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Governor

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION

1263 S. Stewart Street
Carson City, Nevada 89712

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ENVIRONMENTAL PROTECTION

OCT 01 2012



RUDY MALFABON, P.E., Director

October 1, 2012

In Reply Refer to:

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

MS4 Permit NV0023329
Stormwater Management Program
FY 2012 Annual Report

Dear Mr. McGoff:

The Nevada Department of Transportation (NDOT) is submitting the Municipal Separate Storm Sewer Systems (MS4) Stormwater Management Program (Program) Annual Report per the requirements of Permit No. NV0023329 issued to NDOT July 7, 2010. Contents describe NDOT's Program compliance activities for the time period July 1, 2011 through June 30, 2012 (FY 2012).

As always, we appreciate your continued assistance. If you have any questions regarding this information, please contact James Murphy at (775) 888-7889 or jmurphy@dot.state.nv.us.

Sincerely,

Steve M. Cooke, P.E, Chief
Environmental Services Division

SMC/JDM/tkb

Enclosures

Approved
12/28/12
SMC



NEVADA DEPARTMENT OF TRANSPORTATION

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ENVIRONMENTAL PROTECTION

OCT 01 2012



STORMWATER MANAGEMENT PROGRAM

**ANNUAL REPORT FOR FISCAL YEAR 2012
JULY 1, 2011 – JUNE 30, 2012**

Nevada Department of Transportation
Environmental Services 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)]

Steve M. Cooke
Steve M. Cooke, P.E.
Chief, Environmental Services Division

Date: 10/1/12

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) February 23, 2004 and most recently July 7, 2010 (Permit). NDOT has developed a Stormwater Management Program (SWMP) to comply with the 2004 Permit requirements and address stormwater pollution control as it relates to highway planning, design, construction and maintenance activities throughout the State. NDOT is currently in the process of updating the SWMP to coincide with the requirements of the 2010 Permit.

The objective of this Annual Report is to report SWMP related activities as they pertain to the requirements of the Permit. The format of this Annual Report coincides with Parts II-IV of the Permit.

SECTION II. Discharges to Water Quality Impaired Waters

Total Maximum Daily Loads (TMDLs) have been established for 13 designated water quality impaired waterbodies within the state of Nevada. Currently, NDOT has not been issued waste load allocations for stormwater discharge into any designated impaired waterway.

NDOT's Environmental Services Division has made assessments regarding stormwater discharge from NDOT's right-of-way into the following TMDL listed waterways. These assessments will be reiterated in NDOT's forthcoming revised SWMP.

- **Bryant Creek:** In November 2003, NDEP established TMDLs on Bryant Creek for total arsenic, total iron, total nickel, turbidity and total suspended solids (TSS). NDOT does not own or maintain any facilities that impact this waterway.
- **Dixie and Hanks Creeks:** In December of 2010, NDEP established TMDL's for both these waterbodies for elevated stream temperature. NDOT does not own or maintain any facilities that impact these waterways.

The following water quality efforts summarize NDOT's monitoring of stormwater discharge into waterways included on Nevada's 2006 303(d) Impaired Waters List (please refer to Part IV (Stormwater Monitoring) of the Annual Report for more information regarding these studies).

- As part of NDOT's ongoing I-580 Water Quality and Best Management Practices (BMP) Effectiveness Study, several surface waters within the project limits are monitored for construction related water quality impacts associated with the I-580 Freeway Extension Project (Contract 3292). Galena Creek, a waterway currently monitored under this study, is included on Nevada's 2006 303(d) Impaired

Waters List for zinc. NDOT will receive an updated report summarizing water quality monitoring efforts in FY 2013. However, analytical results from previous sampling efforts suggest that NDOT is not a significant contributor to the elevated zinc concentrations in Galena Creek.

NDOT continued stormwater monitoring efforts associated with the Lake Tahoe Basin Stormwater Monitoring Program. Lake Tahoe is on Nevada's 2006 303(d) Impaired Waters List for clarity. Analytical results are variable, but results suggest stormwater treatment capabilities associated with infiltration and sediment basins with regards to total suspended solids (TSS) and turbidity. Six years of sediment and infiltration basin monitoring indicates a 76% to 88% TSS reduction, respectively, when comparing basin influent to effluent. Other notable findings of the study suggest stormwater nutrient load reductions for total phosphorus, dissolved ortho-phosphorus, total Kjeldahl Nitrogen, nitrate, nitrite, total iron and dissolved zinc associated with sediment and infiltration basins. NDOT has various water pollution control structures installed within the Lake Tahoe Basin, e.g. stormwater treatment vaults, riprap lined structures, etc, in an effort to improve the quality of stormwater discharge.

II.C. Discharges to Lake Tahoe and Tributaries to Lake Tahoe

The development of a TMDL addressing nutrient and fine sediment particle loading into Lake Tahoe from stormwater runoff was completed and subsequently approved by the U.S. Environmental Protection Agency in August, 2011. The Permit requires that NDOT enter into a Memorandum of Agreement (MOA) with NDEP to implement strategies to control stormwater runoff and improve the clarity and water quality of Lake Tahoe.

An MOA has yet to be developed between NDOT and NDEP. It is still to be determined by NDEP if NDOT is to enter into an MOA or just utilize language in the Permit for TMDL related compliance. Nonetheless, NDOT anticipates a draft MOA from NDEP could be available for review within the next few months.

With the development of the new SWMP, NDOT will continue to assess stormwater discharging from its infrastructure into impaired waterbodies listed on Nevada's 2006 303(d) Impaired Waters List.

Table 10 (Appendix A) summarizes stormwater related Maintenance activities within the Lake Tahoe Basin.

Data collected from NDOT's Maintenance and Asset Management Division indicates that NDOT removed more material from the right-of-way within the Lake Tahoe Basin (an estimated 1,899 yd³) from cleaning cut slopes, ditches, sediment basins, etc., than what was applied (an estimated 619 yd³) for cut slope repair and sand/salt application during the reporting period. Sweeping activities alone removed more material (an estimated 764 yd³) than what was applied.

SECTION III. Stormwater Management Program

NDOT is required to revise (as necessary) and submit an updated SWMP to NDEP for review and approval by January 7, 2012 per the requirements of the Permit. NDOT entered into an agreement with a service provider in October, 2011 to assist with the redevelopment of NDOT's SWMP to reflect the requirements of the Permit issued in 2010.

NDOT originally stated to NDEP that the SWMP would be submitted for review by May 7, 2012. However, due to unforeseen circumstances with the development of the SWMP, NDOT requested to NDEP an extension of time to September 17, 2012 for SWMP submittal. In response, NDEP agreed to the extension of time, but requested that a current version of the draft SWMP be submitted for review no later than June 1, 2012. NDOT concurred and submitted a draft version of the SWMP to NDEP on May 21, 2012.

NDOT has made significant strides in developing a final draft version of the SWMP for submittal to NDEP by September 17, 2012. NDOT will complete the development of the revised SWMP in FY 2013.

NDOT's Water Quality Section (WQS) within the Environmental Services Division, which is comprised of a Supervisor and Water Quality Specialist, manages and coordinates Permit compliance and oversees the administration of the SWMP. The WQS is a primary contact for regulatory compliance and construction issues associated with the Construction Stormwater General Permit NVR 100000 as well as other water quality related permits, e.g. Section 401 Water Quality Certification. In addition, the WQS reviews Stormwater Pollution Prevention Plans (SWPPPs) and Temporary Working in Waterway/Discharge Permit BMP Plans for NDOT projects, as necessary.

The Environmental Services Division at NDOT is responsible for securing and/or providing oversight of all regulatory permits relative to water quality (with the exception of Tahoe Regional Planning Agency issued permits). Working with other NDOT Divisions, notably Design, Maintenance and Asset Management and Construction, Environmental Services Division assists with identifying and resolving potential regulatory, construction and maintenance issues. The Environmental Services and Construction Divisions as well as the Hydraulics Section (within the Design Division) are tasked with updating NDOT Stormwater Quality manuals, standard specifications and performing environmental monitoring as necessary.

The Environmental Services Division was authorized to create a new position within the Water Quality Section to assist with the administration and implementation of NDOT's SWMP. This position was filled in August of 2011, however the position was vacated shortly afterwards in February, 2012. The position vacancy was posted in spring of 2012 and will be filled in FY 2013.

The U.S. Environmental Protection Agency (EPA) performed a programmatic audit (Audit) of NDOT's SWMP on August 9-12, 2011, with a subsequent report of the findings developed May 10, 2012 (Appendix B). The EPA identified several potential Permit violations. Specifically noted was that NDOT failed to:

- Fully implement the 2005 SWMP
- Develop required pollution prevention plans for all maintenance facilities
- Fully implement an employee training program
- Implement an illicit discharge, detection and elimination program

The EPA, however, found the following NDOT SWMP elements noteworthy:

- Collaboration with local conservation districts to implement sediment reduction measures beyond NDOT's rights-of-way in the Clear Creek Watershed
- Utilization of its Roadway Information System to reduce the amount of salt/brine applied to roadways, decreasing the potential for pollutant discharge.

As a result of the large volume of material (240+pages), the individual site reports conducted by the EPA as part of the Audit (included in Appendix B of the Audit Report) are not included with this Annual Report. However, these individual reports are available upon request.

NDOT began addressing EPA noted deficiencies immediately following the Audit.

The Environmental Services and Construction Divisions continued revising NDOT's Standard Specifications for Road and Bridge Construction in an effort to improve the Construction aspect of the SWMP. The goal is to reinforce NDOT's commitment to water pollution control during and following construction activities by strengthening and clarifying contract related documentation.

NDOT's Product Evaluation Committee continued reviewing and assessing vendor submittals for new temporary and permanent erosion control products for inclusion on NDOT's Qualified Products List.

III.C. MS4 Maps and Outfalls

NDOT's Hydraulics Section is over 90% complete with inventorying and mapping hydraulic facilities, i.e. outfalls, within the right-of-way in the Clear Creek Watershed. A map depicting these features will be made available as part of NDOT's revised SWMP.

NDOT's Hydraulics Section is over 75% complete with inventorying and mapping hydraulic facilities, i.e. outfalls, within the right-of-way in the Lake Tahoe Basin. A map depicting these features will be included in NDOT's revised SWMP sometime in FY 2013.

NDOT Environmental Services and Location Divisions as well as the Hydraulics Section have been working together to develop a protocol for mapping and inventorying hydraulic facilities, e.g. outfalls, within the right-of-way for other areas of the state. The procedure will be described in NDOT's revised SWMP. Maps will be included in the revised SWMP as they are developed; summaries will be provided in future Annual Reports. Under this new program, significant progress has been made with the inventorying of hydraulic facilities within Clark County.

III.D. Discharges to Clear Creek Watershed

NDOT is required to develop a separate Clear Creek Master Stormwater Management Program (CCSWMP) for inclusion into the SWMP. NDOT will include an updated CCSWMP as part of the revised SWMP.

NDOT's Hydraulics Section continued designing and funding small scale, erosion control improvement projects at select drainage and outfall locations within the Clear Creek Watershed in an effort to reduce the impacts of stormwater discharge into Clear Creek. NDOT works directly with the Carson River Conservation District to fund and implement these projects. Erosion control structures typically constructed/implemented as part of these small scale projects include culvert work, riprap channel lining and aprons, slope stabilization, re-grading, sediment removal, applying wood chipped material to disturbed areas and making general improvement to stormwater conveyances. A brief summary of the small scale projects constructed during FY 2012 are described below:

- US-50 near milepost CC 6.6: Removal of sediment from a detention/sediment basin and improved outlet structure; 181 ft. and 40 ft. of riprap lining were installed within two respective stormwater drainages.
- US-50 near milepost CC 4.6: 270 ft. of riprap lining was installed within one stormwater drainage. Construction related disturbed areas were reseeded and mulched.
- US-50 near milepost CC 4.5: 2,451 ft. of riprap lining was installed within several stormwater drainages. Construction related disturbed areas were reseeded and mulched.
- US-50 near milepost CC 3.9: 500 ft. of riprap lining was installed within one stormwater drainage. Construction related disturbed areas were reseeded and mulched.
- US-50 near milepost CC 3.5: 50 ft. of 12 in. high density polyethylene (HDPE) culvert and 42 ft. of riprap lining was installed within one stormwater drainage. Construction related disturbed areas were reseeded and mulched.

- US-50 near milepost CC 3.3: 500 ft. of riprap lining was installed within one stormwater drainage. Construction related disturbed areas were reseeded and mulched.
- US-50 near milepost CC 2.9: Two 24 in. HDPE culverts and 1,960 ft. of riprap lining were installed within one stormwater drainage. Construction related disturbed areas were reseeded and mulched.
- US-50 near milepost CC 0.9: 40 ft. of 15 in. HDPE culvert; 375 ft. of 36 in. HDPE culvert; and 70 ft. of riprap lining were installed within two stormwater drainages. Construction related disturbed areas were reseeded and mulched.

In addition to the work described above, NDOT Maintenance forces performed stormwater improvement work within a single stormwater outfall area off of Old Clear Creek Rd. This effort consisted of removing a portion of a de-graded culvert, regrading and riprap lining the stormwater channel for improved flow and reduced channel scour. This work

NDOT's Hydraulics Section continued working on the watershed-scale US-50 Stormwater Drain Project. Various challenges and constraints have surfaced during the last few years, resulting in several design and schedule modifications. Nonetheless, the ultimate goal of improving the water quality of Clear Creek through infrastructure improvements and source control remains the same. The following updated project schedule has been proposed for 2013 – 2014.

- US-50 Central Clear Creek Watershed Storm Drain Project from milepost CC 3.0 to 5.2. This project includes construction of multiple smaller stormdrains, drop inlets, trench drains, slope flattening, grading, concrete curb and gutter, channel work with stabilization, and slip lining of cross culverts. This project is expected to commence in 2013.
- US-50 Spooner Summit Storm Drain Project from milepost DO 13.0 to 14.0. This project consists of drop inlet replacement, placement of new drop inlets, slope flattening, grading, concrete curb and gutter, channel work with stabilization, and slip lining of cross culverts. This project is expected to commence in 2013.
- US-50 Lower Clear Creek Watershed Storm Drain Project from milepost CC 5.2 to CC 7.6. This project includes construction of a stormdrain-trunkline, drop inlets, trench drains, detention basin, slope flattening, grading, concrete curb and gutter, channel work with stabilization and slip lining of cross culverts. This project is expected to advertise in 2014.
- Package 1 and 2 of the US-50 Upper Clear Creek Watershed Storm Drain Project to the Tahoe Golf Club Drive Interchange (milepost DO 14.0 to CC 3.0). This project includes construction of a stormdrain-trunkline, drop inlets, trench drains, detention basin, slope flattening, grading, concrete curb and gutters,

channel work with stabilization, and slip lining of cross culverts. This project is expected to commence in 2014.

NDOT's Hydraulics Section continued Clear Creek water quality monitoring efforts in cooperation with the U.S. Geological Survey (USGS). This is a continuation of an on-going study that focuses on monitoring stream flow, sediment loads (suspended and bed-load), sediment particle size distribution and select chemical constituents within Clear Creek. The goals and objectives of this study are to:

- Establish baseline data for comparison with possible changes in water quality and sediment yield due to planned development.
- Quantify the relation between suspended-sediment loading and discharge in Clear Creek.
- Use of this relation to estimate sediment yield from the Clear Creek basin.

The USGS released a report in 2009 summarizing data collected during the 2004-2007 water years. It is expected that the USGS will release an updated report in FY 2013 summarizing recent data collection efforts. NDOT is negotiating with the USGS to develop a new joint funded agreement to continue monitoring efforts beyond FY 2013.

III.F. Stormwater Education Program

With the assistance of NDEP, NDOT's Environmental Services and Training Divisions developed and implemented an internal, formalized Stormwater Certification Training Program. The objectives of this training program are as follows:

- Satisfy Permit requirements regarding employee training, i.e. personnel and frequency.
- Provide an overall understanding of stormwater management and regulations and NDOT's SWMP.
- Certify individuals to meet qualifications with regards to construction site stormwater pollution control implementation and inspection.

The Stormwater Certification Training Program covers a broad range of stormwater related topics, including the following:

- Procedures for illicit discharge detection, investigation and field screening
- Authorized and non-authorized discharges as defined by the Permit
- BMPs employed to minimize the discharge of pollutants

- Permit requirements
- Post-construction stormwater BMPs to prevent or minimize water quality impacts
- Spill prevention and response procedures

Training is conducted at the District level by Certified Stormwater Trainers (Trainers), who were chosen by their respective District Engineer. The Trainers attended an 8 hour training course instructed by NDEP Bureau of Water Pollution Control and NDOT Water Quality Section personnel. Successful completion of the course required a passing score of 80% or higher on a 50 question final exam. Certified Stormwater Trainers are then encouraged to participate in additional "Train the Trainer" courses provided by NDOT Training Division to refine and improve upon their skills as instructors. The Certified Trainer course was held in October, 2011.

During FY 2012, Certified Stormwater Trainers trained over 500 NDOT employees consisting of Construction, Maintenance, Right-of-Way and various District personnel statewide. Individuals who successfully completed the training were also required to pass the same 50 question final exam as the Trainers with a passing score of 80% or higher.

Individuals who have successfully completed the training receive certification cards. Recordkeeping consists of a database created and maintained by Environmental Services Division which houses information such as trainee names, certification number, certification and associated expiration dates.

A more detailed description of NDOT's Certified Stormwater Training Program will be described in the revised SWMP.

On August 16, 2011, NDOT Hydraulics Section personnel attended the 2011 Lake Tahoe Summit at Homewood, Ca. NDOT setup an information booth and handed out pamphlets to attendees that demonstrated NDOT's commitment to the ongoing Lake Tahoe Environmental Improvement Program (EIP). Created following the 1997 Lake Tahoe Presidential Forum, the EIP is a collaborative, long term strategy involving public and private partnerships to preserve and restore the Lake Tahoe Basin to address the degradation of Lake Tahoe's water clarity and surrounding environment.

