management Plans

The NDOT did not develop, nor implement, any "Vegetation Control Management Plans" during the Reporting Period.

Program Evaluation

This program is rated as *Excellent* with continued refinement as needed.

NDOT continues to responsibly apply herbicide along state highway rights-of-way in support of various objectives such as noxious weed abatement efforts, wildfire prevention, and to maintain a level of public safety. Fertilizer use is very limited statewide with most of the products applied in select landscaped areas within the Washoe County MS4 area. The NDOT continues to develop post-construction revegetation prescriptions without incorporating straight fertilizer products.

Discharges to Sanitary Sewer Systems

There is nothing to report as NDOT's status with discharges to sanitary sewer systems did not change. The NDOT maintains existing authorizations. The Stormwater Division is unaware of any new instances of stormwater discharge into a sanitary sewer system and consequently did not procure any new authorizations.

Program Evaluation

This program is rated as *Excellent* with continued refinement as needed.

Other Reporting Requirements

Progress with Achieving Measurable Goals

Measurable goals were developed as part of the NDOT's Draft Plan currently undergoing review by NDEP. Below is a summary of those measurable goals that are continuous or have progress benchmarks set during the Reporting Period.

Legal Authority

- Review the *Standard Specifications for Road and Bridge Construction* and perform updates as appropriate.

- The *Standard Specifications for Road and Bridge Construction* was reviewed. Changes have been proposed and continue to undergo internal review.

- Review the *Terms and Conditions Relating to Right-of-Way Occupancy Permits* and perform updates as appropriate.
  - The *Terms and Conditions Relating to Right-of-Way Occupancy Permits* was reviewed and changes made as appropriate.

Stormwater Education Program

- Achieve at least 80% compliance of stormwater training requirements for NDOT personnel for all discipline specific stormwater trainings.
  - The NDOT achieved this goal for the following training courses: Introduction to Stormwater (100%), Water Pollution Control Manager (93%), and Stormwater Management for Equipment Shops (86%). Stormwater Division Design Section personnel met their training requirements as well (100%). The NDOT fell slightly short of this goal for the following training courses: Maintenance Stormwater Training (75%) and Introduction to Construction Site Stormwater Management Training (77%).

Public Participation/Involvement Program

- Maintain the Stormwater Program website and update accordingly.
  - The Stormwater Program website was consistently maintained throughout the Reporting Period.
- Maintain Stormwater Program social media platforms.
  - Stormwater Program social media platforms were consistently maintained throughout the Reporting Period.
- Participate in at least one public outreach event in each NDOT District.
  - The NDOT participated in multiple public outreach events in each NDOT District, notably Carson City, Elko, and Las Vegas.

Maps and Outfalls Program

- Refine major outfall mapping data
  - Major outfall mapping data continued to be refined. At the time of reporting, the NDOT has mapped and verified 49 major outfalls.

Discharges to Water Quality Impaired Waters Program

- Within six (6) months of publishing by NDEP, develop a plan for identifying and evaluating stormwater discharges from the MS4 into future State 303(d) and TMDL listed WOUS.
    - The NDEP did not publish a new listing of State 303(d) and TMDL listed WOUS during the Reporting Period; consequently, a plan was not developed.

Construction Site BMPs Program

- Perform oversight and QA construction site stormwater inspections at the specified Plan frequencies.
    - Oversight and QA construction site stormwater inspections were performed by NDOT personnel at the specified Plan frequencies. Minor shortcomings were attributed to miscommunication and reduced staffing from personnel turnover. The Stormwater Division will evaluate measures to help resolve future incidents of miscommunication.
- Perform SWPPP reviews on all NDOT construction projects covered under the CGP.[7]
    - Contractor SWPPPs were reviewed by either Construction Crew or Stormwater Division personnel for all 4-digit construction projects.
- Review the *Construction Site Best Management Practices (BMPs) Manual* and perform updates as appropriate.
    - The *Construction Site Best Management Practices (BMPs) Manual* was reviewed; however, updates were not warranted.

New Development and Redevelopment Program

- Review Headquarters generated designs for new development and redevelopment projects and incorporate post-construction BMPs as appropriate.
    - Headquarters generated designs for new development and redevelopment projects were reviewed by Stormwater Division Design Section staff with post-construction BMPs incorporated as appropriate.
- Review the *Planning and Design Guide* and perform updates as appropriate.
    - The *Planning and Design Guide* was reviewed; however, updates were not warranted.

[7] Stormwater Construction General Permit NVR100000 issued by the NDEP.

Illicit Discharge Detection and Elimination Program

- Perform routine monitoring on 20% of all identified major outfalls statewide.
    - 20 of the 49 identified major outfalls (40%) underwent a dry weather inspection.
- Perform follow-up routine monitoring on 100% of the major outfalls that had a confirmed illicit discharge the previous year. Follow-up monitoring will occur at least once per year until there are no signs of subsequent illicit discharges.
    - There were no confirmed illicit discharges identified as part of routine major outfall monitoring efforts performed the previous fiscal year. Consequently, follow-up monitoring was not performed.
- Document and respond to (as appropriate) all illicit discharge incidents reported to the Stormwater Division.
    - All illicit discharge incidents reported to the Stormwater Division were documented and underwent appropriate responsive action.
- Review the *Field Guide for the Detection and Elimination of Illicit Discharges* and perform updates as appropriate.
    - The *Field Guide for the Detection and Elimination of Illicit Discharges* was reviewed; however, updates were not warranted.
- Review the *Illicit Discharge Field Investigation Procedures Manual* and perform updates as appropriate.
    - The *Illicit Discharge Field Investigation Procedures Manual* was reviewed; however, updates were not warranted.

Industrial Facility Monitoring and Control Program

- Perform routine monitoring on 20% of identified industrial facilities (i.e. non-material source sites) statewide that directly discharge stormwater runoff into the NDOT's MS4.
    - Routine monitoring was performed on 100% of identified industrial facilities.
- Review and update as necessary the list of identified industrial facilities subject to routine monitoring, including a listing of those facilities that are contributing a known substantial pollutant loading to the NDOT's MS4.
    - Thirteen new facility assessments were performed; the list of industrial facilities subject to routine monitoring was updated as appropriate. To date, the NDOT has not identified any industrial facilities contributing a known substantial pollutant loading to the NDOT's MS4.

Non-Metallic Mineral Mining and Dressing Facility Program

- Update material source site mapping data as needed
    - Mapping data continues to undergo refinement and is updated as appropriate.
- Review the *Maintenance Source Site Stormwater Management Guide* and update accordingly
    - The *Maintenance Source Site Stormwater Management Guide* was developed during the Reporting Period. This document will be reviewed during subsequent Reporting Periods with updates performed as appropriate.

Maintenance Facility Program

- Review the FPPP(s) and update accordingly
    - The FPPP was reviewed and an updated document is scheduled for release in FY 2020.[8]
- Review the *Maintenance Facility Stormwater Best Management Practices (BMPs) Manual* and update accordingly
    - The *Maintenance Facility Stormwater Best Management Practices (BMPs) Manual* was reviewed; however, updates were not warranted.

Public Street Maintenance Program

- Inspect, record condition, and maintain (as needed) 10% of the storm sewer system statewide.
    - The NDOT fell slightly short of this measurable goal with an estimated 9.3%.
- Review the *Storm Sewer System Inspection and Maintenance Guide* and update accordingly
    - This document (previously titled *Stormwater Operations & Maintenance Plan*) was reviewed. Updates to this document are scheduled to be completed during the FY 2020 Reporting Period.

Pesticide and Fertilizer Program

- Ensure Maintenance personnel are properly trained for herbicide and fertilizer application
    - Herbicide and fertilizer application training is a component of the NDOT's Maintenance Stormwater Training. Additionally, Maintenance personnel completed Pesticide Applicator Training facilitated by the Nevada Local Technical

[8] The updated FPPP was published in July of 2019.

Assistance Program, Nevada Department of Agriculture, and the University of Nevada Cooperative Extension.

Discharges to Sanitary Sewer Systems

- Coordinate with the Districts annually to ensure written authorizations are obtained from the appropriate municipal authority prior to discharging stormwater into the sanitary sewer system.
    - The NDOT maintains written approval to discharge into select sanitary sewer systems as stated in the Draft Plan. The Stormwater Division was not informed of any other instance of stormwater discharges into sanitary sewer systems; consequently, no new approvals were obtained.

Changes to Measurable Goals

A new set of Measurable Goals were developed as part of the Draft Plan. Consequently, there is nothing to report as FY 2019 was the first year of Measurable Goal implementation.

Water Quality Improvement and Degradation

Data from stormwater monitoring associated with the Lake Tahoe IMP (refer to Stormwater Monitoring Summary in this annual report) indicate both a positive and negative treatment benefit from stormwater treatment devices receiving stormwater runoff generated from SR-431, suggesting both potential degradation and improvement (constituent and device dependent, refer to Table 27).

Attainment of Water Quality Standards

The NDOT is unaware of any effects on attainment of water quality standards attributable to the implementation of its SWMP.

Summary of Stormwater Activities Planned for FY 2020

The NDOT will continue to implement its day-to-day SWMP related activities during FY 2020. Below is a summary of specific new stormwater activities planned for implementation in FY 2020.

- The NDOT entered into a formal agreement with the Nevada Broadcaster's Association to assist with developing and implementing a media component of the NDOT's stormwater public outreach efforts. The estimated project cost is $150,000. If executed, project activities are expected to be ongoing throughout FY 2020.
- The NDOT is in the process of securing a service provider agreement to assist with implementing a public outreach and education project specifically for local schools.

Schools will develop stormwater pollution plans specifically for their respective facility grounds. The estimated project cost is $75,000. If executed, project activities are expected to be ongoing throughout FY 2020.

- The NDOT is in the process of securing a service provider agreement that will deliver a commercial "off the shelf" solution in support of its water quality monitoring efforts. The estimated project cost is $250,000. If executed, project activities are expected to commence mid to late FY 2020.
- The NDOT, with service provider assistance, will facilitate a new stormwater training focusing on MS4 Permit audits. The estimated project cost is $58,500. Project activities are expected to be ongoing throughout the first half of FY 2020.
- The NDOT will serve as committee chair for the Nevada Water Innovation Institute beginning in early FY 2020. Financial implications are unknown but expected to be minimal.
- It is anticipated that the online Stormwater Awareness Training will be revamped. Financial implications are unknown but expected to be minimal. This effort is anticipated to commence mid FY 2020.
- Monitoring stations are planned to be installed at 2 additional stormwater discharge points for the US-50 – Clear Creek Watershed runoff characterization monitoring study. The additional information is expected to not only enhance the quality of data in support of existing study goals, but to assist with water quality modeling calibration efforts as well. If executed, the estimated project cost for the increased monitoring is $12,000. Equipment installation is expected mid to late FY 2020.
- New monitoring equipment is planned to be installed at the Las Vegas North Maintenance Facility. Equipment installation is expected to commence mid FY 2020 at minimal cost.

Known Estimates of Pollutant Loading Reductions from the Implementation of SWMP Elements

Table 28 summarizes estimated load reductions of specific water quality constituents from the installation of post-construction BMPs on projects awarded and completed during the Reporting Period. Source control BMPs (e.g. riprap, revegetation, etc.) are implemented on all projects with treatment controls or with CGP coverage.

Table 27 summarizes load reductions from manufactured stormwater treatment devices installed as part of the Lake Tahoe IMP monitoring study (refer to Stormwater Monitoring Summary of this annual report).

SWMP Expenditures and Next Fiscal Year's Estimated Budget

Table 29 summarizes SWMP related expenditures during the Reporting Period. The Stormwater Division continued operations with 58 full time employees[9] (53 staff level and 5 admin level employees) as depicted on the organizational charge provided in the Draft Plan. The 58 full time employees do not include employees staffed within other NDOT Divisions that assist with SWMP implementation (e.g. District Construction and Maintenance Crews).

The NDOT has allocated approximately $6.5 million dollars towards the administration and implementation of the SWMP during FY 2020. This does not include funding allocated to other ancillary programs that support SWMP implementation (e.g. construction costs, maintenance costs, etc.). Funding for these programs in support of SWMP implementation cannot be extrapolated at the beginning of the FY but can be reported at the end of the FY.

[9] The total number of employees at any given point during the Reporting Period fluctuates as a result of employee turnover.

Tables and Figures

Table 1. Number of NDOT stormwater trainings conducted in each District.

Training	District I	District II	District III	Total
Maintenance Stormwater Training	3	4	2	9
Introduction to Construction Site Stormwater Management	2	1	1	4
Water Pollution Control Manager	4	2	1	7
Water Pollution Control Manager (Refresher)	4	2	1	7
Stormwater Management for Equipment Shops	2	2	-----[10]	4
Total	15	11	5	31

[10] No trainings were held in District III due to all targeted staff current with training requirements. Training requirements could be satisfied upon previous completion of the defunct Maintenance Stormwater Training.