On October 13, 2011, NDOT Environmental Services Division personnel gave a presentation at the annual NDOT Maintenance Supervisor's Meeting. The presentation provided a summary of the recent EPA Audit and summarized various Maintenance related Permit requirements, including the development and implementation of Facility Pollution Prevention Plans (FPPPs).

In cooperation with the University of Nevada Cooperative Extension's NEMO Program and NDEP, NDOT Environmental Services Division and Hydraulics Section hosted a free of charge, permanent stabilization/erosion control public seminar on October 12,

2011. The seminar focused on NDOT's erosion control efforts within the Clear Creek Watershed. NDOT provided a brief history of Clear Creek erosion control issues followed by site visits to various locations where NDOT implemented small scale, site specific drainage stabilization techniques, i.e. drainage regrading, riprap lining stormwater conveyances, post-construction mulching and seeding, etc., in an effort to improve the water quality of stormwater discharging into Clear Creek. There were 20 attendees (not including the instructors) from a variety of disciplines, including local contractors, state and federal government officials. The responses to the training seminars were positive with the general consensus being that attendees had a greater knowledge of the subject matter as a result of attending the training.

In cooperation with the University of Nevada Cooperative Extension's NEMO Program and NDEP, Fisher Industries, NDEP and JBR Environmental Consultants, Inc., NDOT hosted a free of charge, construction site BMPs training seminar for the public on May 10, 2012 utilizing the ongoing I-580 Freeway Extension Project (Contract #3292) as the classroom setting. There were 41 attendees (not including the instructors) from various disciplines, i.e. contractors, state government officials, etc, that attended two separate seminars. The primary focus of the seminars was to provide a general overview of temporary and permanent erosion control applications commonly implemented on construction sites. Areas visited on the construction site included fueling and equipment staging areas, a concrete batch plant, sites that have undergone successful final stabilization, and areas still actively under construction. A survey was provided to the attendees to gage their knowledge of various construction site BMPs before and after the training. The responses to the training seminars were positive with the general consensus being that attendees had a greater knowledge of the subject matter as a result of attending the training.

NDOT is an official Clear Creek Watershed Council stakeholder and commits staff to attend various meetings and functions as appropriate. NDOT utilizes this venue to discuss erosion control efforts (current and proposed).

NDOT's main website contains various information related to NDOT's SWMP that is readily accessible to the general public, including on-going erosion control efforts in the Lake Tahoe Basin and NDOT's Water Quality Manuals. In February, 2012, NDOT added a link on its main website that provides a mechanism for the general public to report illicit discharges within NDOT's right-of-way. The website provides information describing what an illicit discharge could be and how to report an illicit discharge. The website link is located on NDOT's main website page at <http://www.nevadadot.com/>.

NDOT has updated its website to provide information to the general public describing NDOT's involvement with the Lake Tahoe Environmental Improvement Program. Website content includes a general overview of NDOT's program as well as information pertaining to construction and maintenance activities.

NDOT has developed the Road to Blue website (<http://roadtoblue.com>), which provides an overview of NDOT construction projects within the Lake Tahoe Basin. Currently, the

website is highlighting construction activities associated with Contract 3440 (SR-28 WA 8.13 to 10.99), Contract 3471 (SR-28 WA 7.81 to 8.34) and Contract 3501 (WA 0.00 to 6.13). The website provides a brief overview of erosion/sediment control problems currently experienced and the mitigation measures being taken.

Construction projects within the Lake Tahoe Basin have signs posted at the project limits providing a quick project summary to traveling motorists.

NDOT continues to utilize "Partnering" efforts to assist with educating Contractors on reducing/eliminating construction site pollutant discharges. Partnering assists the Contractors with an understanding of water quality-related permits required for specific construction activities as well as construction site BMP implementation. Partnering is a formalized program jointly developed with NDOT's stakeholders that allows for the achievement of better project results by establishing common goals. NDOT has developed the following formal guide, "Guide to Partnering on NDOT Projects" to serve as a reference source for NDOT team members, describing the procedures to support the use of partnering for internal operations, and in dealing with external stakeholders.

NDOT continued to utilize the Adopt-a-Highway (AAH) Program to assist with trash cleanup efforts statewide. The program was established in 1990 to allow 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. NDOT had 111 groups (135 miles) in District I (Southern Nevada); 281 groups (305 miles) in District II (Central and Western Nevada); and 152 groups (326 miles) in District III (Northern and Eastern Nevada).

NDOT continued to utilize the Sponsor-a-Highway (SAH) Program to assist with trash cleanup efforts on high traffic volume urban freeways in the Las Vegas and Reno areas. Firms and organizations seeking recognition for community service for litter cleanup efforts through this program may do so through three pre-qualified contractors approved by NDOT. In the Las Vegas area, 188 one mile segments were sponsored involving three contractors; in the Reno area, 30 one mile segments were sponsored involving a single contractor.

III.H. NDOT Contractors Performing Construction Activities

During the reporting period, NDOT awarded 36 Construction Contracts; of which 17 obtained coverage under the Stormwater General Permit NVR100000 (CGP) (Table 1).

Table 1. Construction contracts executed in FY 2012

Contract No.	Stormwater General Permit No. (CSW)
3452	N/A
3453	22279
3454	22278
3455	N/A

Table 1. Cont'd.

Contract No.	Stormwater General Permit No. (CSW)
3456	26125
3458	N/A
3459	22757
3460	22540
3461	N/A
3462	22541
3465	N/A
3466	24842
3467	N/A
3468	23462
3469	N/A
3470	23863
3471	25825
3472	N/A
3473	N/A
3474	25064
3475	N/A
3477	N/A
3478	26852-Waiver
3479	25583
3480	25503
3481	26225-Waiver
3501	25846
3502	26426
3503	N/A
3504	26806
3505	N/A
3506	N/A
3510	N/A
3511	N/A
3512	N/A
3500READV	27306

NDOT also executed 16 District Contracts; of which 2 obtained coverage under the CGP (Table 2).

Table 2. District contracts executed in FY 2012

Contract No.	Stormwater General Permit No. (CSW)
D2-007-11	N/A
D0-009-11	N/A
D1-012-11	N/A
D1-013-11	N/A

Table 2. Cont'd.

Contract No.	Stormwater General Permit No. (CSW)
D1-024	24831
D2-004-11READV	N/A
D2-011-11	N/A
D2-014-11	N/A
D2-015-11	N/A
D2-016-11	N/A
D2-017-11	N/A
D2-018-11	N/A
D2-027-11	N/A
D3-005-10	26228
D3-006-11	N/A
D3-008-11	N/A

Contracts that did not obtain coverage under the CGP did not meet requirements warranting permit procurement. As NDOT standard practice, all Contracts, regardless of CGP procurement, were required to implement temporary pollution control measures as specified in NDOT's "Construction Site Best Management Practices Manual" as appropriate.

Notices of Violations were not issued by NDEP on any NDOT construction projects during the reporting period.

NDOT's WQS continued pre-construction communication efforts with NDOT's contractors, addressing stormwater related concerns and subsequent water quality related expectations from NDOT during construction. The WQS was able to communicate to contractors NDOT's water quality related policies as well as information related to water quality related permits (procured by both NDOT and the contractor). General feedback received indicates that NDOT's contractors have a better understanding of construction related requirements prior to the commencement of construction activities.

III.I. Discharges from New Development and Redevelopment

NDOT closed out 32 Construction contracts during the reporting period. Contracts that incorporated permanent best management practices and stormwater improvements into the design are listed below in Table 3. With the exception of Contracts 3392READV, 3407 and 3443, NDEP accepted the Notice of Termination to close out the CGP for the projects listed.

Table 3. Construction contracts closed out during FY 2012 that incorporated permanent BMPs.

Contract	Project Limits[†]	CSW No.	Permanent BMPs Installed[‡]
3270READV	US-95 (CL 1.16 to 17.08)	9697	Riprap channels, aprons, down drains, and revetment; general stormwater facility improvements
3327	US-395 (CC 3.37 to 9.56)	8565	Concrete channels, slope paving, cellular erosion control mats, riprap slope protection, retaining walls, gravel bed ditch, water quality basin, embankment protector, riprap and concrete aprons, geosynthetic channel armor, landscaping, and general stormwater improvements
3354	District II Headquarters (Reno)	N/A	Building addition
3392READV	City of Las Vegas	16995	General stormwater improvements
3394	US-93 (CL 67.83 to 86.59)	12990	Landscaping and general stormwater improvements
3395	SR-317 (LN 37.10 to 58.10)	14985	Riprap road embankment protection, riprap apron and dikes, concrete overflow section
3396	US-50 (CH 22.92)	14263	General stormwater improvements
3397	I-15 (CL 0.00 to 16.35)	15465	General stormwater improvements
3399	SR-651 (WA 1.94 to 4.94)	15466	General stormwater improvements
3407	US-93 (EL 93.5)	16931	Landscaping and retaining walls
3411	US-395 (CC 0.00 to 0.40); US-395 (DO 33.00 to 33.90)	16407	Stormwater pre-treatment vault, riprap drainage basin and ditch, revegetation, general stormwater improvements
3412	US-95 (CL 91.49 to 120.68)	16590	Riprap aprons, slope paving and general stormwater improvements
3413	US-95 (MI 0.00 to 27.70)	19648	General stormwater improvements
3415	US-93 (WP 76.35 to 98.56)	16767	General stormwater improvements
3419	I-80 (WA 26.75 to 41.49)	17512-Waiver	Embankment protectors and general stormwater improvements
3420	US-93 (EL 43.95 to 54.60)	N/A	Riprap channel and general stormwater improvements
3422	US-93 (EL 140.0 to 141.0)	N/A	Landscaping and general stormwater improvements
3430	I-515 at E. Tropicana Ave.	19972	Landscaping, rock wall and general stormwater improvements
3432	US-95 (ES 140.0 to 141.0)	N/A	General stormwater improvements
3434	SR-160 (CL 21.5 to NY 1.5)	N/A	General stormwater improvements
3443	I-80 (LY 1.26)	20762	Gravel mulch pads and ditches, riprap aprons, riprap ditches, revegetation, embankment protectors and general stormwater improvements
3444	SR-604 (CL 50.4 to 58.0)	21191	General stormwater improvements
3463	Ely Maintenance Station	N/A	Vehicle bay extension and storage building addition

[†]Route number followed by mile posting (letters indicate county abbreviations)

[‡]Permanent BMPs located at one or multiple locations within the project limits

*Riprap utilized as drainage protection, slope protection, erosion control, etc. Miscellaneous stormwater facility improvements can include curb and gutter, island paving, trench drains, drop inlet modifications, embankment protectors, pave ditches, ditch grading, ac swales and dikes, etc. Retaining walls can include MSE walls, soil nail and/or cantilever walls. Landscaping can include containerized plantings, native plant transplanting, decorative rock, mulching, water harvesting, etc.

NDOT closed out various District contracts during the reporting period. Notable Contracts that incorporated permanent BMPs and stormwater improvements into the design are listed below in Table 4.

Table 4. District Contracts closed out FY 2012 that incorporated permanent BMPs.

Contract	Project Limits[†]	CSW No.	Permanent BMP Installed
D0-009-11	Various District I	N/A	Installation of RWIS stations
D2-016-11	District II HQ Equipment Yard	N/A	Installation of Vortechs 9000 Stormwater Treatment System
D3-005-10	US-93 (EL 34.00 to 36.00)	N/A	Revegetation (to be performed Fall of 2012)

[†]Route number followed by mile posting (letters indicate county abbreviations)

NDOT continues to design and construct projects in support of the Lake Tahoe Environmental Improvement Program (EIP) (a public-private partnership with the focus of achieving environmental goals for the Lake Tahoe Basin). During the reporting period, construction activities associated with the following EIP projects within the Lake Tahoe Basin were ongoing:

- Contract 3377 (SR-207 DO 0.00 to 3.14): Water quality enhancement and erosion control.
- Contract 3433 (US-50 DO 7.00 to 12.35): Slope stability, water quality and erosion control enhancements.
- Contract 3440 (SR-28 WA 8.13 to 10.99): Water quality and erosion control improvements.
- Contract 3467 (US-50 DO 3.00 to 12.30; SR-28 WA 2.60 to 4.90): Drop inlet retrofit.
- Contract 3471 (SR-28 WA 7.81 to 8.34): Construction of a new roundabout.
- Contract 3501 (SR-431 WA 0.00 to 6.13): Water quality and erosion control enhancements.

In March, 2012, NDOT received a letter of appreciation from the Washoe Tribe of Nevada and California (Tribe) thanking NDOT for their cooperation and coordination efforts associated with Contract 3411. Substantial erosion control efforts were incorporated into the design that will help alleviate sedimentation onto the Tribe's property as contributed from stormwater discharged from NDOT and surrounding municipality properties.

III.J. Illicit Discharge Detection and Elimination System

NDOT Maintenance has implemented a statewide guidance policy addressing HazMat call-out procedures for handling hazardous material releases along, and within, NDOT's right-of-way. As part of this internal guidance policy, the firm H2O Environmental (H2O) is tasked with responding to reported releases within NDOT's right-of-way statewide. H2O responded to six incidences along NDOT right-of-way, five involving diesel fuel/petroleum releases and one involving a mining chemical release.

In August, 2011, while performing routine field survey activities, NDOT Environmental Services Division staff witnessed Galena Maintenance Facility personnel performing equipment washing outside of a designated area. Following a discussion with the Maintenance staff as to what was acceptable under NDOT's SWMP and MS4 Permit with regards to authorized and non-authorized discharges, washing immediately ceased. Maintenance Facility personnel were instructed to perform equipment washing at a designated washing facility.

In September, 2011, NDOT was notified of a small, unleaded fuel spill (approximately one gallon) at the District II Sparks Equipment Facility during construction activities associated with District contract D2-016-11. Contaminated soil was removed and properly disposed of.

In March, 2012, NDOT was notified of an ongoing issue involving the release of animal washwater from a local zoo into NDOT's right-of-way in the Las Vegas area. NDOT reported the incident immediately to NDEP. NDOT worked with the City of Las Vegas resulting in a "cease and desist" letter being issued to the zoo.

In June, 2012, NDOT Right-of-Way staff witnessed an illegal dumping of material into NDOT's right-of-way near Carlin, NV. A pumper truck was observed discharging what turned out to be liquid/solid waste material from a car wash. Unfortunately by the time NDOT personnel could confront the responsible party, the truck had finished dumping. The responsible party, Thomas Petroleum, was informed that this was an illegal discharge activity within NDOT's right-of-way. NDEP was quickly notified of the incident.

In June, 2012, while performing routine activities, NDOT Environmental Services Division investigated a dry weather flow within NDOT's right-of-way along SR-431 in Washoe County, NV. Upon further investigation, the dry weather flow was snowmelt runoff.

In February, 2012, NDOT developed a link on its main web page (www.nevadadot.com) to facilitate public reporting of illicit discharges and illegal dumping to or from NDOT's storm sewer system. The link titled "Report Illegal Roadside Dumping" is located at the bottom of the Departments main web page. The web link provides information defining what an illicit discharge is and how to generate a report.

An Illicit Discharge Reporting and Response Database has been developed to track illicit discharge incidences reported to Environmental Services Division. This database facilitates in the documentation process, the identification of problem areas, and the reporting of corrective actions and Departmental response and follow-up. Currently, NDOT's Environmental Services Division is responsible for housing and maintaining this database.

NDOT's Construction, Maintenance and Right-of-Way personnel will continue to look for illicit discharges within NDOT's right-of-way as part of day to day activities. NDOT personnel have been instructed to contact Environmental Services Division when an illicit discharge has been encountered.

The Hazardous Materials Section, within the NDOT Environmental Services Division, has coordinated with NDEP's Bureau of Corrective Actions to produce spill reporting guidance. This laminated wallet-sized card contains pertinent information for NDOT Maintenance personnel, who are generally first responders to releases along Nevada's highways statewide. The card summarizes reportable release thresholds, required information to report and phone numbers for NDEP and the Nevada Division of Emergency Management. In addition, NDOT Maintenance Crew vehicles house a copy of the Emergency Response Guidebook, a reference for first responders during the initial phase of a dangerous goods/hazardous materials transportation incident.

III.L. Stormwater Discharges from NDOT Maintenance Facilities

No spills from NDOT Maintenance Facilities to the storm sewer system or receiving waters were reported to Environmental Services Division during the reporting period. However, during NDOT's programmatic SWMP Audit, the EPA witnessed an authorized discharge occurring at NDOT's District II Maintenance Facility in Reno. Unauthorized and potential unauthorized discharges from NDOT's Maintenance Facilities into the storm sewer system were observed during the Audit. NDOT Environmental Services Division is currently working with Maintenance staff across the state in developing solutions that will eliminate potential non-authorized discharges.

NDOT installed sand/salt "Sprung" structures at the Big Smoky, Tonopah and Austin Maintenance Facilities. These structures provide a complete enclosure for sand/salt piles, eliminating direct precipitation contact onto the piles and subsequent runoff.

III.M. Comprehensive Maintenance Facility Inspection

Formal, comprehensive stormwater inspections were conducted at 13 Maintenance stations along with several associated offsite material storage areas during the reporting period (see Appendix C for copies of the inspection forms). Following the inspections, formal inter-Departmental memos were submitted to the Maintenance Facility Supervisor I and appropriate District management staff documenting stormwater related concerns and recommendations for corrective action. Some of the offsite, material storage areas inspected were included on their respective Maintenance Facility

inspection forms. Those that were not included on the inspection forms were instead documented via the inter-Departmental memo submitted to the appropriate Maintenance Supervisors and District management staff. Copies of all inspection related documentation is housed within Environmental Services Division, Water Quality Section.

As a result of ongoing Maintenance Facility inspection efforts, Environmental Services Division is developing a revised stormwater inspection form. The revised form is more conducive to Maintenance facility inspections, more user friendly (i.e. more “yes and no” type questions) and will direct the inspector to specific potential pollutant discharge areas of concerns common to NDOT Maintenance Stations. The revised form will be ready for use early on in FY 2013.

Formal documented Maintenance Facility inspections will continue throughout FY 2013. NDOT will be more consistent with documenting inspections of off-site material storage on the Maintenance Facility inspection forms themselves in addition to the inter-Departmental inspection memos.