Table 2. The number of NDOT personnel trained in each District and the corresponding training module.

Training	Number of NDOT Personnel Trained
Introduction to Stormwater	11
Maintenance Stormwater Training	137
Introduction to Construction Site Stormwater Management	39
Water Pollution Control Manager (Including Refresher)	193[11]
Stormwater Management for Equipment Shops	77
Total	457

[11] This includes 114 non-NDOT personnel (e.g. construction contractors).

Table 3. Analytics of NDOT's *@loveNVwaters* Facebook page.

Description	Total
Likes	727
Follows	743
Posts	304
Videos	37
Views	41,645
Daily Impressions	188.5

Table 4. Stormwater outreach-related social media platforms and associated analytics.

Platform	Analytics
Instagram	483 Followers 23,000 Reaches 35,000 Impressions
Twitter	101,693 Reaches

Table 5. Results of the AAH and SAH litter removal programs statewide.[12]

Adopt-A-Highway			
District	Participants	Bags of Litter	Miles Cleaned
I	65	4	41.5
II	3	2	4
III	39	20	39
Total	107	26	84.5
Sponsor-A-Highway			
	Participants	Bags of Litter	Miles Cleaned
Total	39	6,579	1,567

[12] Statewide numbers are only available for the SAH program.

Table 6. NDOT construction contracts awarded during the Reporting Period that procured CGP coverage along with their corresponding CGP CSW number.[13]

Contract No.	Construction General Permit CSW No.
3716	44924
3722	44936
3723	44992
3724	45541
3725	45065
3728	45121
3730	45027
3734	45321
3736	45653
3738	45516
3739	45868
3744	45418
3745	45568
3752	45798
3753	45711
3754	45587
3755	45701
3758	45790
3762	46444
3763	46055
3768	46176
3774	46123 (Pending)
3776	46300
3769-READV	46425
803-19	46396 (Pending)

[13] Contracts 3774 and 803-19 had CGP coverage "Pending" per NDEP's website at the time of reporting. It is expected that the "Pending" status will be resolved prior to the contract's respective Notice to Proceed date.

Table 7. NDOT construction contracts closed out during the Reporting Period, their corresponding CGP CSW number, and status of permit termination.[14]

Contract No.	Construction General Permit CSW No.	Status
3605	41534	Terminated
3614-CMAR	41337	Terminated
3615	41871	Transferred to NDOT
3630	42216	Terminated
3651	42932	Terminated
3652	42920	Terminated
3658	42921	Terminated
3662	43193	Terminated
3668	43356	Terminated
3690	43955	Terminated
3694	44119	Terminated
3701	44165	Transferred to NDOT
3701	44308	Terminated
3705	44290	Open
3705	44308	Terminated
3721	44919	Terminated

[14] Contract 3705 was covered under 2 CGPs (CSW-44290 for the roadway construction limits and CSW-44308 for a material site). The Notice of Termination (NOT) has been filed for CSW-44290; however, the NDEP has not processed the NOT at the time of reporting, hence the permit's "Open" status.

Table 8. Summary of construction site oversight stormwater inspections performed by NDOT personnel at contracted construction sites statewide.

	Number of Inspections (Construction Crew)	Number of Inspections (Stormwater Division)	Total Number of Inspections
District I	495	60	555
District II	457	10	467
District III	239	36	275
Total	1,191	106	1,297

Table 9. Summary of construction site stormwater inspections performed by NDOT personnel at CGP transferred construction sites statewide.

	Number of Inspections (Maintenance Crew)	Number of Inspections (Stormwater Division)	Total Number of Inspections
District I	10	1	11
District II	10	2	12
District III	11	11	22
Total	31	14	45

Table 10. The number of illicit discharge incidents reported to the Stormwater Division broken down by NDOT District and incident closure status.

	District I	District II	District III	Total
Total Incidents Reported	24	21	9	53
Incidents Confirmed Illicit	19	19	6	44
Closure Status	Open – 8 Closed – 11	Open – 5 Closed – 14	Open – 2 Closed – 4	Open – 15 Closed – 29

Table 11. The number of non-NDOT industrial facilities evaluated for potential stormwater discharges into the NDOT's right-of-way.[15]

Industrial Sites	District I	District II	District III	Total
Re-Assessed	45 (6)	26 (5)	14 (2)	85 (13)
New Assessments	13 (-----)	----- (-----)	1 (-----)	14 (-----)
Total	58 (6)	26 (5)	15 (2)	99 (13)

[15] Those sites categorized as SARA 313 sites are shown in parenthesis, e.g. 6 of the 45 sites re-assessed in District 1 are SARA 313 sites.

Table 12. Summary of Material Source Site comprehensive stormwater inspections.

	Inspections	Compliance Issues	Outstanding Compliance Issues
District 1	8	6	-----
District 2	1	-----	-----
District 3	4	-----	-----
Total	13	6	-----

Table 13. Summary of non-compliance issues documented during Material Source Site comprehensive stormwater inspections.

Deficiency Category	District I	District II	District III	Total
Spills/Leaks	-----	-----	-----	-----
BMPs	-----	-----	-----	-----
Housekeeping	6	-----	-----	-----
Total	6	-----	-----	-----

Table 14. List of FPPP covered Maintenance Facilities.

Major Maintenance Facilities				
Name	Address/Route	County	Milepost	District
Las Vegas-North Station	123 E. Washington Ave., Las Vegas, NV 89101	CL	-----	1
Las Vegas-South Station	6610 Ullom Dr., Las Vegas, NV 89188	CL	-----	1
Tonopah Station	US-6	NY	1.8	1
Carson City Station	1250 Oregon St., Carson City, NV 89712	CC	-----	2
Fallon Station	888 Harrigan Rd., Fallon, NV 89406	CH	-----	2
Reno-Sparks Station	310 Galletti Wy., Sparks, NV 89431	WA	-----	2
Elko Station	1951 Idaho St., Elko, NV 89801	EL	-----	3
Ely Station	1401 E. Aultman, Ely, NV 89301	WP	-----	3
Wells Station	SR-223	EL	74.9	3
Winnemucca Station	725 W. 4th St., Winnemucca, NV 89445	HU	-----	3
Minor A Maintenance Facilities				
Flamingo Yard	I-515	Clark	12.8	1
Mt. Charleston Station	SR-157	Clark	5.1	1
Mountain Springs Station	SR-160	Clark	21.3	1
Searchlight Station	SR-164	Clark	18.6	1
Glendale Station	SR-169	Clark	24.2	1
Panaca Station	SR-319	Lincoln	52.0	1
Big Smokey Station	SR-376	Nye	53.4	1
Montgomery Pass Station	US-6	Mineral	8.4	1
Blue Jay Station	US-6	Nye	65.8	1
Alamo Station	US-93	Lincoln	39.0	1
Old Indian Springs Station	US-95	Clark	123.3	1
Goldfield Station	US-95	Esmeralda	19.5	1
Mina Station	US-95	Mineral	15.7	1
Beatty Station	US-95	Nye	59.9	1
Lovelock Station	690 Grinnel Ave., Lovelock, 89419	Pershing	N/A	2
Cold Springs Station	ARCH-01	Churchill	0.0	2
Lovelock South-Yard	FRPE01	Pershing	16.5	2
Clear Acre Yard	I-580	Washoe	27.2	2

Table 14 (cont'd).

Boomtown Yard	I-80	Washoe	4.0	2
Logging Road Lane Yard	Logging Road Lane	Douglas	N/A	2
Carson City 5th St. Yard	None	Carson City	N/A	2
Yerington Station	SR-208	Lyon	29.0	2
Log Cabin Yard	SR-339	Lyon	11.2	2
Virginia City Station	SR-341	Storey	2.5	2
Lovelock North (KOA) Yard	SR-396	Pershing	1.6	2
Fernley Station	SR-427	Lyon	1.0	2
Comanche Yard	SR-429	Washoe	7.4	2
SR-431 WA 23.9 Yard	SR-431	WA	23.9	2
Incline Village Station	SR-431	Washoe	0.1	2
Mt. Rose Station	SR-431	Washoe	13.0	2
Galena Creek Station	SR-431	Washoe	17.3	2
Wellington Station	SR-829	Lyon	3.0	2
Gardnerville Station	US-395	Douglas	18.8	2
Stead Yard	US-395	Washoe	34.8	2
Fairview Yard	US-50	Carson City	10.7	2
Trento Yard	US-50	Churchill	12.9	2
Spooner Station	US-50	Douglas	12.0	2
Spooner East Yard	US-50	Douglas	13.2	2
Dayton/Lafond Yard	US-50	Lyon	12.0	2
Silver Springs Yard	US-50	Lyon	28.3	2
Smart Yard	US-95	Churchill	23.7	2
Hawthorne Station	US-95	Mineral	49.4	2
Old Pequop Station	FREL43	Elko	97.6	3
Wendover Station	FREL459	Elko	0.5	3
Salvage Yard	FRHU15	Humboldt	6.3	3
Susie Creek Yard	I-80	Elko	4.2	3
East of Wells Yard	I-80	Elko	76.7	3
Emigrant Pass Station	I-80	Eureka	16.8	3
I-80 LA 4.0 Yard	I-80	Lander	4.0	3
Quinn River Station	SR-140	Humboldt	51.8	3
North Fork Station	SR-225	Elko	77.9	3
Independence Valley Station	SR-226	Elko	19.6	3
Ruby Valley Station	SR-229	Elko	35.5	3
Battle Mountain Station	SR-304	Lander	6.6	3

Table 14 (cont'd).

Lund Station	SR-318	White Pine	11.8	3
Eureka Station	US-50	Eureka	36.8	3
Austin Station	US-50	Lander	24.1	3
Old Currant Station	US-6	Nye	127.1	3
Ely Bone Yard	US-6	White Pine	40.7	3
Old Baker Station	US-6	White Pine	91.5	3
Currie Station	US-93	Elko	11.8	3
Contact Station	US-93	Elko	125.5	3
Orovada Station	US-95	Humboldt	43.5	3
Minor B Maintenance Facilities				
Material Pit NEV058185	US-93	LN	28.8	1
Material Pit LN02-10	US-93	LN	34.9	1
Material Pit LN02-07	US-93	LN	48.2	1
Material Pit LN03-03	US-93	LN	52.0	1
Material Pit LN03-01	US-93	LN	77.1	1
Material Pit LN05-02	US-93	LN	99.8	1
Material Pit LN05-01	US-93	LN	108.4	1
Material Pit LN06-01	US-93	LN	111.7	1
Material Pit LN07-03	US-93	LN	124.4	1
Material Pit LN07-02	US-93	LN	130.6	1
Material Pit LN08-01	US-93	LN	148.2	1
Material Pit LN08-03	US-93	LN	158.2	1
Material Pit LN08-02	US-93	LN	163.2	1
Material Pit NEV057851	US-93	LN	171.0	1
Material Pit CL09-04	US-95	CL	1.0	1
Material Pit CL10-04	US-95	CL	44.0	1
Material Pit CL18-03	US-95	CL	117.8	1
Material Pit CL19-01	US-95	CL	123.4	1
Material Pit CL09-03	US-95	CL	15.8	1
Material Pit CL09-01	US-95	CL	18.0	1

Table 14 (cont'd).

Material Pit CL11-06	US-95	CL	52.0	1
Material Pit CL18-02	US-95	CL	98.8	1
Material Pit ES03-08	US-95	ES	9.0	1
Material Pit ES05-02	US-95	ES	85.9	1
Material Pit ES04-01	US-95	ES	24.5	1
Material Pit MI01-04	US-95	MI	15.5	1
Material Pit MI01-06	US-95	MI	17.4	1
Material Pit NY08-06	US-95	NY	58.4	1
Material Pit NY10-04	US-95	NY	100.5	1
Material Pit NY07-06	US-95	NY	24.5	1
Material Pit NY09-03	US-95	NY	87.5	1
Material Stockpile	Fir St., Gerlach	WA	N/A	2
Material Stockpile	FRWA15	WA	0.2	2
Material Stockpile	I-80	CH	4.1	2
Material Stockpile	I-80	PE	31.0	2
Material Stockpile	I-80	PE	49.9	2
Material Pit WA71-01	Short Lane	WA	N/A	2
Material Stockpile	SR-208	LY	0.8	2
Material Pit LY14-05	SR-208	LY	0.8	2
Material Stockpile	SR-208	LY	10.0	2
Material Stockpile	SR-208	LY	18.0	2
Material Stockpile	SR-338	LY	9.5	2
Material Pit LY34-02	SR-339	LY	8.1	2
Material Stockpile	SR-341	LY	0.6	2
Material Stockpile	SR-341	ST	9.2	2
Material Stockpile	SR-359	MI	20.4	2
Material Stockpile	SR-359	MI	32.5	2
Material Stockpile	SR-445	WA	22.1	2
Material Stockpile	SR-447	WA	8.0	2
Material Pit WA37-03	SR-447	WA	44.0	2
Material Pit LY13-01	SR-824	LY	3.6	2
Material Stockpile	US-395	DO	8.8	2
Material Stockpile	US-50	CH	60.5	2
Material Stockpile	US-50	LY	29.5	2
Material Stockpile	US-95	CH	58.9	2
Material Pit MI02-04	US-95	MI	33.0	2

Table 14 (cont'd).