III.N. Scope of Inspections

NDOT’s updated list of Maintenance Facilities is provided in Table 11 in Appendix A.

III.O. Public Street Maintenance Program in Urbanized Areas

NDOT continues to implement the public street maintenance aspect of the SWMP. Tables 5-10 summarize NDOT’s sweeping, snow and ice management and hydraulic facility maintenance efforts within specific MS4 areas, the Lake Tahoe Basin and statewide. NDOT utilized a service provider to assist with street sweeping operations in the Las Vegas MS4 area, which resulted in the removal of an estimated 145.1 yd³ of material from NDOT’s roadways (not included in Table 8).

In addition to the AAH program (previously described in ***Section III.F. Stormwater Education Program***), NDOT utilizes the services of volunteers associated with the Sponsor-A-Highway (SAH) program to assist with litter and debris cleanup efforts. The SAH program allows firms and organizations seeking recognition for community service through litter removal on high traffic volume urban freeways in the Las Vegas and Reno areas to utilize the services of prequalified contractors approved by NDOT.

Keep Truckee Meadows Beautiful, a private 501(c)3 non-profit group dedicated to creating a cleaner, more beautiful region through education and active community involvement, implements the Litter Index, a national initiative of the Keep America Beautiful program. This index ranks areas of the Truckee Meadows on a “cleanliness” scale of 1 – 4 (1 representing the highest mark for cleanliness). NDOT freeway areas within the Truckee Meadows (US-395 South, Central and North; and I-80 East and West) received scores between 1.0 and 2.0 with an overall average of 1.2, which falls between the designations “No litter/virtually no litter can be observed” and “Slightly

littered upon careful inspection, a small amount of litter is obvious.” The I-80 West area was the only area to receive a 2.0, which has the designation of “Slightly Littered,” with all the other freeway areas receiving a score of 1.0.

III.P. Measures to Control Discharges from Roadways

NDOT requires the use of abrasives and/or de-icing agents on highways across the state where near freezing or freezing winter temperatures occur. NDOT continues to work diligently in determining the abrasive/de-icing agent application threshold to maximize the motoring public’s safety while considering the potential adverse affects to the environment (Tables 5-10). NDOT Maintenance forces continue to utilize the Road Weather Information Systems (RWIS) to assist with abrasive/deicing agent applications. NDOT executed District Contracts for the installation of new RWIS sites within District I and III. NDOT is currently utilizing 77 RWIS sites across the state to assist with snow and ice control operations.

NDOT and the University of Nevada, Reno are working towards developing a Maintenance Decision Support System (MDSS). Using accurate weather and road condition information, the MDSS can predict local weather conditions with greater accuracy, allowing NDOT to increase the efficiency of winter road maintenance operations, thus reducing the cost of winter maintenance and increasing the level of service.

Tables 5-10 summarize NDOT’s material removal efforts within specified MS4 areas, the Lake Tahoe Basin and statewide. NDOT’s Maintenance Management System (MMS) is not currently set up to collect material volume data associated with culvert, drop inlet or slot drain cleanings.

III.Q. Storm Sewer System and Highway Maintenance

As aforementioned in ***III.P. Measures to Control Discharges from Roadways***, Tables 5-10 summarize material removal efforts within specified MS4 areas, the Lake Tahoe Basin and statewide. NDOT’s MMS is not currently set up to collect material volume data associated with culvert, drop inlet or slot drain cleanings.

III.R. Herbicide, Pesticide and Fertilizer Program

NDOT continued herbicide application activities in an effort to control state listed noxious weed species and improve conditions along shoulder areas for motorist safety. Tables 5-10 summarizes herbicide and fertilizer applications conducted by NDOT Maintenance Crews within the specified MS4 areas, the Lake Tahoe Basin and statewide.

NDOT Maintenance forces continue to utilize the pest control applicator certification administered by the Nevada Department of Agriculture.

Due to difficulties in securing funding, NDOT could not secure the services of a contractor for statewide weed spraying activities as has been done in the past. In addition, resources were not available for weed abatement activities in the Washoe Wetlands Mitigation Area.

In addition to the application of herbicides for statewide weed control efforts (as previously described), NDOT applies small amounts of pesticides at local Maintenance Facilities and occasionally assists the Bureau of Land Management with Mormon cricket abatement efforts.

III.S. NDOT Maintenance Yards Management Program

NDOT has begun efforts to prepare Facility Pollution Prevention Plans (FPPPs) for "Major" and "Minor" Maintenance Facilities. At this time, NDOT has developed and subsequently implemented an FPPP for the Reno/Sparks Maintenance Facility.

Pursuant to Section III.S.3.j of the Permit, NDOT was to have 50% of the FPPPs developed by July 7, 2012. NDOT has fallen short of that goal. NDOT's current goal is to have 100% of the FPPPs developed before January 1, 2014. This timeline will be incorporated into NDOT's updated SWMP. NDOT will still adhere to the prioritization approach stated in its letter to NDEP (September 21, 2011) of developing FPPPs for the major facilities first and foremost followed by FPPP development for the minor facilities.

III.U. Annual Review and Updating the SWMP

NDOT hired a service provider to assist with revising NDOT's SWMP Manual to reflect the requirements stated in the Permit. As required by III.A.2. of the Permit, NDOT was to submit a revised SWMP to NDEP for review and approval by January 7, 2012. NDOT fell short of that requirement. NDOT requested an extension of time to NDEP (which was subsequently granted) to submit the revised SWMP by May 7, 2012. Due to unanticipated circumstances during SWMP development, NDOT was unable to meet that revised timeline; however a significant portion of the draft SWMP was completed. NDOT complied with NDEP's request to submit a draft SWMP on or before June 1, 2012. NDOT will have the revised SWMP completed for implementation in FY 2013.

III.V. Updating NDOT's Manuals

NDOT's "Planning and Design Guide" and "Construction Site Best Management Practices (BMP) Manual" were not revised or updated during the FY 2012 reporting period. The working versions of both manuals are the January 2006 versions.

IV.A. Stormwater Monitoring

NDOT completed stormwater monitoring activities associated with the "Lake Tahoe Basin Stormwater Monitoring Program" administered by NDOT's Hydraulics Section.

Monitoring activities occurred from December 2005 through April, 2011. Concluding goals of this program were three-fold:

1. Characterize stormwater runoff quality from NDOT roadways in the Lake Tahoe Basin.
2. Determine the treatment effectiveness of various NDOT BMPs at removing nutrients and sediment.
3. Collect data for use in the Lake Tahoe TMDL implementation process.

A final report was issued January, 2012. As previously mentioned in **Section II. Discharges to Water Quality Impaired Waters**, analytical results are variable; however results suggest stormwater treatment capabilities associated with infiltration and sediment basins with regards to total suspended solids (TSS) and turbidity. Six years of sediment and infiltration basin monitoring indicates a 76% to 88% TSS reduction, respectively, when comparing basin influent to effluent. Other notable findings of the study suggest stormwater nutrient load reductions for total phosphorus, dissolved ortho-phosphorus, total Kjeldahl Nitrogen, nitrate, nitrite, total iron and dissolved zinc associated with the sediment and infiltration basins. Although this study has concluded, NDOT Hydraulics Section is researching new monitoring opportunities in the Lake Tahoe Basin.

NDOT continued the I-580 Water Quality and BMP Effectiveness Study. Surface waters within the ongoing I-580 Freeway Extension project area are being monitored for construction activity related water quality impacts. The primary objective of the water quality monitoring study is to adhere to NDOT's water quality goals and objectives that are based upon non-degradation of existing water quality and SWPPP compliance. Stormwater runoff sampling occurs on Winter's Creek, Galena Creek, Brown's Creek, Brown's Diversion, Corey Canyon Creek and Steamboat Creek, all of which are within the southwestern area of the Truckee River Hydrographic Region. In addition, there are 24 BMP effectiveness monitoring sites strategically located along the I-580 alignment, of which 14 are currently being monitored (remaining sites will be monitored following their completed installation). NDOT will receive an updated report in FY 2013. This monitoring study is set to expire during FY 2013.

NDOT Environmental Services Division continued stormwater interceptor and pre-treatment vault monitoring in the Lake Tahoe Basin. The primary goal of this study is to help characterize stormwater runoff and associated sediment from NDOT's right-of-way. Sediment and/or water was sampled from 22 locations and analyzed for various constituents. No deleterious odors or substances were observed at the time of sampling. Initial review of the analytical data demonstrated a noticeable reduction in bacteria levels compared to samples obtained in 2009. Total petroleum hydrocarbon-extractable (TPH-E) concentrations (EPA Method SW8015B) in the sediment samples generally exceeded 100 ppm. Confirmed free product was not observed in any settling chamber upon time of sampling. All the interceptor volume-based treatment vaults have oil absorbent pillows in the middle chamber that are replaced on a yearly basis. Sediment pumped out of the drainage structures is transported out of the Lake Tahoe

Basin and contained in a lined facility either within Oasis Pit or temporarily stored at the Spooner Maintenance Decant Basin Facility. Stormwater pumped out of treatment vaults is discharged at a decant facility located in the Incline Village Maintenance Facility, which provides for disposal in the Incline Village General Improvement District (IVGID) sewer system for treatment. Environmental Services Division will continue monitoring efforts in FY 2013.

Water quality analyses associated with these studies were performed by a State of Nevada certified laboratory. Laboratory results and generated reports are not included with this annual report; however copies are available upon request.

NDOT Environmental Services Division, Biology Section, concluded post-construction monitoring efforts of various water harvesting structures installed along I-15 in the Las Vegas area in 2007 as part of Contract 3288. These structures were qualitatively assessed for structural integrity and performance. It was determined that rock berm based structures, overall, performed well trapping sediment and providing areas for vegetation growth, which will help retain stormwater flows. Monitoring efforts such as these will assist NDOT with determining the feasibility of incorporating these types of low impact development (LID) structures into future NDOT projects.

IV.C. Annual Reports

Permit subsection IV.C.3.f requires “A summary of the stormwater activities NDOT plans to undertake during the next reporting cycle (including an implementation schedule and a fiscal analysis).” In addition to everyday project planning and development associated with NDOT projects as a whole, several SWMP related 2nd party agreements are currently executed that are expected to continue into the FY 2013 reporting period. The scopes-of-work for these agreements are summarized below. There has been no indication that these projects will be discontinued due to a lack of funding.

- Planning and Design: Lake Tahoe EIP project design
- Water Quality Monitoring: Clear Creek and I-580 Freeway Extension project.
- Public Education and Outreach: Truckee Meadows Stormwater Permit Coordinating Committee.
- Maintenance: Lake Tahoe Basin stormwater basin cleaning, maintenance of sand/oil interceptors statewide and hazardous material/spill response.

During the reporting period, SWMP activities continued to be administered (as a whole) by NDOT’s WQS within Environmental Services Division. A new staff position has been created within the Environmental Services Division, WQS, to assist with overseeing the implementation of NDOT’s SWMP. NDOT is in the process of creating a third WQS position to assist with the implementation of NDOT’s SWMP. If approved, the position

is expected to be filled sometime in FY 2013. The WQS will continue to be the primary administrator's of NDOT's SWMP and will work towards meeting compliance with all elements of the Permit.

NDOT will be issuing a request for proposal to hire a service provider to help augment NDOT's Environmental Services Division Staff with administering NDOT's SWMP. The primary goal is to accelerate NDOT's SWMP forward at a quicker rate than what has occurred in past years, which will assist NDOT with meeting Permit compliance related goals and timelines. If approved, a service provider could be on board as early as FY 2013.

NDOT will have the revised SWMP completed and ready for implementation in FY 2013. Significant SWMP related tasks to be implemented include FPPP development, Maintenance Facility inspections and implementation of NDOT's hydraulic facility mapping program. All program element compliance activities and associated implementation schedules will be described in the forthcoming revised SWMP.

Permit subsection IV.C.3.I states the following reporting requirements: *"Annual expenditures for the reporting period, with a breakdown for the major elements of the SWMP, and the budget for the year following each annual report."* NDOT does not have a dedicated budget exclusively for SWMP activities; therefore an all inclusive listing of expenditures associated with the various elements of NDOT's SWMP cannot be reported. Expenditures associated with the implementation of temporary and permanent erosion control features can be significant; however these costs are difficult to extract since they are often times associated with various construction and maintenance related costs.

Expenditures associated with stormwater related contracts administered by Environmental Services Division during the reporting period are broken down below:

- SWMP Manual Re-Development – approx. \$162,200
- SWMP Audit Technical and Coordination Assistance – approx. \$85,100
- Water Quality Monitoring – approx. \$12,800
- Public Education/Outreach – approx. \$900

Expenditures associated with stormwater related contracts administered by Design Division (including Hydraulics Section) during the reporting period are broken down below:

- Clear Creek Monitoring – approx. \$51,000
- Clear Creek Erosion Control Efforts – approx. \$553,200
- Lake Tahoe EIP Design Efforts – approx. \$800,000
- Lake Tahoe Hydraulic Facility Inventory – approx. \$28,300

Expenditures associated with stormwater related contracts administered by Maintenance and Asset Management Division during the reporting period are broken down below:

- Lake Tahoe Hydraulic Facility Cleaning – approx. \$293,200

Expenditures associated with stormwater related contracts administered by Safety-Traffic Division during the reporting period are broken down below:

- Statewide Hazardous Materials Response – approx. \$44,200
- RWIS Installation and Maintenance – approx. \$230,900

Expenditures associated with stormwater related contracts administered by District I during the reporting period are broken down below:

- Sand/Oil Interceptor Service – approx. \$19,000
- Erosion & Sediment Control/Site Stability – approx. \$208,300
- Hydraulic Facility Cleaning – approx. \$71,900

Expenditures associated with stormwater related contracts administered by District III during the reporting period are broken down below:

- Erosion Control/Site – approx \$108,400
- RWIS Installation – approx. \$118,800

Expenditures associated with sand/salt “Sprung” structures were approximately \$594,100.

Expenditures associated with Lake Tahoe Stormwater Vault Monitoring activities were approximately \$12,100.

Please note that financial related information provided is based upon best available information.

Due to the fact that NDOT does not have a budget dedicated specifically for SWMP activities, a budget forecast for subsequent reporting periods would be difficult to develop with any level of certainty. However, it is expected that most SWMP related agreements currently in place will continue into FY 2013. In addition, expenditures associated with SWMP administration will increase as a result of additional personnel in the WQS. NDOT’s Hydraulics Section will have an estimated \$300,000 available for Clear Creek Watershed erosion control projects.

MAP-21, the Moving Ahead for Progress in the 21st Century Act (P.L. 112-141), was signed into law by President Obama on July 6, 2012. Funding surface transportation programs nationwide at over \$105 billion for fiscal years 2013 and 2014, MAP-21 is the first long-term highway authorization enacted since 2005. MAP-21 will assist NDOT

with funding transportation projects in the near future, providing a mechanism for stormwater-related considerations to be incorporated into various NDOT programs.

**APPENDIX A
Tables**

Table 5. Summary of NDOT Maintenance activities statewide.

<u>Cleaning/Material Removed</u>			
<u>Task</u>	<u>Accomplishment</u>	<u>Man Hours</u>	<u>Material Quantity</u>
Clean Culvert Openings	1,279 each	2,973	---
Clean Culverts	55,724 linear ft.	6,569	---
Clean Cuts and Ditches	---	6,951	33,515 yd ³
Repair Fill and Cut Slopes	---	45,826	296,974 yd ³
Clean Drop Inlets	6,584 each	4,202	---
Clean Retention/Detention Basins	---	72	341 yd ³
Clean Slotted Drains	435 linear ft.	118	---
Remove Debris	---	6,607	27,682 yd ³
Pick-Up Trash Bags [†]	---	1,570	1,347 yd ³
Empty Litter Barrels	---	2,905	---
Pickup Broom Sweeping	6,166 each	28,004	21,660 yd ³
Sweep/Clean Debris from Structures	---	1,275	---
Remove Storm Debris	---	1,771	20,768 yd ³
Clean Sand/Oil Separators	---	10	10 yd ³
Snow and Ice Removal	---	67,620	---
<u>Material Applied</u>			
<u>Task</u>	<u>Accomplishment</u>	<u>Man Hours</u>	<u>Quantity</u>
Salt	---	---	2,413 yd ³
Salt/Sand	---	---	82,650 yd ³
Brine	---	---	152,001 gal.
Liquid-Chemical Anti-Icing Agent	---	---	3,105 gal.
Dry-Chemical Anti-Icing Agent	---	---	2,507 yd ³
Treated Lane Miles - Brine	3,863 lane miles	675	191,704 gal.
Treated Lane Miles - MgCl	1,703 lane miles	210	48,818 gal.
Chemical Weed Spray	2,984 shoulder miles	5,205	---
Herbicide - Hi-Tech [‡]	---	---	3,137 oz.
Herbicide - Diuron 80 Df	---	---	20 lbs.
Herbicide - Pendulum	---	---	17.2 gal.
Herbicide - Rodeo	---	---	5 gal.
Herbicide - Round-Up Pro Concentrate	---	---	1,982.75 gal.
Herbicide - Sureguard	---	---	1,128 oz.
Herbicide - Tordon K	---	---	10 gal.
Herbicide - Specticle	---	---	202.5 oz.
Herbicide - Weedone LV-4	---	---	126 gal.
Insecticide and Herbicide (Dry)	---	---	40 lbs
Insecticide and Herbicide (Liquid)*	---	---	1,103.5 gal
Fertilizer (Liquid)	---	---	1,690 gal.
Fertilizer (Pellets)	---	---	250 lbs

[†]Trash bags collected as part of the Adopt-A-Highway program are incorporated within this MMS task.

[‡]Due to data tracking constraints, Hi-Tech may actually be any of the following products: Arsenal Powerline, Element-4, Surfian AS, and/or Tordon K.

*Insecticides are applied to treat Maintenance Facilities or to assist the BLM with Mormon cricket abatement efforts. Specific quantities of insecticide or herbicide applied under this MMS task cannot be differentiated.

Table 6. Summary of NDOT Maintenance activities within the Carson Valley MS4 areas.

Cleaning/Material Removed			
<u>Task</u>	<u>Accomplishment</u>	<u>Man Hours</u>	<u>Material Quantity</u>
Clean Culvert Openings	6 each	10	----
Clean Culverts	65 linear ft.	25	----
Clean Cuts and Ditches	-----	1	4 yd ³
Repair Fill and Cut Slopes	-----	146	231 yd ³
Clean Drop Inlets	168 each	447	-----
Clean Retention/Detention Basins	-----	29	30 yd ³
Clean Slotted Drains	275 linear ft.	99	-----
Remove Debris	-----	958	190 yd ³
Pick-Up Trash Bags [†]	-----	8	28 yd ³
Empty Litter Barrels	-----	-----	-----
Pickup Broom Sweeping	-----	593	381 yd ³
Sweep/Clean Debris from Structures	-----	10	-----
Remove Storm Debris	-----	-----	-----
Clean Sand/Oil Separators	-----	-----	-----
Snow and Ice Removal	-----	1,095	-----
Material Applied			
<u>Task</u>	<u>Accomplishment</u>	<u>Man Hours</u>	<u>Material Quantity</u>
Salt	-----	-----	140 yd ³
Salt/Sand	-----	-----	230 yd ³
Brine	-----	-----	11,140 gal.
Liquid-Chemical Anti-Icing Agent	-----	-----	-----
Dry-Chemical Anti-Icing Agent	-----	-----	-----
Treated Lane Miles - Brine	-----	-----	-----
Treated Lane Miles - MgCl	52 lane miles	12	3123 gal.
Chemical Weed Spray	-----	-----	-----
Herbicide - Hi-Tech [†]	56 shoulder miles	206	-----
Herbicide - Diuron 80 Df	-----	-----	19 oz.
Herbicide - Rodeo	-----	-----	10.4 lbs.
Herbicide - Round-Up Pro Concentrate	-----	-----	2 gal.
Herbicide - Sureguard	-----	-----	22.2 gal.
Insecticide and Herbicide (Dry)	-----	-----	74.7 oz.
Insecticide and Herbicide (Liquid)*	-----	-----	-----
Fertilizer (Liquid)	-----	-----	14.5 gal
Fertilizer (Pellets)	-----	-----	-----

[†]Trash bags collected as part of the Adopt-A-Highway program are incorporated within this MMS task.

[#]Due to data tracking constraints, Hi-Tech may actually be any of the following products: Arsenal Powerline, Element-4, Surfian AS, and/or Tordon K.

*Insecticides are applied to treat Maintenance Facilities or to assist the BLM with Mormon cricket abatement efforts. Specific quantities of insecticide or herbicide applied under this MMS task cannot be differentiated.

Table 7. Summary of NDOT Maintenance activities within the Elko MS4 areas.

<u>Cleaning/Material Removed</u>			
<u>Task</u>	<u>Accomplishment</u>	<u>Man Hours</u>	<u>Material Quantity</u>
Clean Culvert Openings	-----	-----	-----
Clean Culverts	-----	-----	-----
Clean Cuts and Ditches	-----	-----	-----
Repair Fill and Cut Slopes	-----	383	48 yd ³
Clean Drop Inlets	8 each	10	-----
Clean Retention/Detention Basins	-----	-----	-----
Clean Slotted Drains	-----	-----	-----
Remove Debris	-----	152	123 yd ³
Pick-Up Trash Bags [†]	-----	207	328 yd ³
Empty Litter Barrels	-----	-----	-----
Pickup Broom Sweeping	-----	248	306 yd ³
Sweep/Clean Debris from Structures	-----	23	-----
Remove Storm Debris	-----	-----	-----
Clean Sand/Oil Separators	-----	-----	-----
Snow and Ice Removal	-----	608	-----
<u>Material Applied</u>			
<u>Task</u>	<u>Accomplishment</u>	<u>Man Hours</u>	<u>Quantity</u>
Salt	-----	-----	-----
Salt/Sand	-----	-----	968 yd ³
Brine	-----	-----	-----
Liquid-Chemical Anti-Icing Agent	-----	-----	-----
Dry-Chemical Anit-icing Agent	-----	-----	57 gal.
Treated Lane Miles - Brine	-----	-----	80 yd ³
Treated Lane Miles - MgCl	-----	-----	-----
Chemical Weed Spray	25 lane miles	4	6,030 gal.
Insecticide and Herbicide (Dry)	-----	-----	-----
Insecticide and Herbicide (Liquid)	-----	-----	-----
Fertilizer (Liquid)	-----	-----	-----
Fertilizer (Pellets)	-----	-----	-----

[†]Trash bags collected as part of the Adopt-A-Highway program are incorporated within this MMS task.

Table 8. Summary of NDOT Maintenance activities within the Las Vegas Valley MS4 areas.

<u>Cleaning/Material Removed</u>			
<u>Task</u>	<u>Accomplishment</u>	<u>Man Hours</u>	<u>Material Quantity</u>
Clean Culvert Openings	8 each	31	----
Clean Culverts	1261 linear ft.	156	----
Clean Cuts and Ditches	----	145	694 yd ³
Repair Fill and Cut Slopes	----	473	879 yd ³
Clean Drop Inlets	3,802 each	1471	----
Clean Retention/Detention Basins	----	----	----
Clean Slotted Drains	----	----	----
Remove Debris	----	26,065	8,518 yd ³
Pick-Up Trash Bags	----	----	----
Empty Litter Barrels	----	----	----
Pickup Broom Sweeping	----	11,122	5,890 yd ³
Sweep/Clean Debris from Structures	----	543	----
Remove Storm Debris	----	52	20 yd ³
Clean Sand/Oil Separators	----	----	----
Snow and Ice Removal	----	----	----
<u>Material Applied</u>			
<u>Task</u>	<u>Accomplishment</u>	<u>Man Hours</u>	<u>Material Quantity</u>
Salt	----	----	----
Salt/Sand	----	----	----
Brine	----	----	----
Liquid-Chemical Anti-Icing Agent	----	----	----
Dry-Chemical Anti-Icing Agent	----	----	----
Treated Lane Miles - Brine	52 lane miles	12	3123 gal.
Treated Lane Miles - MgCl	----	----	----
Chemical Weed Spray	477 shoulder miles	1,615	----
Herbicide - Round-Up Pro Concentrate	----	----	1,144 gal.
Insecticide and Herbicide (Dry)	----	----	----
Insecticide and Herbicide (Liquid)*	----	----	139 gal.
Fertilizer (Liquid)	----	----	----
Fertilizer (Pellets)	----	----	----

*Insecticides are applied to treat Maintenance Facilities or to assist the BLM with Mormon cricket abatement efforts. Specific quantities of insecticide or herbicide applied under this MMS task cannot be differentiated.

Table 9. Summary of NDOT Maintenance activities within the Washoe County MS4 areas.

<u>Cleaning/Material Removed</u>		<u>Accomplishment</u>	<u>Man Hours</u>	<u>Material Quantity</u>
<u>Task</u>				
Clean Culvert Openings	121 each		293	-----
Clean Culverts	28,230 linear ft.		1,701	-----
Clean Cuts and Ditches	-----		217	202 yd ³
Repair Fill and Cut Slopes	-----		455	722 yd ³
Clean Drop Inlets	342 each		554	-----
Clean Retention/Detention Basins	-----		-----	-----
Clean Slotted Drains	-----		-----	-----
Remove Debris	-----		5,602	1,777.6 yd ³
Pick-Up Trash Bags [†]	-----		3	3 yd ³
Empty Litter Barrels	-----		2,905	-----
Pickup Broom Sweeping	6,166 each		28,004	21,660 yd ³
Sweep/Clean Debris from Structures	-----		1,275	-----
Remove Storm Debris	-----		1,771	20,768 yd ³
Clean Sand/Oil Separators	-----		10	10 yd ³
Snow and Ice Removal	-----		67,620	-----
<u>Material Applied</u>				
<u>Task</u>		<u>Accomplishment</u>	<u>Man Hours</u>	<u>Quantity</u>
Salt		-----	-----	636.4 yd ³
Salt/Sand		-----	-----	1,514 yd ³
Brine		-----	-----	152,001 gal.
Liquid-Chemical Anti-Icing Agent		-----	-----	31,009 gal.
Dry-Chemical Anti-Icing Agent		-----	-----	-----
Treated Lane Miles - Brine		1,175 lane miles	195	60,041 gal.
Treated Lane Miles - MgCl		-----	-----	-----
Chemical Weed Spray		571 shoulder miles	784	-----
Herbicide - Hi-Tech [†]		-----	-----	-----
Herbicide - Round-Up Pro Concentrate		-----	-----	2,781.1 oz.
Herbicide - Sureguard		-----	-----	97.6 gal.
Herbicide - Specticle		-----	-----	820.9 oz.
Herbicide - Weedone LV-4		-----	-----	202.5 oz.
Insecticide and Herbicide (Dry)		-----	-----	75 gal.
Insecticide and Herbicide (Liquid)*		-----	-----	10 lbs.
Fertilizer (Liquid)		-----	-----	155.1 gal.
Fertilizer (Pellets)		-----	-----	1,316.6 gal.

[†]Trash bags collected as part of the Adopt-A-Highway program are incorporated within this MMS task.

[‡]Due to data tracking constraints, Hi-Tech may actually be any of the following products: Arsenal Powerline, Element-4, Surfian AS, and/or Tordon K.
^{*}Insecticides are applied to treat Maintenance Facilities or to assist the BLM with Mormon cricket abatement efforts. Specific quantities of insecticide or herbicide applied under this MMS task cannot be differentiated.

Table 10. Summary of NDOT Maintenance activities within the Lake Tahoe Basin.

<u>Cleaning/Material Removed</u>			
<u>Task</u>	<u>Accomplishment</u>	<u>Man Hours</u>	<u>Material Quantity</u>
Clean Culvert Openings	4 each	4	----
Clean Culverts	200 linear ft.	24	----
Clean Cuts and Ditches	-----	626	938 yd ³
Repair Fill and Cut Slopes	-----	264	134 yd ³
Clean Drop Inlets	273 each	460	-----
Clean Retention/Detention Basins	-----	5	1 yd ³
Clean Slotted Drains	-----	-----	-----
Remove Debris	-----	336	83 yd ³
Pick-Up Trash Bags [†]	-----	11	15 yd ³
Empty Litter Barrels	-----	-----	-----
Pickup Broom Sweeping	-----	1,391	764.38 yd ³
Sweep/Clean Debris from Structures	-----	-----	-----
Remove Storm Debris	-----	15	6 yd ³
Clean Sand/Oil Separators	-----	-----	-----
Snow and Ice Removal	-----	7,643	-----
<u>Material Applied</u>			
<u>Task</u>	<u>Accomplishment</u>	<u>Man Hours</u>	<u>Quantity</u>
Salt	-----	-----	435 yd ³
Salt/Sand	-----	-----	485 yd ³
Brine	-----	-----	54,777 gal.
Liquid-Chemical Anti-Icing Agent	-----	-----	-----
Dry-Chemical Anti-Icing Agent	-----	-----	-----
Treated Lane Miles - Brine	106 lane miles	28	6,107 gal.
Treated Lane Miles - MgCl	-----	-----	-----
Chemical Weed Spray	2 shoulder miles	16	-----
Herbicide - Hi-Tech [‡]	-----	-----	-----
Insecticide and Herbicide (Dry)	-----	-----	19 oz.
Insecticide and Herbicide (Liquid)	-----	-----	-----
Fertilizer (Liquid)	-----	-----	-----
Fertilizer (Pellets)	-----	-----	-----

[†]Trash bags collected as part of the Adopt-A-Highway program are incorporated within this MMS task.

[‡]Due to data tracking constraints, Hi-Tech may actually be any of the following products: Arsenal Powerline, Element-4, Surfian AS, and/or Tordon K.

Table 11: Current listing of NDOT Maintenance Facilities statewide.

DISTRICT	NAME	TYPE	ANTI-ICING	SALT/SAND	COUNTY	ROUTE	MILEPOST	LATITUDE	LONGITUDE
1	LAS VEGAS	DISTRICT 1 HQ		NO	Clark	SR578	0.5	36°10' 53.772"	-115°8' 11.602"
1	LAS VEGAS HANGER	HANGER	N/A	NO	Clark	N/A	0	36°5' 45.507"	-115°9' 57.394"
1	MT. CHARLESTON	MAINTENANCE STATION		YES	Clark	SR157	5.1	36°16' 19.160"	-115°34' 29.222"
1	INDIAN SPRINGS	MAINTENANCE STATION		YES	Clark	MACFARLANE AVENUE	0	36°34' 14.438"	-115°40' 15.093"
1	SEARCHLIGHT	MAINTENANCE STATION		YES	Clark	SR164	18.4	35°27' 57.160"	-114°55' 18.401"
1	MT. SPRINGS	MAINTENANCE STATION		YES	Clark	SR160	21.3	36°1' 22.498"	-115°30' 24.493"
1	GLENDALE	MAINTENANCE STATION		NO	Clark	FRCL55	94	36°40' 23.003"	-114°31' 23.452"
1	GOLDFIELD	MAINTENANCE STATION		NO	Esmeralda	SOUTH STREET	19.3	37°42' 18.329"	-117°14' 32.179"
1	PANACA	MAINTENANCE STATION		YES	Lincoln	SR319	1.7	37°47' 26.229"	-114°22' 33.906"
1	ALAMO	MAINTENANCE STATION		NO	Lincoln	US93	41	37°22' 11.210"	-115°9' 33.533"
1	MONTGOMERY PASS	MAINTENANCE STATION		NO	Mineral	US95	15.3	38°23' 8.738"	-118°6' 23.865"
1	BEATTY	MAINTENANCE STATION		NO	Mineral	ARM101	0	37°58' 37.645"	-118°19' 11.181"
1	TONOPAH	MAINTENANCE STATION		YES	Nye	US95	59.9	36°54' 36.833"	-116°45' 23.175"
1	BIG SMOKEY	MAINTENANCE STATION		NO	Nye	US95	150.1	38°3' 44.161"	-117°13' 25.000"
1	BLUE JAY	MAINTENANCE STATION		NO	Nye	SR376	53.3	38°47' 0.240"	-117°10' 26.200"
1	SOUTH LAS VEGAS	MAINTENANCE STATION		NO	Nye	US6	67.3	38°22' 20.339"	-116°13' 29.472"
1	GABBS INTERNATIONAL 2	MAINTENANCE YARD		NO	Clark	LOOP ROAD	0	36°4' 10.532"	-115°12' 10.924"
1	COTTONTAIL	MATERIALS SITE		NO	Nye	SR361	12.8	38°55' 11.564"	-117°56' 23.986"
1	COLEDALE	SALT-SAND		YES	Esmeralda	SR266	40.2	37°30' 2.894"	-117°11' 10.882"
1	GOLDFIELD	SALT-SAND		YES	Esmeralda	US6	80.6	38°1' 35.361"	-117°52' 50.562"
1	TOQUIMA	SALT-SAND		YES	Esmeralda	SOUTH STREET	19.3	37°42' 17.658"	-117°14' 30.380"
1	PIOCHE	SALT-SAND		YES	Lander	SR376	17.7	39°24' 4.419"	-116°56' 39.170"
1	ALAMO	SALT-SAND		YES	Lincoln	US93	153.4	38°24' 16.629"	-114°37' 45.591"
1	JCT 93/318	SALT-SAND		YES	Lincoln	US93	36.9	37°22' 9.075"	-115°9' 31.685"
1	MINA	SALT-SAND		YES	Lincoln	SR318	0.1	37°31' 44.080"	-115°13' 15.124"
1	MONTGOMERY PASS	SALT-SAND		YES	Mineral	US95	15.1	38°22' 58.405"	-118°6' 25.587"
1	WARM SPRINGS	SALT-SAND		YES	Mineral	ARM101	0	37°58' 37.925"	-118°19' 14.841"
1	BLACKROCK SUMMIT	SALT-SAND		YES	Nye	US6	48	38°10' 4.337"	-116°26' 13.709"
1	MANHATTAN	SALT-SAND		YES	Nye	US6	89.3	38°30' 15.113"	-115°54' 51.937"
1	CARVERS	SALT-SAND		YES	Nye	SR377	0.4	38°34' 10.668"	-117°10' 27.131"
1	BLUE JAY	SALT-SAND		YES	Nye	SR376	53.4	38°46' 56.425"	-117°10' 41.979"
1	QUEEN CITY SUMMIT	SALT-SAND		YES	Nye	US6	67.3	38°22' 18.943"	-116°13' 28.042"
1	LIDA MP26.5	STOCKPILE		YES	Nye	SR375	45.9	37°45' 3.140"	-115°56' 39.153"
1	GABBS INTERNATIONAL	STOCKPILE		NO	Esmeralda	SR266	26.3	37°26' 38.151"	-117°24' 25.971"
2	RENO	DISTRICT 2 HQ		NO	Nye	SR361	13	38°55' 13.266"	-117°57' 12.928"
2	CARSON CITY HANGER	HANGER	N/A	NO	Washoe	GALLETTI WAY	0	39°31' 57.918"	-119°46' 49.243"
2	HOT SPRINGS FACILITY	MAINTENANCE HQ	SALT BRINE	NO	Carson City	COLLEGE PARKWAY	0	39°11' 27.162"	-119°43' 58.000"
2	TAHOE GOLF CLUB DR	MAINTENANCE RECHARGE	N/A	NO	Carson City	COLLEGE PARKWAY	0	39°11' 30.825"	-119°45' 12.500"
2	CARSON CITY	MAINTENANCE STATION	SALT, SALT BRINE	NO	Carson City	FRCC08	0	39°7' 1.462"	-119°50' 40.422"
2	COLD SPRINGS	MAINTENANCE STATION	SALT BRINE	YES	Churchill	FRCC04	0.4	39°9' 17.786"	-119°45' 44.207"
2	FALLON	MAINTENANCE STATION	SALT BRINE	NO	Churchill	ARCH01	0	39°24' 42.061"	-117°50' 22.108"
2	SPOONER	MAINTENANCE STATION	SALT BRINE	NO	Churchill	SR115	4.5	39°27' 59.168"	-118°45' 47.714"
2	GARDNERVILLE	MAINTENANCE STATION	SALT BRINE	NO	Douglas	ARDO01	0	39°5' 45.108"	-119°54' 37.694"
2	FERNLEY	MAINTENANCE STATION	SALT, SALT BRINE	NO	Douglas	ARD001	0	38°54' 45.807"	-119°41' 28.790"
2	WELLINGTON	MAINTENANCE STATION	SALT, SALT BRINE	NO	Lyon	PINENUT ROAD	0	39°36' 31.393"	-119°15' 53.655"
2	HAWTHORNE	MAINTENANCE STATION	SALT, SALT BRINE	NO	Lyon	FRLY04	0.1	39°36' 31.393"	-119°15' 53.655"
2	LOVELOCK	MAINTENANCE STATION	SALT, SALT BRINE	NO	Lyon	SR829	3	38°45' 3.459"	-119°22' 9.058"
2	VIRGINIA CITY	MAINTENANCE STATION	SALT, SALT BRINE	NO	Lyon	SR208	29	38°59' 32.356"	-119°9' 45.978"
2	INCLINE VILLAGE	MAINTENANCE STATION	SALT, SALT BRINE	NO	Mineral	8TH STREET	0	38°31' 45.680"	-118°36' 59.754"
2	RENO YARD	MAINTENANCE STATION	SALT, SALT BRINE	NO	Pershing	GRANNEL AVENUE	0	40°10' 37.574"	-118°28' 48.002"
2	OASIS PIT	MAINTENANCE STATION	SALT, SALT BRINE	NO	Storey	SR341	2.5	39°17' 55.609"	-119°39' 19.272"
2	WONDER	MAINTENANCE YARD	SALT, SALT BRINE	YES	Washoe	SR431	0.1	39°15' 9.225"	-119°58' 16.026"
2		MAINTENANCE YARD	SALT, SALT BRINE	NO	Washoe	GALLETTI WAY	0	39°31' 58.260"	-119°46' 57.728"
2		MAINTENANCE YARD	SALT, SALT BRINE	NO	Carson City	US50	7.2	39°7' 9.012"	-119°46' 39.977"
2		MAINTENANCE YARD	SALT, SALT BRINE	NO	Churchill	US50	60.5	39°17' 15.250"	-118°9' 43.289"