Material Pit LY21-01	US-95A	LY	27.8	2
Material Stockpile	US-95A	MI	83.2	2
Material Pit WP08-03	US-6	WP	3.8	3
Material Stockpile	US-6	WP	40.4	3
Material Stockpile	US-6	WP	65.0	3
Material Pit EL13-05	US-93	EL	6.0	3
Material Stockpile	US-93	EL	49.5	3
Material Pit EL14-02	US-93	EL	68.4	3
Material Stockpile	US-93	EL	96.5	3
Material Pit EL16-03	US-93	EL	116.6	3
Material Pit CC020120	US-93	WP	2.0	3
Material Pit CC025129	US-93	WP	59.0	3
Material Pit WP05-01	US-93	WP	71.0	3
Material Pit WP05-04	US-93	WP	85.5	3
Material Stockpile	US-93	WP	92.5	3
Material Pit WP06-02	US-93	WP	108.0	3
Material Pit WP06-03	US-93	WP	108.0	3
Material Stockpile	US-93	WP	112.8	3
Material Pit EL09-01	US-93A	EL	15.6	3
Material Stockpile	US-93A	EL	15.6	3
Material Stockpile	US-93A	EL	30.2	3
Material Pit EL10-01	US-93A	EL	34.0	3
Material Stockpile	US-95	HU	22.2	3
Material Stockpile	US-95	HU	2.5	3
Material Pit HU06-03	US-95	HU	46.1	3
Material Stockpile	US-95	HU	71.1	3

Table 15. Summary of FPPP compliance activities for Major and Minor Facilities.

District I	
Task	Compliance (%)
Stormwater Inspections (FPPP Administrators)	98
Stormwater Inspections (Stormwater Division)	100
Drop Inlet Inspections	100
Sweeping	50
District II	
Task	Compliance (%)
Stormwater Inspections (FPPP Administrators)	124
Stormwater Inspections (Stormwater Division)	100
Drop Inlet Inspections	100
Sweeping	62
District III	
Task	Compliance (%)
Stormwater Inspections (FPPP Administrators)	103
Stormwater Inspections (Stormwater Division)	100
Drop Inlet Inspections	100
Sweeping	50

Table 16. Summary of stormwater pollution control Maintenance tasks performed at designated FPPP Major and Minor Facilities.

Task	Unit of Measurement	Accomplishment	Number of Major Maintenance Facilities	Number of Minor Maintenance Facilities
Clean Sand/Oil Separators	Yd^3	60	2	2
Clean Sediment or Retention Basins	Yd^3	24	2	-----
Clean Culvert Openings	Linear Ft.	1	-----	1
Clean Drop Inlets	Each	3	-----	1
Install/Repair/Replace Pollution Prevention Devices	Man-Hours	322	2	5
Repair Fill and Cut Slopes	Yd^3	534	-----	4
Clean Slotted Drains	Linear Ft.	100	-----	1

Table 17. Summary of Maintenance Facility comprehensive stormwater inspections.

	Inspections	Compliance Issues	Outstanding Compliance Issues[16]
District 1	123	106	3
District 2	61	25	0
District 3	107	7	0
Total	291	138	3

[16] Outstanding at the time of reporting.

Table 18. Summary of non-compliance issues documented during Maintenance Facility comprehensive stormwater inspections.[17]

Deficiency Category	District I	District II	District III	Total
Equipment Spills/Leaks	16	2	1	19
BMPs	28	21	3	52
Housekeeping	62	2	3	67
Total	106	25	7	138

[17] Each issue could involve multiple incidents. For example, the 16 "Equipment Spills/Leaks" issues documented for District 1 could involve more than 16 pieces of equipment.

Table 19. Carson Valley MS4 area Maintenance task summary.

Task	Unit of Measurement	Accomplishment
Clean Culvert Openings	Each	90
Clean Culverts	Linear Ft.	230
Clean Cuts & Ditches	Yd^3	538
Repair Fill and Cut Slopes	Yd^3	4,705
Clean Drop Inlets	Each	670
Clean Retention/Detention Basins	Yd^3	16
Clean Slotted Drains	Linear Ft.	225
Repair, Replace, Extend or Install Culverts	Linear Ft.	10
Install, Repair, Replace Pollution Prevention Devices	Man-Hours	-----
Remove Debris	Yd^3	328
Pick-up Trash Bags	Yd^3	6
Empty Litter Barrels	Each	-----
Pickup Broom Sweeping	Yd^3	722
Sweep/Clean Debris from Structures	Man-Hours	-----
Remove Storm Debris	Yd^3	1
Clean Sand/Oil Separators	Yd^3	-----
Snow and Ice Removal	Man-Hours	3,967
Salt	Yd^3	33
Salt/Sand	Yd^3	1,310
Brine	Gal.	68,580
Liquid-Chemical Anti-Icing Agent (MgCl)	Gal.	-----
Dry-Chemical Anti-Icing Agent	Yd^3	-----
Treated Lane Miles (Brine)	Gal.	46,494
Treated Lane Miles (MgCl)	Gal.	-----
Fertilizer-Liquid	Gal.	-----
Fertilizer-Pellets	Lbs.	-----

Table 20. Elko MS4 area Maintenance task summary.

Task	Unit of Measurement	Accomplishment
Clean Culvert Openings	Each	21
Clean Culverts	Linear Ft.	1,980
Clean Cuts & Ditches	Yd^3	-----
Repair Fill and Cut Slopes	Yd^3	55
Clean Drop Inlets	Each	10
Clean Retention/Detention Basins	Yd^3	-----
Clean Slotted Drains	Linear Ft.	-----
Repair, Replace, Extend or Install Culverts	Linear Ft.	-----
Install, Repair, Replace Pollution Prevention Devices	Man-Hours	-----
Remove Debris	Yd^3	190
Pick-up Trash Bags	Yd^3	16
Empty Litter Barrels	Each	-----
Pickup Broom Sweeping	Yd^3	530
Sweep/Clean Debris from Structures	Man-Hours	-----
Remove Storm Debris	Yd^3	-----
Clean Sand/Oil Separators	Yd^3	-----
Snow and Ice Removal	Man-Hours	3,316
Salt	Yd^3	-----
Salt/Sand	Yd^3	4,549
Brine	Gal.	-----
Liquid-Chemical Anti-Icing Agent (MgCl)	Gal.	-----
Dry-Chemical Anti-Icing Agent	Yd^3	-----
Treated Lane Miles (Brine)	Gal.	-----
Treated Lane Miles (MgCl)	Gal.	-----
Fertilizer-Liquid	Gal.	-----
Fertilizer-Pellets	Lbs.	-----

Table 21. Las Vegas MS4 area Maintenance task summary.