DISTRICT	NAME	TYPE	ANTI-ICING	SALT/SAND	COUNTY	ROUTE	MILEPOST	LATITUDE	LONGITUDE
2	FALLON SOUTH	MAINTENANCE YARD		YES	Churchill	US95	23.3	39°26' 5.578"	-118°46' 55.602"
2	SPOONER EAST	MAINTENANCE YARD	SALT BRINE	NO	Douglas	US50	13.4	39°6' 20.670"	-119°53' 27.429"
2	KINGSBURY	MAINTENANCE YARD	SALT BRINE	NO	Douglas	SR207	8.9	38°57' 16.688"	-119°50' 54.136"
2	YERINGTON	MAINTENANCE YARD		NO	Lyon	SR339	11.1	38°59' 18.030"	-119°10' 56.919"
2	SCHURZ	MAINTENANCE YARD		NO	Mineral	US95A	82.8	38°56' 26.865"	-118°48' 39.338"
2	LOVELOCK NORTH	MAINTENANCE YARD	SALT BRINE	NO	Pershing	SR396	1.6	40°11' 22.582"	-118°28' 0.979"
2	LOVELOCK STOCKPILE	MAINTENANCE YARD	SALT BRINE	NO	Pershing	FRPE01	16.1	40°9' 52.729"	-118°29' 6.343"
2	STEAD	MAINTENANCE YARD		NO	Washoe	US395	23.9	39°37' 13.427"	-119°53' 12.950"
2	GALENA CREEK	MAINTENANCE YARD		NO	Washoe	SR431	17.2	39°21' 14.211"	-119°51' 21.130"
2	MT. ROSE	MAINTENANCE YARD	SALT, SALT BRINE	NO	Washoe	SR431	13.1	39°20' 23.152"	-119°52' 33.774"
2	WINTERS RANCH	MAINTENANCE YARD	SALT, SALT BRINE	NO	Washoe	SR429	7.8	39°18' 30.364"	-119°49' 30.639"
2	GALENA	MAINTENANCE YARD	SALT, SALT BRINE	NO	Washoe	SR431	23.7	39°23' 48.728"	-119°45' 32.799"
2	CLEAR ACRE YARD	MAINTENANCE YARD	N/A	YES	Washoe	580	27.5	39°33' 11.835"	-119°47' 20.928"
2	CARSON CITY	NDOT HQ		NO	Carson City	FRC004	0.3	39°9' 24.320"	-119°45' 49.342"
2	LANDMARK	NDOT HQ		NO	Carson City	FRC001	1.9	39°7' 11.446"	-119°46' 15.308"
2	TRINITY	SALT-SAND	SALT BRINE	YES	Churchill	US95	58.9	39°56' 26.567"	-118°44' 54.308"
2	LEVIATHAN	SALT-SAND		YES	Churchill	US395	8.8	38°48' 12.670"	-119°36' 24.056"
2	HEAVENLY	SALT-SAND		NO	Douglas	SR207	3.7	38°58' 41.582"	-119°53' 11.240"
2	DOUGLAS COUNTY	SALT-SAND	SALT	YES	Douglas	AIRPORT ROAD	0	39°0' 17.963"	-119°45' 35.546"
2	GARDNERVILLE	SALT-SAND		YES	Douglas	PINENUR ROAD	0	38°54' 37.760"	-119°41' 31.014"
2	DAYTON EAST	SALT-SAND	N/A	NO	Lyon	US50	12	39°18' 13.221"	-119°30' 48.928"
2	SILVER SPRINGS	SALT-SAND		YES	Lyon	US50	29.3	39°24' 53.696"	-119°13' 34.590"
2	EXIT 119	SALT-SAND		YES	Lyon	US50	31	40°20' 3.745"	-118°19' 16.348"
2	HUMBOLDT HOUSE	SALT-SAND	SALT BRINE	YES	Pershing	IR80	49.9	40°35' 54.937"	-118°15' 5.045"
2	SALT PILES OUTSIDE	SALT-SAND	N/A	YES	Pershing	FRPE408	0	40°20' 16.251"	-118°18' 46.617"
2	TRACY	SALT-SAND		YES	Pershing	FRWA15	31.9	39°34' 1.146"	-119°30' 5.745"
2	BOOMTOWN	SALT-SAND	SALT BRINE, MAG. CHLORIDE	YES	Washoe	IR80	4.1	39°30' 49.191"	-119°58' 45.234"
2	WHISKEY SPRINGS	SALT-SAND	SALT BRINE	YES	Washoe	SR445	19.8	39°48' 22.165"	-119°39' 56.742"
2	MP 44	SALT-SAND	SALT	NO	Washoe	SR447	44	40°13' 8.439"	-119°22' 18.245"
2	GERLACH COUNTY YARD	SALT-SAND	SALT	NO	Washoe	FIR STREET	0	40°38' 58.782"	-119°21' 36.067"
3	ELKO	DISTRICT 3 HQ	MAG. CHLORIDE	NO	Elko	IDAHO STREET	0	40°50' 46.557"	-115°45' 1.012"
3	IDOT WELLS CON FIELD OFFIC	MAINTENANCE OFFICE	N/A	NO	Elko	SR223	74.2	41°6' 31.287"	-114°58' 27.978"
3	INDEPENDENCE VALLEY	MAINTENANCE STATION		NO	Elko	SR226	19.5	41°18' 6.655"	-116°8' 53.597"
3	NORTH FORK	MAINTENANCE STATION		NO	Elko	SR225	50.6	41°29' 0.504"	-115°48' 55.124"
3	CONTACT	MAINTENANCE STATION	SALT	NO	Elko	US93	125.3	41°46' 9.149"	-114°45' 8.599"
3	PEQUOP	MAINTENANCE STATION	MAG. CHLORIDE	NO	Elko	FREL43	97.6	41°3' 42.135"	-114°31' 54.275"
3	RUBY VALLEY	MAINTENANCE STATION		NO	Elko	SR229	35.5	40°37' 55.904"	-115°15' 57.305"
3	WELLS	MAINTENANCE STATION	MAG. CHLORIDE	YES	Elko	SR223	0.8	41°6' 45.573"	-114°58' 10.6"
3	WEST WENDOVER	MAINTENANCE STATION	MAG. CHLORIDE	NO	Elko	FREL59	0	40°44' 36.148"	-114°3' 51.818"
3	CURRIE	MAINTENANCE STATION		NO	Elko	AREL74	0	40°15' 59.550"	-114°44' 44.450"
3	EMIGRANT	MAINTENANCE STATION	SALT	NO	Eureka	FREUD8	0.1	40°39' 0.192"	-116°18' 9.969"
3	EUREKA	MAINTENANCE STATION		NO	Eureka	US50	36.6	39°31' 4.613"	-115°57' 45.964"
3	QUINN RIVER	MAINTENANCE STATION		NO	Humboldt	SR140	51.8	41°45' 55.575"	-118°32' 59.718"
3	OROVADA	MAINTENANCE STATION		NO	Humboldt	US95	57.7	41°34' 6.469"	-117°47' 4.137"
3	WINNEMUCCA	MAINTENANCE STATION		NO	Humboldt	WEST 4TH STREET	0	40°58' 1.425"	-117°44' 25.533"
3	AUSTIN	MAINTENANCE STATION	MAG. CHLORIDE	NO	Lander	SR305	31	39°30' 11.162"	-117°5' 0.037"
3	BATTLE MOUNTAIN	MAINTENANCE STATION		NO	Lander	4TH STREET	0	40°38' 13.660"	-116°56' 3.459"
3	CURRANT	MAINTENANCE STATION	SALT	NO	Lander	ARNY47	0	38°49' 3.301"	-115°20' 51.991"
3	ELY	MAINTENANCE STATION		YES	Nye	US93	54.4	39°15' 30.213"	-114°51' 42.514"
3	LUND	MAINTENANCE STATION	SALT	NO	White Pine	SR318	11.9	38°52' 14.455"	-115°0' 32.262"
3	BAKER	MAINTENANCE STATION		NO	White Pine	ARWP12	0	39°5' 12.749"	-114°14' 15.569"
3	WELLS EAST YARD	MAINTENANCE YARD	MAG. CHLORIDE	YES	Elko	IR80	74.5	41°6' 6.752"	-114°54' 20.461"
3	PARADISE VALLEY	MAINTENANCE YARD		NO	Humboldt	US95	36.6	41°17' 23.165"	-117°41' 30.624"
3	SALVAGE YARD	MAINTENANCE YARD	MAG. CHLORIDE	NO	Humboldt	FRHU15	9.4	40°55' 39.710"	-117°47' 58.214"
3	MAGGIE SUMMIT ROAD	MATERIALS SITE		NO	Elko	SR225	78.7	41°46' 47.390"	-115°56' 41.958"

DISTRICT	NAME	TYPE	ANTI-ICING	SALT/SAND	COUNTY	ROUTE	MILEPOST	LATITUDE	LONGITUDE
3	INDEPENDENCE VALLEY	SALT-SAND		YES	Elko	SR226	19.4	41°18' 1.226"	-116°6' 55.482"
3	NORTH FOLK	SALT-SAND	SALT BRINE	YES	Elko	SR225	51.4	41°29' 32.119"	-115°49' 26.080"
3	MOUNTAIN CITY	SALT-SAND		YES	Elko	SR225	109.1	41°48' 56.401"	-115°57' 7.483"
3	DEETH	SALT-SAND		YES	Elko	SR230	0.6	41°3' 55.078"	-115°17' 13.098"
3	HD SUMMIT	SALT-SAND		YES	Elko	US93	95.6	41°22' 31.048"	-114°47' 7.857"
3	XIT 365, INDEPENDENCE VALLE	SALT-SAND		YES	Elko	FREL38	87.3	41°5' 29.507"	-114°42' 39.745"
3	MONTELLO	SALT-SAND		YES	Elko	SR233	20.8	41°14' 11.978"	-114°13' 18.942"
3	ELKO	SALT-SAND		YES	Elko	SR535	20.5	40°48' 31.259"	-115°49' 34.817"
3	HALLECK	SALT-SAND		YES	Elko	IR80	42.8	40°57' 23.040"	-115°28' 58.412"
3	SILVERTON PASS	SALT-SAND		YES	Elko	IR80	112.1	40°55' 32.968"	-114°19' 38.119"
3	WARM SPRINGS	SALT-SAND		YES	Elko	US93	49.5	40°45' 28.044"	-115°02' 11.132"
3	M5758	SALT-SAND		YES	Elko	US93A	30.2	40°25' 38.543"	-114°10' 43.338"
3	SPRING CREEK	SALT-SAND		YES	Elko	SR228	0.6	40°46' 39.640"	-115°40' 41.495"
3	CARLIN	SALT-SAND		YES	Elko		4.2	40°43' 43.245"	-116°4' 55.758"
3	WENDOVER	SALT-SAND		YES	Elko	FREL59	0	40°44' 35.594"	-114°3' 53.394"
3	NORTH OF CURRIE	SALT-SAND		YES	Elko	US93	13.7	40°17' 23.922"	-114°45' 48.6
3	NEW TUSCARORA JUNCTION	SALT-SAND		YES	Elko	SR225	56.5	41°11' 3.497"	-115°49' 24.900"
3	RUBY VALLEY	SALT-SAND		YES	Elko	SR229	35.6	40°37' 50.928"	-115°15' 59.722"
3	ALPHA	SALT-SAND		YES	Eureka	SR278	35.3	40°0' 59.858"	-116°11' 32.869"
3	MP 61.25	SALT-SAND		YES	Eureka	SR278	61.3	40°22' 16.978"	-116°6' 45.039"
3	DUNPHY	SALT-SAND		YES	Eureka	FREU02	5.5	40°41' 50.643"	-116°33' 17.073"
3	1000 CREEK	SALT-SAND		YES	Eureka	SR140	88.2	41°53' 59.408"	-118°59' 24.839"
3	GOLCONDA SUMMIT	SALT-SAND		YES	Humboldt	IR80	36.1	40°55' 18.111"	-117°23' 37.228"
3	VALMY	SALT-SAND	MAG. CHLORIDE	YES	Humboldt	FRHU10	1.3	40°47' 19.108"	-117°7' 42.617"
3	BUTTON POINT	SALT-SAND		YES	Humboldt	IR80	24.1	41°0' 54.007"	-117°34' 22.782"
3	MCDERMITT	SALT-SAND		YES	Humboldt	US95	85.3	41°57' 38.804"	-117°42' 36.806"
3	HUMBOLDT	SALT-SAND		YES	Humboldt	SR795	1.2	41°0' 17.693"	-117°43' 59.461"
3	MP 14.4	SALT-SAND		YES	Humboldt	SR140	14.4	41°24' 52.565"	-118°3' 33.355"
3	QUINN RIVER	SALT-SAND		YES	Humboldt	SR140	51.9	41°45' 58.879"	-118°33' 7.376"
3	SALVAGE YARD	SALT-SAND		YES	Humboldt	FRHU15	9.4	40°55' 38.451"	-117°48' 4.274"
3	SR140 STOCKPILE	SALT-SAND		NO	Humboldt	SR140	109.8	41°59' 26.504"	-119°19' 7.981"
3	HUMBOLDT	SALT-SAND		YES	Humboldt	US95	2.5	41°0' 22.394"	-117°43' 56.710"
3	ARGENTA	SALT-SAND		YES	Lander	IR80	19.2	40°39' 43.542"	-116°44' 6.767"
3	ANTELOPE VALLEY	SALT-SAND		YES	Lander	SR305	41.9	40°2' 45.681"	-117°11' 3.613"
3	NEW PASS	SALT-SAND		YES	Lander	US50	0.4	39°32' 26.950"	-117°28' 44.678"
3	BATTLE MOUNTAIN	SALT-SAND		YES	Lander	IR80	4.2	40°39' 47.464"	-116°57' 46.034"
3	AUSTIN	SALT-SAND		YES	Lander	US50	23.1	39°30' 2.784"	-117°4' 58.948"
3	SR318 .mp43.67	SALT-SAND		YES	Lincoln	SR318	43.67	38°4' 40.806"	-114°58' 51.5
3	SUNNYSIDE	SALT-SAND		YES	Nye	SR318	21.2	38°27' 7.994"	-115°0' 44.0
3	CURRENT	SALT-SAND		YES	Nye	US6	128.2	38°49' 3.337"	-115°20' 51.957"
3	COGRAVE	SALT-SAND		YES	Nye	FRPE21	0	40°47' 24.923"	-117°59' 37.644"
3	LUND	SALT-SAND		YES	Pershing	SR318	11.9	38°52' 14.653"	-115°0' 30.703"
3	LAGES STATION	SALT-SAND		YES	White Pine	US93	112.9	40°3' 54.105"	-114°36' 53.947"
3	STRAWBERRY	SALT-SAND		YES	White Pine	US50	3.9	39°22' 28.477"	-115°50' 18.363"
3	MOORMAN	SALT-SAND		YES	White Pine	US50	34.2	39°21' 20.434"	-115°20' 11.967"
3	ROBINSON SUMMIT	SALT-SAND		YES	White Pine	US50	44	39°25' 47.060"	-115°10' 54.850"
3	SHELLBOURNE	SALT-SAND		YES	White Pine	US93	92.7	39°47' 48.574"	-114°44' 28.024"
3	MAJORS PLACE	SALT-SAND		YES	White Pine	US6/50/93	27	39°1' 28.424"	-114°34' 48.379"
3	ELY	SALT-SAND	SALT, MAG. CHLORIDE	YES	White Pine	US93	54.4	39°15' 33.944"	-114°51' 41.450"
3	CEDAR PARK	SALT-SAND		NO	White Pine	US6	40.36	39°13' 39.613"	-114°51' 34.913"
3	IIPAH	SALT-SAND		YES	White Pine	US50	27.9	39°22' 55.303"	-115°25' 32.161"
3	GRIMES PIT	STOCKPILE		YES	Lander	US50	54.3	39°28' 23.474"	-116°36' 2.951"
3	ELDORADO	STOCKPILE		YES	White Pine	SFR490	0	39°18' 52.555"	-114°52' 8.534"

**Appendix B
EPA Audit Report**

Nevada Department of Transportation

MS4 Audit Report

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NPDES Permit NV0023329

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Audit Performed by:

United States Environmental Protection Agency, Region 9

Audit Dates: August 9-12, 2011

Report Date: May 10, 2012



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I. Executive Summary

The U.S. Environmental Protection Agency (EPA) conducted, from August 9 through 12, 2011, an audit of the Nevada Department of Transportation (NDOT) Municipal Separate Storm Sewer System (MS4) Program. The audit assessed compliance with the *National Pollutant Discharge Elimination System (NPDES) Permit for Discharges from Nevada Department of Transportation Municipal Separate Storm Sewer System (NV0023329)* (2010 Permit) and evaluated NDOT's implementation of its 2005 statewide Storm Water Management Plan (SWMP), as required by the previous permit, issued in 2004. The 2004 and 2010 Permits prescribe specific requirements for SWMP elements and timelines for implementation. The 2005 SWMP details practices and procedures NDOT uses to control the discharge of pollutants in storm water.