Task	Unit of Measurement	Accomplishment
Clean Culvert Openings	Each	37
Clean Culverts	Linear Ft.	31,854
Clean Cuts & Ditches	Yd^3	110
Repair Fill and Cut Slopes	Yd^3	1,015
Clean Drop Inlets	Each	3,320
Clean Retention/Detention Basins	Yd^3	60
Clean Slotted Drains	Linear Ft.	117
Repair, Replace, Extend or Install Culverts	Linear Ft.	-----
Install, Repair, Replace Pollution Prevention Devices	Man-Hours	136
Remove Debris	Yd^3	8,122
Pick-up Trash Bags	Yd^3	14
Empty Litter Barrels	Each	188
Pickup Broom Sweeping	Yd^3	6,661
Sweep/Clean Debris from Structures	Man-Hours	244
Remove Storm Debris	Yd^3	11
Clean Sand/Oil Separators	Yd^3	16
Snow and Ice Removal	Man-Hours	77
Salt	Yd^3	-----
Salt/Sand	Yd^3	-----
Brine	Gal.	-----
Liquid-Chemical Anti-Icing Agent (MgCl)	Gal.	-----
Dry-Chemical Anti-Icing Agent	Yd^3	16
Treated Lane Miles (Brine)	Gal.	-----
Treated Lane Miles (MgCl)	Gal.	-----
Fertilizer-Liquid	Gal.	-----
Fertilizer-Pellets	Lbs.	-----

Table 22. Washoe County MS4 area Maintenance task summary.

Task	Unit of Measurement	Accomplishment
Clean Culvert Openings	Each	214
Clean Culverts	Linear Ft.	1,750
Clean Cuts & Ditches	Yd^3	10
Repair Fill and Cut Slopes	Yd^3	2,378
Clean Drop Inlets	Each	2,694
Clean Retention/Detention Basins	Yd^3	200
Clean Slotted Drains	Linear Ft.	-----
Repair, Replace, Extend or Install Culverts	Linear Ft.	203
Install, Repair, Replace Pollution Prevention Devices	Man-Hours	152
Remove Debris	Yd^3	1,562
Pick-up Trash Bags	Yd^3	-----
Empty Litter Barrels	Each	2
Pickup Broom Sweeping	Yd^3	7,427
Sweep/Clean Debris from Structures	Man-Hours	-----
Remove Storm Debris	Yd^3	45
Clean Sand/Oil Separators	Yd^3	-----
Snow and Ice Removal	Man-Hours	6,947
Salt	Yd^3	357
Salt/Sand	Yd^3	5,395
Brine	Gal.	114,107
Liquid-Chemical Anti-Icing Agent (MgCl)	Gal.	-----
Dry-Chemical Anti-Icing Agent	Yd^3	-----
Treated Lane Miles (Brine)	Gal.	112,871
Treated Lane Miles (MgCl)	Gal.	-----
Fertilizer-Liquid	Gal.	7,905
Fertilizer-Pellets	Lbs.	60

Table 23. Lake Tahoe MS4 area Maintenance task summary.[18]

Task	Unit of Measurement	Accomplishment
Clean Culvert Openings	Each	25
Clean Culverts	Linear Ft.	30
Clean Cuts & Ditches	Yd^3	415
Repair Fill and Cut Slopes	Yd^3	778
Clean Drop Inlets	Each	662
Clean Retention/Detention Basins	Yd^3	52
Clean Slotted Drains	Linear Ft.	6
Repair, Replace, Extend or Install Culverts	Linear Ft.	-----
Install, Repair, Replace Pollution Prevention Devices	Man-Hours	27
Remove Debris	Yd^3	231
Pick-up Trash Bags	Yd^3	-----
Empty Litter Barrels	Each	-----
Pickup Broom Sweeping	Yd^3	1,047
Sweep/Clean Debris from Structures	Man-Hours	-----
Remove Storm Debris	Yd^3	32
Clean Sand/Oil Separators	Yd^3	10
Snow and Ice Removal	Man-Hours	9,788
Salt	Yd^3	564
Salt/Sand	Yd^3	1,529
Brine	Gal.	83,653
Liquid-Chemical Anti-Icing Agent (MgCl)	Gal.	-----
Dry-Chemical Anti-Icing Agent	Yd^3	-----
Treated Lane Miles (Brine)	Gal.	40,529
Treated Lane Miles (MgCl)	Gal.	-----
Fertilizer-Liquid	Gal.	-----
Fertilizer-Pellets	Lbs.	-----

[18] NDOT's contractor removed an additional 317 yd^3 of material from the storm sewer system.

Table 24. Statewide MS4 area Maintenance task summary.[19]

Task	Unit of Measurement	Accomplishment
Clean Culvert Openings	Each	1,706
Clean Culverts	Linear Ft.	168,882
Clean Cuts & Ditches	Yd^3	13,120
Repair Fill and Cut Slopes	Yd^3	185,172
Clean Drop Inlets	Each	8,075
Clean Retention/Detention Basins	Yd^3	513
Clean Slotted Drains	Linear Ft.	481
Repair, Replace, Extend or Install Culverts	Linear Ft.	2,498
Install, Repair, Replace Pollution Prevention Devices	Man-Hours	715
Remove Debris	Yd^3	36,484
Pick-up Trash Bags	Yd^3	692
Empty Litter Barrels	Each	8,280
Pickup Broom Sweeping	Yd^3	31,867
Sweep/Clean Debris from Structures	Man-Hours	2,667
Remove Storm Debris	Yd^3	68,831
Clean Sand/Oil Separators	Yd^3	86
Snow and Ice Removal	Man-Hours	116,605
Salt	Yd^3	1,927
Salt/Sand	Yd^3	133,508
Brine	Gal.	615,656
Liquid-Chemical Anti-Icing Agent (MgCl)	Gal.	2,150
Dry-Chemical Anti-Icing Agent	Yd^3	3,085
Bridge Treatment (KCH_3COO)	Gal.	13,686
Treated Lane Miles (Brine)	Gal.	590,896
Treated Lane Miles (MgCl)	Gal.	-----
Fertilizer-Liquid	Gal.	9,750
Fertilizer-Pellets	Lbs.	110

[19] NDOT's contractor removed an additional 317 yd^3 of material from the storm sewer system in the Lake Tahoe Basin.