EPA reviewed documents, met and interviewed staff to gather information on overall program management, and conducted field inspections at NDOT construction sites and maintenance facilities. Nevada Division of Environmental Protection (NDEP) accompanied EPA throughout the audit. At the conclusion of the audit, EPA shared an initial assessment with the NDOT representatives.

This report includes background information and presents audit findings which are separated into four categories: noteworthy program elements; recommendations for improvements; program deficiencies; and potential permit violations. Although this report describes potential permit violations, this is not a formal finding of violation.

EPA found the following elements of NDOT's current program noteworthy. Specifically, NDOT:

- collaborates with local conservation districts to implement sediment reduction measures beyond NDOT rights-of-way in the Clear Creek Watershed; and
- uses its Roadway Information System to reduce the amount of salt/brine applied to roadways, decreasing the potential for pollutant discharge.

EPA also found potential permit violations. Most significantly, NDOT failed to:

- fully implement the 2005 SWMP;
- develop required pollution prevention plans for all maintenance facilities;
- fully implement an employee training program; and
- implement an illicit discharge, detection and elimination program.

II. Background

A. MS4 Program Audits

Storm water runoff, generated when precipitation flows over land or impervious surfaces accumulates pollutants which can adversely affect water quality. Storm water collected by a publicly-owned conveyance or system of conveyances and discharged to a water of the United States requires NPDES permit authorization. Such discharges are regulated through Municipal Separate Storm Sewer (MS4) permits. The pipes, roadways and other storm water conveyances operated by the Nevada Department of Transportation constitute an MS4. In general, NPDES permits require MS4s to develop and implement a storm water management plan (SWMP) to address the following program elements:

- mapping storm water features, including major outfalls;
- public education and outreach;
- illicit discharge detection and elimination;
- construction site runoff control;
- post-construction site runoff control; and
- pollution prevention/good housekeeping at municipal facilities

Audits of MS4s are being conducted nationwide to determine compliance with permit requirements and to evaluate the overall effectiveness of the nation's MS4 programs. EPA Region 9 is conducting audits of MS4s throughout the Pacific Southwest and has performed more than 50 audits over the last 10 years. EPA has performed MS4 audits of Arizona, California and Hawaii state transportation agencies located within Region 9. The audit reports are available on EPA's website at: <http://www.epa.gov/region9/water/npdes/ms4audits.html>.

B. NDOT's Storm Water Program

NDOT administers over 5,400 miles of roads, 1,000 bridges and operates 49 maintenance facilities. It is organized into four functional divisions (Administration, Engineering, Operations and Planning) and three geographic districts. Each district is managed by a district engineer with the principal responsibility for construction and maintenance programs.

NDEP issued a state-wide MS4 permit to NDOT on February 23, 2004 (2004 Permit). Section 4.1.1 of the 2004 Permit required NDOT to submit a Storm Water Management Plan (SWMP) within one year of Permit issuance while Section 4.1.2 required full implementation of the SWMP within five years of Permit issuance. NDOT submitted the SWMP in January 2005 (2005 SWMP). NDEP re-issued the *NPDES Permit for Discharges from Nevada Department of Transportation Municipal Separate Storm Sewer System (NV0023329)* (2010 Permit) on July 7, 2010. Among other requirements, the 2010 Permit requires NDOT to review, revise and submit an updated SWMP to NDEP by January 7, 2012 and to continue to implement and maintain current BMPs detailed in NDOT's current (2005) SWMP until the new SWMP is submitted. This audit report therefore refers to the 2004 and 2010 Permits, and the 2005 SWMP.

C. Audit Organization

EPA Region 9, represented by David Wampler, Luis Garcia-Bakarich, and John Tinger, conducted the audit between August 9th and August 12th, 2011. Steve McGoff, Joe Maez, Chris Gravenstein, and Michele Reid from NDEP participated in the audit. The audit consisted of file

reviews, interviews with NDOT staff and management and a number of site-visits at select NDOT maintenance facilities and construction sites. The following program areas were evaluated during the audit:

- program management;
- storm water education for staff, contractors, and the public;
- construction operations;
- illicit discharge detection and elimination;
- maintenance program; and
- monitoring and reporting

III. Audit Findings

This section is organized to generally follow the structure of the 2010 Permit. For each section in our report, we identify, where appropriate, noteworthy aspects of NDOT's storm water program implementation, recommendations for improvement, program deficiencies, and potential permit violations. Our findings are supported by interviews, observations and photographic evidence gathered during the audit as well as documentation obtained before, during or after the audit. Documents provided by NDOT are listed in Appendix A. An itinerary of the audit and EPA's site visit reports, including photos, photo logs, and aerial reference images, are provided in Appendix B.

A. Program Management

The Water Quality Section of the Environmental Services Division (ESD), within the Engineering Division, is responsible for statewide management of NDOT's storm water program. Although overall storm water management resides within the ESD, other internal programs (e.g., Hydraulics, Construction, and Maintenance) regularly coordinate with ESD. Throughout the audit, EPA met with members of these groups to discuss their role in implementation of the storm water requirements. Prior to the 2005 SWMP, NDOT created the Water Quality Erosion Sediment Control (WQESC) Implementation Team and Steering Committee, made up of numerous divisions or sections, to assist in SWMP development. The WQESC no longer meets, but NDOT indicated it intends to reinstitute it.

A.1. Storm Water Management Plan

The 2004 Permit required NDOT to implement its 2005 SWMP within five years of the effective date of the permit. The 2005 SWMP included a phased schedule for the implementation of specific BMPs. The 2010 Permit requires NDOT to continue implementing the 2005 SWMP until a revised SWMP is submitted, establishes a deadline for submittal of an updated SWMP, and requires that the revised SWMP be implemented within two years of NDEP's approval.

Potential Permit Violation

NDOT has failed to fully implement the SWMP within five years of the authorization date of the 2004 Permit. [2004 Permit Section 4.1.2]

The 2005 SWMP should have been fully implemented by February 23, 2009. For example, NDOT has not developed and implemented Facility Pollution Prevention Plans for maintenance facilities. Other examples of NDOT's failure to fully implement the 2005 SWMP are described in detail later in this report.

Potential Permit Violation

The 2005 SWMP does not include maps of NDOT's storm sewer system, including the location of any major outfall discharging to waters of the U.S. [2004 Permit Section 4.3.1, and 2010 Permit Section III.C.1]

NDOT provided district facility maps to EPA prior to our audit. While these maps contain the location of various waterbodies and maintenance facilities, they do not include the location of any MS4 features such as drainage pipes, culverts, or major outfalls discharging to waters of the U.S.

A.2. Clear Creek Master Storm Water Management Plan

Section 3.2 of the 2004 Permit and Section III.D of the 2010 Permit require implementation of a separate Storm Water Management Plan for the Clear Creek Watershed (CCSWMP). The 2005 CCSWMP was developed by NDOT to reduce discharge of pollutants to Clear Creek from NDOT activities in the watershed. The CCSWMP describes BMPs and implementation schedules.

EPA, NDEP, and NDOT viewed several sites in the Clear Creek Watershed where NDOT has installed soil stabilization and treatment control BMPs. While some of the sediment projects were located within NDOT's right-of-way, others were on private property, down-slope from U.S. Hwy 50. NDOT's representatives described the difficulties associated with controlling sediment but showed several successful projects in their right-of-way and on private property (field report, Appendix B.2).

Noteworthy Program Element

NDOT has partnered with the local conservation district to install or fund projects that fall outside of its right-of-way.

NDOT has designed and implemented retrofit projects intended to reduce storm water runoff velocity and sediment transport from U.S. Hwy 50 into Clear Creek. U.S. Hwy 50 between Spooner Summit and Carson City is aligned on a hillside composed of decomposed granite substrate which is highly erosive, and the highway's cuts and benches contribute volumes of sediment to Clear Creek. In some cases, where the project required work beyond NDOT's right-of-way, NDOT has partnered with the local conservation district to implement these projects.

Potential Permit Violation

The Clear Creek Storm Water Management Plan does not describe control techniques used at the Spooner Summit decant facility to ensure no illicit discharge of pollutants into Clear Creek. [2004 Permit Section 3.2.1.3 and 2010 Permit Section III.D.1.c]

The NDOT Spooner Summit decant facility is located at the summit of Hwy 50 between Carson City and Lake Tahoe. EPA visited the Spooner Summit facility with NDOT and NDEP (field report, Appendix B.3). NDOT stated the Spooner Summit Decant facility and a similar one in Incline Village were constructed to accept accumulated sediment from storm drain features (e.g., vault boxes, drop inlets) within the Tahoe Basin. NDOT must update the CCSWMP to include a description of the controls at the Spooner Summit decant facility. At the facility, NDOT vector trucks unload their accumulated wastes into a settling basin where sediment settles out, and the water either evaporates, infiltrates, or discharges through a culvert drain leading to a tributary of

Clear Creek. Although the basin was dry at the time of the audit, EPA observed evidence of potential discharges, including an open drain and floatable plastics at the top of the containment berm (field report Appendix, B.3).

B. Storm Water Education Program

Section 4.5 of the 2004 Permit and Section III.F of the 2010 Permit requires NDOT to develop and implement a storm water outreach and education program to address the three main audiences that impact NDOT's storm water discharges: NDOT employees, construction contractors, and the public.

B.1. Employee Training

Section 4.5.2.1 of the 2004 Permit and Sections III.F.2 through 5.h of the 2010 Permit describe requirements for employee training. The 2004 Permit requires NDOT to implement the program specified in the 2005 SWMP and provides frequent reminders to reinforce the training. NDOT's 2005 SWMP states NDOT will develop training to introduce staff to water quality principles, NDOT's roles and responsibilities to support SWMP implementation, introduce the SWMP, and train employees to use specific manuals. The 2010 Permit requires NDOT to provide specific training (e.g., to identify illicit discharges/connections, perform construction site inspections and identify non-storm water discharges) to employees identified in the Permit within twelve months of the effective date of the Permit. During the audit, EPA interviewed NDOT employees, reviewed paperwork and asked to see a copy of the employee training program. EPA observed NDOT does not have a formal process for training and that its current approach to training is inconsistent. For example, NDOT did provide a list of employees who recently had taken a 40-hour construction site inspector training which included a module on construction site storm water BMPs. However, based on discussions with individuals at NDOT maintenance stations, and review of annual reports, NDOT maintenance employees typically have not had any storm water training other than construction BMP training.

Potential Permit Violation

NDOT has not implemented an Employee Storm Water Training Program within one year of permit issuance. [2010 Permit Section III.F.2]

NDOT was unable to demonstrate all employees identified by the 2010 Permit had received initial training within twelve months of the effective date of the Permit (see Sections III.F.2 and III.F.5 of the 2010 Permit for a list of employees identified by the Permit).

B.2. Construction Contractor Training

Section 4.5.2.2 of the 2004 Permit requires NDOT to implement the program specified in the 2005 SWMP and provide outreach to contractors to raise awareness of the problems and causes of storm water pollution and to reinforce their training. In Section 5.5 of the 2005 SWMP, NDOT committed to develop a more detailed outreach program to train NDOT contractors. However, based on discussions with NDOT representatives and review of annual reports, the program consists of sporadic workshops for potential contractors and informal, on-site or pre-project meetings.

Recommendation for Improvement

NDOT's revised SWMP should include contractor-specific training requirements to ensure consistent implementation by all contractors. To comply with the 2010 Permit, the training

should ensure contractors have adequate training to: understand BMP selection, installation and maintenance requirements; recognize activities that may impact storm water quality; and understand the procedures in place to prevent or report illicit discharges or illicit connections to the MS4.

B.3. Public Education Program

Section 4.5.1 of the 2004 Permit requires NDOT to include a Public Outreach and Education Program to reduce the discharge of pollutants to the maximum extent practicable and submit a plan to develop and implement a public education program within 180 days of adoption. In the 2005 SWMP, NDOT commits to develop a public outreach plan to address illicit discharge reporting, and include research and mass media advertising. Section III.F.5.i of the 2010 Permit requires NDOT to continue to implement the Public Education/Outreach Program and adds new program elements.

Based on conversations with staff and a review of recent annual reports, NDOT has an Adopt-A-Highway program, attends Truckee River Festival events as a member of the Truckee Meadows Storm Water Committee, and participates in public meetings or workshops to inform the public about erosion control methods to improve the quality of storm water discharge. The annual reports also describe NDOT's contributions to the Water Wise program. While the most recent reports state the Water Wise Program had ceased they also indicate archived material is as still available at the following website: <http://krnv.envirocast.net/>. When EPA attempted to access this website recently, we found it was no longer functioning.

Program Deficiency

NDOT should improve the current Public Education/Outreach Program to ensure its public outreach program is effective. For instance, NDOT could highlight innovative projects or programs throughout the state to reduce storm water pollution.

C. Construction Program

The 2004 and 2010 Permits require NDOT to develop and implement a construction site BMP program including structural and non-structural BMPs to reduce pollutants in storm water runoff from construction sites in their right-of-way. The program applies to NDOT, its contractors, local government agencies, or third parties on NDOT or non-NDOT projects. During the audit, EPA met with NDOT representatives from hydraulics (Engineering Division) and construction (Operations Division) who described NDOT's process for controlling pollutants in storm water at construction sites, from the pre-planning phase to the completion of the project and final transfer to the maintenance and asset management group within NDOT.

C.1. Project Planning and Design

In general, during the planning phase, NDOT utilizes internal expertise to evaluate a project's potential threat to water quality, the constructability of certain storm water controls, including post-construction BMPs, and expected storm water protection effectiveness. Prior to construction, NDOT meets with the contractor to review project specifications and, depending on the project, discuss storm water requirements.

According to the 2005 SWMP and discussion with NDOT staff, NDOT staff evaluate all new projects using a Project Categorization Score Sheet to categorize the potential impact to water

quality into one of four categories: no impact, low, medium, and high potential impact. This evaluation helps NDOT prioritize projects and anticipate water quality protection measures when developing contract solicitations. For example, NDOT develops a project-specific lump sum range for Temporary Pollution Control for projects with medium impacts (defined as simple projects with potential to discharge sediment into waters of the U.S., lasting less than two years). For projects with high impacts (complex projects with a high potential for sediment discharge, lasting longer than two years, as well as all projects in the Tahoe Basin), NDOT may condition the project to include specific structural BMP requirements. For all projects, the Project Categorization Score Sheet gives estimated costs for storm water controls to be considered in bid estimates.

Recommendation for Improvement

NDOT should consider using the Project Categorization Sheets to ensure adequate BMP implementation and maintenance during the life of the project and to validate cost estimates at the project's completion. Inclusion of specific fixed costs in requests for proposal ensures contractors dedicate the proper resources to storm water controls and ensures a level playing field to evaluate proposals.

C.2. Contractor Oversight

Section 4.9 of the 2004 Permit and Section III.G.1 of the 2010 Permit require NDOT to control all construction in the rights-of-way through a program to review construction site plans, implement and maintain structural and non-structural BMPs, conduct site inspections with follow-up enforcement, and to educate construction site operators on construction site storm water requirements. As explained during the audit and discussed in the 2005 SWMP, one of the ways in which NDOT oversees its contractors is by performing weekly oversight inspections. NDOT also described various enforcement tools they can use against contractors, including: withholding payment; shutting down activities; pursuing corrective measures at cost to the contractor; or requesting assistance from NDEP.

NDOT discussed its use of "Partnering" which facilitates communication between the construction contractor and the NDOT Resident Engineer on certain construction projects. Partnering is a process required by the Federal Highways Administration on many NDOT construction projects where NDOT and its contractor(s) discuss project implementation issues, including storm water and erosion controls, early in the project to resolve issues before they escalate. NDOT construction managers and contractors spoke very highly of this arrangement as a way to inform contractors of their storm water obligations and to ensure storm water requirements are met.

Program Deficiency

The Weekly Construction Site Discharge Inspection Checklist created by NDOT for oversight inspections does not contain sufficient detail to assess construction general permit compliance. NDOT should revise the Checklist to include more specificity on inspection criteria such as condition of BMPs, timeframes for corrective actions to be taken in response to deficiencies found during inspections, and information about current weather conditions and recent precipitation events.

Potential Permit Violation

NDOT has failed to establish a program to control all construction in the rights-of-way. [2004 Permit Section 4.9.1.1 and 2010 Permit Section III.G.1.a]

Section 5.2 of the 2005 SWMP describes NDOT Standard Specifications directing construction contractors to obtain all necessary water pollution control permits from NDEP; however, NDOT's rights-of-way also extend into tribal lands where NDEP is not the permitting authority. In such instances, NDOT or the construction contractor should file an application for permit coverage under the EPA Construction General Permit. The revised SWMP should make this explicitly clear. For example, in 2011, NDOT engaged in construction within their right-of-way on lands of the Pyramid Lake Paiute Tribe; however, no permit application had been filed with EPA.

Potential Permit Violation

NDOT has failed to include a description of procedures for identifying priorities for inspecting sites and enforcing control measures which consider the nature of construction activity, topography, and the characteristics of soils and receiving water quality. [2004 Permit Section 4.9.1.5]

Section 5.4 of the 2005 SWMP discusses NDOT's construction oversight program. While the SWMP references the Weekly Construction Site Discharge Inspection Checklist, it does not discuss priorities for inspection and enforcement taking into account the criteria listed in the Permit. For example, EPA observed that NDOT is conducting monthly and rain-triggered inspections at the I-580 project due to the size of the project.

D. Illicit Discharge Detection and Elimination Program

Section 4.7 of the 2004 Permit and Section III.J of the 2010 Permit require NDOT to develop an Illicit Discharge Detection and Elimination (IDDE) program to detect and remove illicit discharges and improper disposal into the MS4, including inspections to implement and enforce an ordinance or other means to prevent illicit discharges into the MS4. Additionally, NDOT must conduct field-screening activities, respond to spills, facilitate public reporting, and create a program to educate the public about proper disposal of used oil and other toxic materials.

Section 7 of the 2005 SWMP discusses the IDDE program, implemented through the maintenance program. Typically, this consists of maintenance personnel responding to spill cleanup and illegal dumping on the roadway. NDOT maintains a hotline and has posted information on its website with a phone number for the public to report dumping and spills.

Potential Permit Violation

NDOT failed to describe procedures to conduct on-going field screening activities to detect illicit discharges during the life of the permit, including areas or locations that will be evaluated by such field screens. [2004 Permit Section 4.7.1.2 and 2010 Permit Section III.J.1.b]

Section 7.0 of the 2005 SWMP states NDOT will conduct routine inspections of drainage structures as a way to detect illicit discharges. Based on review of the annual reports and discussion with NDOT representatives, EPA found no evidence that these inspections had occurred or were currently being performed. Based on EPA review of the BMP manuals provided by NDOT, procedures for detecting illicit discharges were not identified. Further, the 2005 SWMP, Section 7.2, states maintenance personnel will be trained to recognize illicit discharges. Interviews with district maintenance personnel during the audit, however, demonstrated NDOT staff had minimal awareness of illicit discharge detection and reporting beyond spill response and illegal dumping of solid waste. Maintenance field staff noted training in spill reporting and response, but was limited to traffic accidents and illegal dumping. NDOT staff indicated that they had not seen dry weather flows within the MS4 system; however, the EPA audit team observed several instances where non-storm water discharges were occurring at NDOT maintenance facilities. (For example, see Appendix B.7 - Site Report of the Reno/Sparks Maintenance Facility).

E. Maintenance Program

Section 4.14 of the 2004 Permit and Sections III.L through S of the 2010 Permit describe the required elements for NDOT's maintenance program. NDOT is required to develop practices to address runoff from highway maintenance facilities, and from various maintenance activities, including snow and ice control, vegetation control, and maintenance of the drainage system.

E.1. Snow and Ice Control

Sections 4.14.1.2 and 4.14.1.3 of the 2004 Permit and Section III.P.1.b of the 2010 Permit describe NDOT's pollution control requirements for snow and ice control where abrasives and/or de-icing agents are used on highways.

Noteworthy Program Element

The Road Weather Information System (RWIS) enables NDOT to more precisely apply salt/brine/sand on the highway while optimizing the use of equipment and staff. The RWIS consists of seventy meteorological stations strategically located alongside highways. The system allows NDOT to anticipate freezing and snowy conditions that can pose hazardous driving conditions. This system has helped reduce the amount of salt and sand applied to its roadways by 70% since 1990. By reducing the amount of de-icing material on the roadway, NDOT reduces the potential impact to water quality and reduces later maintenance work to clean out sediment from vaults and dispose of the waste material.

E.2. Drainage System Maintenance Activities

Section 4.14.1.5 of the 2004 Permit requires NDOT to remove all waste from inlets that pose a significant threat to water quality on an annual basis prior to the winter season. For those inlets that contain significant materials the Permit requires NDOT to consider investigating them under NDOT's illicit discharge program to determine whether enhanced BMPs are required. The 2005 SWMP states that NDOT would establish a cleaning schedule as well as tracking and reporting procedures for the drainage system by 2006. Section III.P through Q of the 2010 Permit requires

NDOT to implement specific BMPs to minimize discharges to and from the storm sewer system, and to report the amount of waste removed from the system.

NDOT staff indicated its maintenance crews clean all drop inlets and interceptors within the Tahoe Basin annually, and half of all culverts annually within Las Vegas. NDOT utilizes a Maintenance Management System (MMS) database to track all of NDOT's maintenance activities, including maintenance of the drainage system. The audit team observed a demonstration of MMS where NDOT explained that it uses information from the system to identify geographic areas that may lead to public safety hazards. For example, NDOT uses MMS to track the amount of debris removed from various locations to prevent flooding. However, the MMS only tracks geographic location and general information about their storm system (e.g., culverts); the MMS does not contain specific information about individual storm water features, such as inlets, outfalls, or other elements of the drainage system. NDOT should expand the existing database to add major outfalls and other storm water system attributes to improve how they track the amount of debris removed from the drainage system, schedule maintenance and form programmatic decisions (e.g., whether enhanced BMPs are required).

Potential Permit Violation

NDOT has failed to identify inlets that pose a significant threat to water quality. [2004 Permit Section 4.14.1.5.1]

NDOT has not determined which, if any, inlets pose a significant threat to water quality. Further, while NDOT has a schedule for cleaning drop inlets and interceptors in the Tahoe Basin and Las Vegas, NDOT has not developed a plan to identify those that pose a significant threat to water quality for other areas of the state. NDOT does summarize in their annual report the amount of wastes removed from certain storm features in certain portions of the state, but does not detail whether the amounts removed are significant or could warrant additional BMPs.

E.3. Maintenance Facilities

Section 4.14.1.6 of the 2004 Permit and Sections III.L through N and III.S describe NDOT's requirements for maintenance facilities.

NDOT operates 49 maintenance facilities statewide. NDOT staff at larger maintenance facilities performs major repair work of its fleet, while staff at smaller facilities performs minor maintenance of vehicles such as oil and antifreeze changes. Many facilities have capacity to store salt/brine and sand and have wash racks to clean vehicles and equipment. NDOT is in the process of building storage facilities at all maintenance yards to store salt/sand indoors, which will reduce the amount of brine/salt contaminants that may enter the on-site storm drains. NDOT reported that fifteen salt and sand storage sites at maintenance facilities have been covered in the last year alone. EPA observed an uncovered salt/sand storage pile at the intersection of U.S. 95 and S.R. 795 north of Winnemucca, NV. The pile is within Nevada's right-of-way for the highways, and no BMPs were noted at the location. As it continues to address salt and sand storage, NDOT should assess its staging locations, developing site-specific BMPs as needed.

The EPA audit team visited several maintenance facilities in all three districts. EPA observed compliance issues at several maintenance facilities including active unauthorized non-storm

water discharges, improper storage of batteries and oily equipment, and evidence of spills. Facility-specific observations are reported in Appendix B of this report.

During field visits, EPA discussed material mining sites with NDOT representatives. NDOT indicated they have over 3,000 such locations throughout Nevada. NDOT should analyze whether specific mining facilities within their control are industrial facilities subject to storm water permitting requirements.

Potential Permit Violation

NDOT has failed to develop Storm Water/Facility Pollution Prevention Plans for all maintenance facilities. [2004 Permit Section 4.14.1.6.1, and 2010 Permit Section III.S]

During the audit EPA requested Facility Pollution Prevention Plans (FPPPs) from NDOT for every maintenance facility visited, but NDOT staff indicated FPPPs had not been developed for any of their maintenance facilities.

F. Monitoring, Recordkeeping and Reporting

Section 5 of 2004 Permit and Section IV of the 2010 Permit describes monitoring, record keeping, and reporting requirements. NDOT is required to submit an annual monitoring plan to NDEP no later than October 1 of each year. In developing the plan, NDOT shall evaluate and update as necessary how monitoring may assist in making decisions about program compliance.

Based on interviews with staff and a review of the annual reports and other materials, NDOT is conducting monitoring at the following locations:

- Lake Tahoe – precipitation events have been sampled since 2005 as part of the EIP Phase III Master Plan for highway runoff characterization, BMP effectiveness, and operation monitoring. Twenty three interceptor and pre-treatment vaults in the Lake Tahoe Basin are sampled for a variety of parameters.
- Clear Creek – NDOT partnered with USGS to conduct in-stream turbidity monitoring.
- Carson City Bypass – NDOT monitors grab samples for general characterization and discharge quality of the wetland BMP.
- I-580 - NDOT conducts Water Quality and BMPs effectiveness monitoring at several creeks and at 15 BMP effectiveness monitoring sites.

Potential Permit Violation

NDOT failed to submit a storm water monitoring plan for 2010 and 2011 which evaluated how monitoring may assist in making decisions about program compliance, the appropriateness of identified BMPs, and progress toward achieving identified measurable goals. [2004 Permit Section 5.1.1 and 2010 Permit Section IV.A.1]

When EPA requested a copy of the two most recent monitoring plans, NDOT staff indicated they had not created monitoring plans for 2010 or 2011. Further, the 2009 monitoring plan failed to include an evaluation of how monitoring may assist in making decisions about program compliance, the appropriateness of identified BMPs, and progress towards achieving measurable goals.

Appendix A

Catalog of Materials Supplied by NDOT

Materials listed in this appendix are not included in submission of this audit report to NDOT. Copies of materials noted below are maintained as cataloged in U.S. EPA Region 9 records and can be made available upon request. These materials were not generated by U.S. EPA.

- A.1 – 2004 NPDES Permit NV0023329
- A.2 – 2010 NPDES Permit NV0023329
- A.3 – 2005 Storm Water Management Plan
- A.4 – 2005 Clear Creek Storm Water Management Plan
- A.5 – Planning and Design Guide
- A.6 – Construction Site BMP Manual
- A.7 – Inventory of Active Material Sites
- A.8 – USGS Water Quality Report For Clear Creek “Sediment Loads and Yield and Selected Water-Quality Parameters in Clear Creek, Carson City, and Douglas County, NV, Water Years 2004-2007” 2009
- A.9 – Kingsbury Grade, SR 207, SWPPP
- A.10 – TRPA Permit for Kingsbury Grade Project
- A.11 – Training Log
- A.12 – Training Power Point Presentation for NDOT Construction Inspectors
- A.13 – Painted Rock SWPPP
- A.14 – Painted Rock Weekly Inspection Reports
- A.15 – I-580 SWPPP
- A.16 – I-580 Construction Inspection Report 6.24.2011
- A.17 – I-580 Temporary Working in Waters Permit # TNEV2007475, May, 2007
- A.18 – I-580 Notice of SWPPP Renewal / CGP NOI
- A.19 – I-580 U.S. ACE §404 Permit #199825095
- A.20 – I-580 BMP Installation Decision Making Process
- A.21 – I-580 Turbidity Data (Galena Creek Bridge)
- A.22 – I-580 Detention Basin Sand/Oil Interceptor Volumes
- A.23 – I-580 Narrative/Photo Documenting the 8.12.11 BMP Corrective Actions near Ophir Creek
- A.24 – Lake Tahoe Storm Water Monitoring Report (2005-2010) Compact Disk
- A.25 – NDOT Organizational Chart
- A.26 – Nevada Contractors Field Guide for Construction Site BMPs
- A.27 – Construction Site BMP Field Manual
- A.28 – NDOT Silver Book Storm Water BMP Specification “Pull Sheets”
- A.29 – I-15 Design Build Inspection Reports
- A.30 – Wellington Maintenance Station Best Management Plan
- A.31 – Mountain Springs Best Management Plan
- A.32 – Checklist for maintenance facility inspections
- A.33 – Blank Weekly Construction Site Discharge Inspection Checklist for NDOT Inspectors
- A.34 – Materials from Winnemucca Maintenance Station Inspection
- A.35 – Sign-In Sheets for Kick-Off and Close-Out Conferences
- A.36 – 2008, 2009, and 2010 Annual Reports

Appendix B

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Summary of Audit Schedule

The following summarizes the site visits performed by EPA's during the four-day Storm Water Audit of NDOT's MS4 Permit. Specific Reports generated by EPA during the site visits are listed below:

- Tuesday, August 9th – Office interview NDOT Headquarters, Environmental Services Division
- Wednesday, August 10th – Carson City Maintenance Facility, erosion control retro-fit projects and the Spooner Summit Decant Facility in the Clear Creek Watershed, and the Kingsbury Grade Sediment Control Project in the Lake Tahoe Basin
- Thursday, August 11th – District maintenance facilities and construction sites:
District 1 – Maintenance Facilities – Mountain Springs and Las Vegas South
District 1 – Construction Sites – 160 Lane Widening and Las Vegas design-build
District 2 – Maintenance Facility – Reno/Sparks
District 2 – Construction Sites – I-580 and I-80 at Fernley
District 3 – Maintenance Facility – Winnemucca
- Friday, August 12th – Close-out conference

Reports of Site Inspections / Visits Performed by U.S. EPA

- B.1 – Carson Maintenance Station
- B.2 – Clear Creek Watershed
- B.3 – Spooner Summit
- B.4 – I-80 Painted Rock Project
- B.5 – I-580 Project
- B.6 – District 1 Materials: I-15 Design-Build, 160 Road Widening, South Maintenance Facility, and Mountain Springs Maintenance Facility
- B.7 – Reno Sparks Maintenance Facility
- B.8 – Winnemucca Maintenance Facility
- B.9 – Material Extraction Pit

Appendix C
Maintenance Facility Inspection Reports

Comprehensive Maintenance Facility Inspection (NV 0023329, Part III.M.)

Facility Location:	Date:	October 25/26, 2011
District I HQ (Las Vegas North) 123 Washington Las Vegas, Nevada 89101		
Performed By:	James Murphy / Jeff Cobb	
Title:	NDOT Water Quality Supervisor / Water Quality Staff II	

Weather description at time of inspection:

1. Temperature	78° f
2. Precipitation	None
3. Wind	2-8 mph

1.) Fueling Area**Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)**

Approximately 200ft from the Washington Street entrance of facility at the southern most area of fueling facility, the Bio diesel fuel pump is leaking at the hose coupler just prior to the external filter and a second leak is at the fuel pump handle. This portion of the fueling area is uncovered with a secondary confinement consisting of approximately 8" concrete curbing. The leaking areas extend over the curbing allowing the spill outside of the containment. (See Attachment "A"). The remaining portions of the fueling area are covered with spill kits signed and in good condition. The drainage for the area consists of concrete valley gutter at the perimeter. The valley gutters discharge at the north-east corner of the fueling area into a sand/oil interceptor.

2.) Vehicle/Equipment Parking**Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)**

South-east section of the facility is covered equipment parking. Drainage consists of perimeter concrete valley gutter with one drop inlet approximately in the middle of the valley gutter. The eastern most valley gutter running north south discharges into a slotted drain just prior to a sand/oil interceptor. The valley gutter running north/south and just to the west in this area appears to sheet flow to the north eastern portion of the facility via curbing and a small concrete slope on the north side of the propane filling area. Vehicle and equipment leaks in this area appear to be minor. Housekeeping measures appear to be in good order. A second location of vehicle/equipment storage is located in the north-west area of the facility. The equipment stored in this area consists of snowplows, various types of maintenance vehicles and attachments and salt/sand distributor beds. Several of the vehicles are leaking oil and hydraulic fluid. One of the salt/sand distributor beds has deposited salt/sand onto the pavement below the rack (See Attachment "B").

3.) Equipment Maintenance / Repair Facilities**Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)**

Located in the northeast corner of the facility. This is the lowest portion of the entire facility and receives all sheet flow from the remaining portions of the facility. Concrete valley gutters are utilized on the north, south and east sides of the repair shop. All of the valley gutters discharge at the extreme northeast corner of the facility into a drop inlet and enter the storm drain system. The repair shop does not have internal floor drains. This shop utilizes slotted drains at the outside perimeter. The slotted drains discharge to a sand/oil interceptor and then enter the sanitary sewer system. All equipment repairs are conducted indoors. Equipment awaiting repairs are stored at the northeast perimeter of the facility. There are several vehicles in this location that are leaking fluids (oil, hydraulic fluid, etc.; (See Attachment "C"). Housekeeping measures are not being utilized for spill prevention or clean up.

8.) Non-Compliance Issues

Include: (detailed description, suggested repair)

See above.

III.M.4. Certified and Signed

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)]

Authorized Signature:



Comprehensive Maintenance Facility Inspection (NV 0023329, Part III.M.)

Facility Location:	Date:	Wednesday, February 29, 2012
Mt. Charleston Maintenance Station SR-157 CL 5.1 Dean Mosher, Supervisor I, C129		
Performed By:	James Murphy	
Title:	Water Quality Specialist	

Weather description at time of inspection:

1. Temperature	~ 50 °F
2. Precipitation	None
3. Wind	0-5 mph

1.) Fueling Area

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Diesel and gas pump island located in the middle of the facility; fuel spill kit located in fuel pump house; diesel fuel pump appears to have a leak (significant diesel fuel leak buildup on fuel island beneath pump handle). Floor dry absorbent has been applied to leaked diesel fuel, but not removed and disposed of properly; two above ground diesel fuel tanks provide for onsite residence heating (no evidence of leaks or spills around these areas).

2.) Vehicle/Equipment Parking

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

NDOT allows Clark County to stage a snow plow on the premises (I indicated to the facility Supervisor that it is Clark County's responsibility to address equipment leaks). No observation of parked equipment currently leaking equipment fluids. Remnants of past drips/leaks where Clark County's snow plow is staged was observed.

3.) Equipment Maintenance / Repair Facilities

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Shop drains discharge to sand oil interceptor (never been pumped, but inspected annually); facility performs minor repairs and servicing (oil changes performed at Las Vegas District I HQ).

8.) Salt/Sand Spreader Racks

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Evidence of minor hydraulic fluid leaks; small sand/salt spills.