Table 25. Summary of herbicide application by Maintenance Crew personnel.

Statewide[20]			
Product	*Category*	*Unit of Measurement*	*Accomplishment*
Denali Ea	Adjuvant	Gal.	75
Insist 90 Surfactant	Adjuvant	Gal.	210
MSO Helena	Adjuvant	Gal.	4
Alligare SMF 75	Herbicide	Oz.	11.5
Alligare 2,4-D	Herbicide	Oz.	4,906
Gallary 75 DF	Herbicide	Lbs.	350
Pendulum	Herbicide	Gal.	205
Portfolio Blend	Herbicide	Gal.	520
Round Up Blend	Herbicide	Gal.	32
Round Up Custom	Herbicide	Gal.	603
Round Up Pro Concentrate	Herbicide	Gal.	5,871
Surflan AS	Herbicide	Gal.	199
Tordon K	Herbicide	Gal.	431
Weedone LV4	Herbicide	Gal.	82
Carson Valley MS4[21]			
Product	*Category*	*Unit of Measurement*	*Accomplishment*
Denali Ea	Adjuvant	Gal.	8
Alligare 2,4-D Amine	Herbicide	Oz.	42
Portfolio Blend	Herbicide	Gal.	45
Round Up Blend	Herbicide	Gal.	5
Round Up Custom	Herbicide	Gal.	60
Round Up Pro Concentrate	Herbicide	Gal.	23
Elko MS4[22]			
Product	*Category*	*Unit of Measurement*	*Accomplishment*
Round Up Custom	Herbicide	Gal.	2
Lake Tahoe MS4			
Product	*Category*	*Unit of Measurement*	*Accomplishment*
-----	-----	-----	-----
Las Vegas Valley MS4[23]			
Product	*Category*	*Unit of Measurement*	*Accomplishment*
Pendulum	Herbicide	Gal.	37
Round Up Blend	Herbicide	Gal.	10

[20] Applied along 3,681 shoulder miles.
[21] Applied along 70 shoulder miles.
[22] Applied along 10 shoulder miles.
[23] Applied along 300 shoulder miles.

Table 25 (cont'd).

Round Up Pro Concentrate	Herbicide	Gal.	1,670
Surflan AS	Herbicide	Gal.	5
Washoe MS4[24]			
Product	*Category*	*Unit of Measurement*	*Accomplishment*
Denali Ea	Adjuvant	Gal.	1
Insist 90 Surfactant	Adjuvant	Gal.	103
Alligare SMF 75	Herbicide	Oz.	2
Alligare 2,4-D Amine	Herbicide	Oz.	2,792
Gallary 75 DF	Herbicide	Lbs.	275
Round Up Custom	Herbicide	Gal.	15
Round Up Pro	Herbicide	Gal.	689
Surflan AS	Herbicide	Gal.	136
Tordon K	Herbicide	Gal.	85

[24] Applied along 495 shoulder miles.

Table 26. Summary of herbicide application performed under county contract and by contractor.

Tri County Weed Control[25]			
Product	*Category*	*Unit of Measurement*	*Accomplishment*
Climb	Adjuvant	Oz.	2
MSO w/Leci-Tech	Adjuvant	Pt.	43
Syl-Tac	Adjuvant	Pt.	100
Escort XP	Herbicide	Oz.	824
Esplanade	Herbicide	Oz.	942
Milestone	Herbicide	Oz.	499
Polaris	Herbicide	Oz.	810
Rainier	Herbicide	Pt.	534
Telar	Herbicide	Oz.	280
Tordon 22K	Herbicide	Oz.	539
Weedar 64	Herbicide	Pt.	1,846
Dye	Indicator Dye	Pt.	141
Churchill County Weed Control[26]			
Product	*Category*	*Unit of Measurement*	*Accomplishment*
Surfactant	Adjuvant	Oz.	73
Base Camp	Herbicide	Oz.	231
Milestone	Herbicide	Oz.	6
Luminate	Indicator Dye	Oz.	7
Douglas County Weed Control[27]			
Product	*Category*	*Unit of Measurement*	*Accomplishment*
Activator 90	Adjuvant	Gal.	18
Attach	Adjuvant	Gal.	14
In-Place	Adjuvant	Gal.	4
Liberate	Adjuvant	Gal.	7
Garlon 4E	Herbicide	Gal.	< 1
Kleenup	Herbicide	Gal.	1.3
Opensite	Herbicide	Lbs.	21
Perspective	Herbicide	Lbs.	6
Sureguard	Herbicide	Lbs.	53
Telar	Herbicide	Lbs.	8
2,4-D	Herbicide	Gal.	14
Turf Trax	Indicator Dye	Qt.	32

[25] Applied along Lincoln, Nye, White Pine, and 7 Clark County State rights-of-way.
[26] Applied along State routes within Churchill County.
[27] Applied along State routes within Douglas County and the Washoe and Carson wetland mitigation areas.

Table 26 (cont'd).

Contractor[28]			
Product	*Category*	*Unit of Measurement*	*Accomplishment*
Nu-Film	Adjuvant	Oz.	766
Bulls-Eye	Herbicide	Oz.	3,064
Control	Herbicide	Oz.	286
Oust	Herbicide	Oz.	919
Razor Pro	Herbicide	Oz.	2,793
Tordon K	Herbicide	Oz.	2,793

[28] Applied along State routes throughout District I.

Table 27. SR-431 stormwater manufactured treatment device performance summary.[29]

	Contech MFS		Jellyfish	
Water Quality Constituent	Average Annual Concentration (mg/L)	Average Annual Load (lbs)	Average Annual Concentration (mg/L)	Average Annual Load (lbs)
Fine Sediment Particles	-28	-104	-121	-183
Total Nitrogen	-0.48	-1.53	+299	+0.32
Total Phosphorus	-0.32	-0.88	-633	0.98

[29] Values represent the difference between treatment device inflow and outflow. A (-) number represents constituent removal; a (+) value represents constituent addition.

Table 28. Summary of estimated pollutant load reductions for post-construction BMPs installed on projects awarded and completed during the Reporting Period.

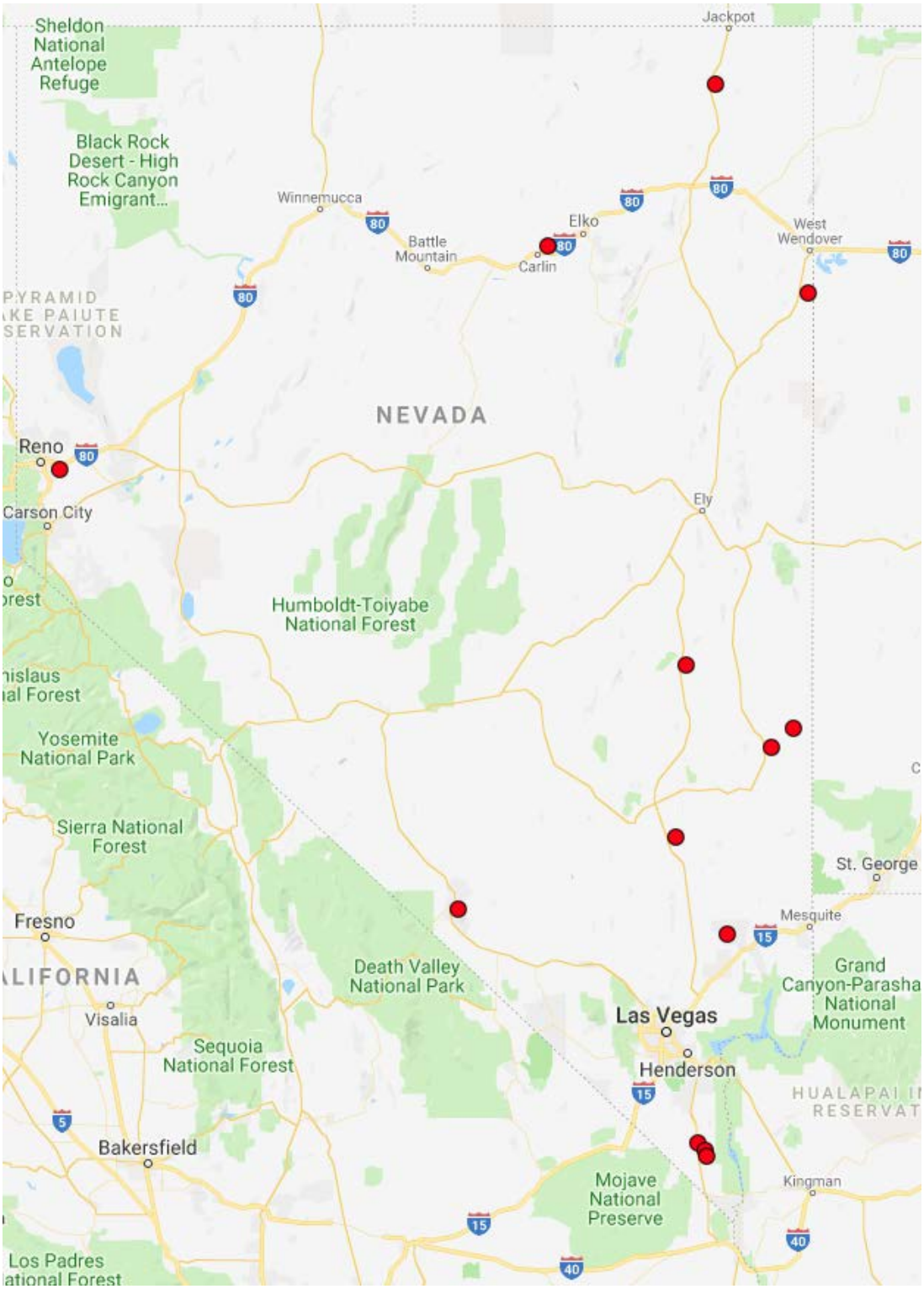
Contract	Status	BMP	TSS	TN	TP	Oil & Grease
3744	Awarded	Infiltration Basin (1)	80%	65%	75%	-----
3716	Awarded	Infiltration Basin (1)	80%	65%	75%	-----
802-19	Awarded	Treatment Vault (1)	80%	-----	-----	-----
3739	Awarded	Treatment Vault (4)	80%	-----	-----	-----
3739	Awarded	Modified Type 2 DI (15)	25%	-----	-----	-----
3739	Awarded	Deep Sump Drop Inlet (7)	25%	-----	-----	-----
802-19	Awarded	Sand/Oil Separator (2)	60%	-----	-----	50%
3607	Completed	Infiltration Basin (2)	80%	65%	75%	-----
3577	Completed	Infiltration Basin (6)	80%	65%	75%	-----
3663	Completed	Deep Sump Drop Inlet (1)	25%	-----	-----	-----
3623	Completed	Deep Sump Drop Inlet (2)	25%	-----	-----	-----

Table 29. Summary of SWMP related expenditures during the Reporting Period.[30]

Category	Amount ($)	Notes
Construction Inspection-Federal Projects	19,140	
Construction Inspection-State Projects	1,927	
Design-Federal Projects	10,587	
Design-State Projects	169,412	
Illicit Discharge Detection & Elimination	32,776	Includes costs associated with statewide on-call hazardous materials cleanup contract
Training and Education	286,055	
Maintenance Facilities	589,365	May include contractor work
Public Outreach	27,459	Includes costs associated with educational materials
Mapping/Database Development	304,883	
Industrial Facility Monitoring & Inspection	8,041	
Field Monitoring	539,566	
Administration	1,797,501	Includes $957 Permit annual fee
Travel	161,823	
Maintenance Facility Inspections	38,505	
Misc. Fees and Fines	-----	
Permanent Erosion Control	379,099,947	Construction contracts
Temporary Pollution Control	6,790,434	Construction contracts
Misc. Pollution Control	367,300	Construction contracts
Dust Control	19,377,129	Construction contracts
Water Quality Projects	5,041,346	
Weed/Pest Control	370,902	
Maintenance Activities	24,561,019	
Equipment Purchases and Leases	184,766	
Total	439,779,883	

[30] Includes reduction to expenses as appropriate. Information reported in this table is based upon best available information.

Figure 1. Map depicting locations (red dots) of current inventory of material source sites (13) subject to Permit coverage.[31]



[31] All 13 material source sites were categorized as “Inactive Mining Phase” sites during the Reporting Period.