9.) Non-Compliance Issues

Include: (detailed description, suggested repair)

Potential leak at the diesel fuel pump; saturated floor dry absorbent at the fuel pump area was not removed and disposed of accordingly; sand/salt spills within spreader rack area are to be cleaned up. See above.

III.M.4. Certified and Signed

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)]

Authorized Signature:



Comprehensive Maintenance Facility Inspection (NV 0023329, Part III.M.)

Facility Location:	Date:
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Thursday, March 01, 2012

Beatty Maintenance Station
US-95 NY 59.9
Brad Hunt, Supervisor I, C123

Performed By:	James Murphy
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Title:	Water Quality Specialist
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Weather description at time of inspection:

1. Temperature	~ 55 °F, Partly Cloudy
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2. Precipitation	None
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3. Wind	None
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1.) Fueling Area

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Diesel and gas fueling island located in the middle of the facility. Spill kit located within the fueling area. Remnants of older, minor leaks. Diesel fuel tank on the north side of the facility office/garage is for indoor heating. No evidence of current spills/leaks within these areas.

2.) Vehicle/Equipment Parking

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Most of the facility's vehicles were out in the field during the inspection. A construction testing trailer is on the premises.

3.) Equipment Maintenance / Repair Facilities

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Major equipment repairs and servicing are conducted in Tonopah. Only minor equipment maintenance, i.e. greasing/lubing, is performed.

8.) Salt/Sand Spreader Racks

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Evidence of old, minor hydraulic fluid leaks; small sand/salt spills.

9.) Non-Compliance Issues

Include: (detailed description, suggested repair)

Sand/salt spills within spreader rack area are to be cleaned up. See above.

III.M.4. Certified and Signed

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)]

Authorized Signature:



Comprehensive Maintenance Facility Inspection (NV 0023329, Part III.M.)

Facility Location:	Date:	Monday, November 14, 2011
District II HQ (Reno Maintenance Facility) 310 Galletti Way, Sparks, NV 89431 (Reno Side of Galletti)		
Performed By:	James Murphy, Water Quality Section, Environmental Services Division	
Title:	Jeff Cobb, Water Quality Section, Environmental Services Division	

Weather description at time of inspection:

1. Temperature	~ 55° F
2. Precipitation	None
3. Wind	~ 5mph

1.) FUELING AREA

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Diesel Fuel Island: Pump 11 has a small leak, resulting in fuel drips on the ground surface. Floor dry has been applied throughout the fueling area; however saturated floor dry has not been collected and disposed of.

2.) VEHICLE/EQUIPMENT PARKING

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Central Parking Area: Various pieces of equipment have minor engine/hydraulic fluid leaks. Floor dry has been applied, but not consistently throughout the area. Minor sand/salt spills. Saturated floor dry has not been collected and disposed of. Sand Spreader Racks: Hydraulic hose leaks and small sand/salt spills on the ground surface; floor dry and fluid containment devices have not been deployed. Sand/salt spills in the area. Sealing Tank/Light Plant Storage Area: Various pieces of equipment leaking engine/hydraulic fluids; floor dry or fluid containment devices have not been deployed.

3.) Equipment Maintenance / Repair Facilities

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Equipment repair and maintenance activities are not conducted at this facility (they occur across the street at the Sparks Equipment Facility).

8.) Non-Compliance Issues

Include: (detailed description, suggested repair)

Non-containment of equipment engine/hydraulic fluids; floor dry not utilized to absorb equipment engine/hydraulic fluids already leaked onto the ground surface; equipment wash water not fully contained within designated wash rack facility; diesel fuel pump leak. See above.

III.M.4. Certified and Signed

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)]

Authorized Signature:



Comprehensive Maintenance Facility Inspection (NV 0023329, Part III.M.)

Facility Location:	Date:	<i>Monday, November 14, 2011</i>
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*District II HQ (Sparks Equipment Facility)
310 Galletti Way, Sparks, NV 89431
(Sparks side of Galletti Way)*

Performed By:	<i>James Murphy / Jeff Cobb</i>
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Title:	<i>Water Quality Specialist / Staff II (NDOT Environmental Services)</i>
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Weather description at time of inspection:

1. Temperature	<i>55f</i>
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2. Precipitation	<i>None</i>
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3. Wind	<i>10 mph</i>
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1.) FUELING AREA

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

The fueling station for this facility was under construction at the time of this inspection. There are no concerns to report at this time. The fueling station is located on the west side of the facility.

2.) VEHICLE/EQUIPMENT PARKING

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

The vehicle parking area is located along the north side of the facility. There are several vehicles leaking hydraulic and petroleum fluids located in the staging line. This area has recently been reconstructed and a concrete valley gutter was added. The valley gutter runs west to east between the repair shop bays and staging line for vehicles. The valley gutter discharges to a storm drain inlet at the east side. Floor dry had been applied to some of the leaked areas, but had not been removed and disposed of.

3.) Equipment Maintenance / Repair Facilities

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

The equipment maintenance and repair shop is located in the center of the facility. This shop does not contain floor drains and is equipped with appropriate disposal stations, spill prevention and absorption measures.

8.) Non-Compliance Issues

Include: (detailed description, suggested repair)

See above

III.M.4. Certified and Signed

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)]

Authorized Signature:



Comprehensive Maintenance Facility Inspection (NV 0023329, Part III.M.)

Facility Location:	Date:	<i>Monday, November 07, 2011</i>
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*Lovelock Maintenance Station
650 Grinnel Ave.
Lovelock, NV*

Performed By:	<i>James Murphy / Jeff Cobb</i>
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Title:	<i>(Water Quality Specialist) / (Staff II), NDOT Environmental Services</i>
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Weather description at time of inspection:

1. Temperature	<i>40 f</i>
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2. Precipitation	<i>None (rain the day before inspection)</i>
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3. Wind	<i>5 mph</i>
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1.) FUELING AREA

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Above Ground Storage tank containing fuel is placed on a concrete slab with a concrete curb perimeter of approximately 8". The concrete curb (secondary confinement) appears to be undersized in regards to the capacity of the storage tank; weepholes were installed at the bottom of the containment curbing at all four corners. There does not appear to be any leaks or spills in this area. A spill kit is located and signed appropriately. (See attached photo set "A")

2.) VEHICLE/EQUIPMENT PARKING

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Equipment racks are located on the south and west sides of the facility. There are several areas where hydraulic fluids have drained from hoses within the equipment rack locations. Due to the small area available within this facility, vehicle parking encompasses all of the interior area. This facility is laden with sediment deposition. The Facility Supervisor indicated that the facility is swept on a regular basis.(See attached photo set "B")

3.) Equipment Maintenance / Repair Facilities

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

All equipment repair activities take place indoors. The repair shop drainage consists of one floor drain at the western most bay that enters the sanitary sewer. General housekeeping within the repair shop is in good order. Spills and leaks were not observed.

8.) Non-Compliance Issues

Include: (detailed description, suggested repair)

See above. The vehicle wash location, in its current condition, is non-compliant with NDOT's Municipal Separate Storm Sewer Systems Permit (NV0023329). It is recommended that a wash rack facility is constructed appropriately to allow for full containment and treatment of wash water and establish a discharge point for the treated wash water into the sanitary sewer system. Until such a facility is constructed, it is recommended that all equipment be washed at an appropriate off site facility.

III.M.4. Certified and Signed

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)]

Authorized Signature:



Comprehensive Maintenance Facility Inspection (NV 0023329, Part III.M.)

Facility Location:	Date:	Tuesday, February 14, 2012
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Wellington Maintenance Station
SR-829 LY MP 3.00
Wellington, NV

Performed By:	James Murphy / Jeff Cobb
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Title:	Water Quality Specialist / Staff II
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Weather description at time of inspection:

1. Temperature	55
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2. Precipitation	none
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3. Wind	none
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1.) FUELING AREA**Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)**

Located on the west side of the facility, the fueling area contains diesel only pumps; used oils and solvents are maintained with secondary containment within the fuel house. A spill kit is also kept in the fuel house. The area is clean and free of leaks and spills.

2.) VEHICLE/EQUIPMENT PARKING**Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)**

The large equipment is stored inside the shop and garage areas located along the east side. Smaller vehicles and equipment are stored at various locations. This facility maintains a mechanical sweeping frequency for all impervious surfaces a minimum of twice a year.

3.) Equipment Maintenance / Repair Facilities**Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)**

Vehicle and equipment servicing and repairs are not conducted at this facility. The facility does maintain used batteries, which are temporarily stored indoors. There are two enclosed shop areas. One is tied to the office and the other is separated. Both are located on the east side of the facility. The shop tied to the office contains floor drains that discharge to a sand/oil interceptor prior to discharging to the leach field (UIC Permitted).

8.) Salt/Sand Spreader Racks**Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)**

Minor spills and leaks where identified in the spreader rack area located along the south perimeter of the facility. These spills and leaks happened prior to this inspection and have been absorbed by sand. The sand needs to be swept up and properly disposed of.

9.) Non-Compliance Issues**Include: (detailed description, suggested repair)**

See above

III.M.4. Certified and Signed

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)]

Authorized Signature:

Comprehensive Maintenance Facility Inspection (NV 0023329, Part III.M.)

Facility Location:

Date: Feb. 14, 2012

Yerington Maintenance Yard
SR-208 LY 28.95
Jason Baker, Supervisor I, C236

Performed By:

James Murphy/Jeff Cobb (Env. Services Div., Water Quality Section)

Title:

Water Quality Specialist/Staff II Engineer

Weather description at time of inspection:

1. Temperature

~ 55°

2. Precipitation

None

3. Wind

None

1.) FUELING AREA

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Diesel fuel island with a spill kit located inside the fuel house. No evidence of recent leaks or spills.

**2.) VEHICLE/EQUIPMENT
PARKING**

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Minor leaks and spills; floor dry applied to areas of minor equipment fluid leaks not cleaned up.
Heavy equipment parked along the south perimeter of the facility.

**3.) Equipment Maintenance /
Repair Facilities**

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

All vehicle maintenance occurs at the Fallon Maintenance Facility. No used oil or battery storage at the facility.
The shop on the south end of the facility contains floor drains.

8.) Salt/Sand Spreader Racks

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Located at the offsite "Log Cabin" yard. Residual of older, minor hydraulic fluid leaks.

9.) Non-Compliance Issues

Include: (detailed description, suggested repair)

Equipment fluid leaks need to be contained and/or cleaned up. Floor dry absorbent that is applied to small leaks and spills needs to be cleaned up and disposed of properly.

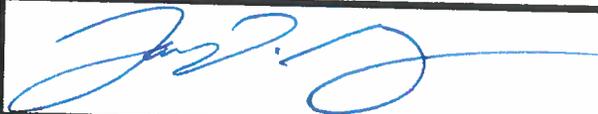
Hydraulic fluid spill at the US-50 Sand/Salt Pile needs to be cleaned up (this location may be under the jurisdiction of the Fernley Maintenance Station).

See above.

III.M.4. Certified and Signed

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)]

Authorized Signature:



Comprehensive Maintenance Facility Inspection (NV 0023329, Part III.M.)

Facility Location:	Date:	Wednesday, January 11, 2012
Virginia City Maintenance Station SR 342 ST 2.65 Virginia City Nevada 89440		
Performed By:	James Murphy / Jeff Cobb	
Title:	Water Quality Specialist / Staff II	

Weather description at time of inspection:	
1. Temperature	55-60
2. Precipitation	None
3. Wind	0-5

1.) FUELING AREA	Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)
<p>The fueling area is located at the main entrance of the facility. The pump house is used for the storage of vehicle fluids and greases. All materials stored inside the pump house have secondary containment and well maintained. A small diesel spill, that happened while fueling, has had floor-dry placed that now needs to be swept up and disposed of properly. A spill kit is located at this location.</p>	

2.) VEHICLE/EQUIPMENT PARKING	Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)
<p>The sweeper for this facility is stored indoors. A snow plow stored along the south side of the office is leaking hydraulic fluid. This needs to be addressed.</p>	

3.) Equipment Maintenance / Repair Facilities	Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)
<p>The repair shop has a floor drain that enters a sand/oil interceptor prior to discharging into the sanitary sewer. Vehicle repairs are not done at this location. This facility does not store batteries. The spreader racks are at the south of the facility and show no signs of hose leaks or residual salt/sand build up.</p>	

8.) Non-Compliance Issues

Include: (detailed description, suggested repair)

The hydraulic leak near the office needs to be addressed. This leak constitutes a non-stormwater discharge and has the potential to be carried off-site during a storm event. See above.

III.M.4. Certified and Signed

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)]

Authorized Signature:



Comprehensive Maintenance Facility Inspection (NV 0023329, Part III.M.)

Facility Location:	Date:	Thursday, January 26, 2012
Fallon Maintenance Station 888 Harigan Road Fallon, Nevada		
Performed By:	Jeff Cobb	
Title:	NDOT Water Quality Section Staff II	

Weather description at time of inspection:

1. Temperature	45-50
2. Precipitation	Afternoon light showers
3. Wind	0-5 mph

1.) FUELING AREA

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

No spills or Leaks. Fuel drums in secondary containment and within fueling area shed. Spill kit located in this area

2.) VEHICLE/EQUIPMENT PARKING

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

This facility has two spreader rack locations and two center vehicle /equipment parking areas. The spreader racks are located along the east side of the facility. Both spreader racks show signs of previous leaks that do not appear to have been properly addressed, however there was no sign of recent or continuous leaks at the time of this inspection. Stormwater from the spreader rack locations sheet flows to the eastern most valley gutter and enters a drop inlet at the north end. The vehicle/equipment parking runs north south with one over the eastern most valley gutter and one over the next valley gutter to the west which enters a drop inlet on the north end. The only identifiable leak was under boot truck at the eastern most location. This vehicle was not leaking at the time of inspection but the leak was obviously not addressed at the time it took place. Other various equipment was parked along the perimeter in a orderly fashion.

3.) Equipment Maintenance / Repair Facilities

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

This facility has a full vehicle/equipment repair shop located east of the main gate off of Harigan Road. The repair shop has functioning floor drains the discharge to a sand/oil interceptor at the south end of the building before entering the sanitary sewer. All used batteries have a 1-2 day turn around for new batteries and therefore are not stored outside.

8.) Non-Compliance Issues

Include: (detailed description, suggested repair)

A few areas where spills and/or leaks have not been cleaned up. Leaking vehicles without drip pans or other containment device in various locations. Recommendations: utilized floor-dry or other acceptable absorbent for spills and properly sweep up and dispose of appropriately. Utilize drip pans or other containment under leaking equipment/vehicles until repair can be completed. These spills and leaks are considered non-stormwater discharges which constitutes non-compliance. See above.

III.M.4. Certified and Signed

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Authorized Signature:



Comprehensive Maintenance Facility Inspection (NV 0023329, Part III.M.)

Facility Location:

Date:

Tuesday, April 17, 2012

Cold Springs Maintenance Station

US-50 CH 81.61

Supervisor I: Dan Clauser; Supervisor II: Ed Ely; Maintenance Manager: Mike Fipps

Performed By:

James Murphy

Title:

Water Quality Specialist

Weather description at time of inspection:

1. Temperature

~ 60°

2. Precipitation

None

3. Wind

0-5 mph

1.) FUELING AREA

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Above ground storage tanks; one fuel island with both diesel and gas pumps; visible staining around pump area (fuel saturated soil directly behind fuel island resulting from prior leak (subsequently fixed)); spill kit signed and located next to pump house.

2.) VEHICLE/EQUIPMENT PARKING

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

South garage (cold storage) facility stores equipment, miscellaneous equipment/materials and used equipment/engine fluids (properly stored); the north garage/office facility houses equipment, miscellaneous equipment and materials, floor drains that discharge into the septic sewer system.

3.) Equipment Maintenance / Repair Facilities

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Major equipment repairs and maintenance are performed in Fallon, no oil changes, just minor maintenance (e.g. greasing).

8.) Salt/Sand Spreader Racks

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Minor, older hydraulic fluid staining; very minor sand/salt spills to be cleaned up

9.) Non-Compliance Issues

Include: (detailed description, suggested repair)

See above. Note: NDEP (Steve McGoff and Sam Stegeman) were present during the inspection and concurred with the findings.

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Authorized Signature:



Comprehensive Maintenance Facility Inspection (NV 0023329, Part III.M.)

Facility Location: *Gardnerville, Maintenance Station*
1875 E. Dump Rd.
Gardnerville, NV

Date: *Tuesday, February 14, 2012*

Performed By: *James Murphy/Jeff Cobb*

Title: *Water Quality Specialist/Staff II*

Weather description at time of inspection:

- 1. Temperature ~ 40 °F
- 2. Precipitation None
- 3. Wind 0-5 mph

1.) FUELING AREA

Include: *(location, facility drainage features, leaks, spills, spill kits, housekeeping measures)*

Diesel and gas. Area is maintained. No evidence of recent spills or leaks. A spill kit is onsite.

2.) VEHICLE/EQUIPMENT PARKING

Include: *(location, facility drainage features, leaks, spills, spill kits, housekeeping measures)*

Several pieces of equipment stored inside; a few pieces of equipment stored outside (no visible signs of leaks).

3.) Equipment Maintenance / Repair Facilities

Include: *(location, facility drainage features, leaks, spills, spill kits, housekeeping measures)*

Floor drains discharge into oil separators prior to discharging into septic system.
Overall, a clean facility.

4.) Material Stockpiles / Storage Areas

Include: *(location, facility drainage features, leaks, spills, spill kits, housekeeping measures, material type, covered/uncovered)*

Several enclosures for equipment/material storage; small pile of cold millings should be covered.

It should be noted that this Crew utilized "Green Patch," an environmental friendly cold mix asphalt product. This facility lies adjacent to the primary local waste transfer station route, resulting in garbage constantly blowing into the facility.

Offsite associated facility areas: Kingsbury and Double Springs. Performed an inspection at the Double Springs material storage area, i.e. sand/salt pile. No "Sprung" structure; stormwater discharges into adjacent upland vegetation area; does not discharge into a Waters of the U.S. Stormwater discharge related concerns were not observed at the time of inspection.

9.) Non-Compliance Issues

Include: (detailed description, suggested repair)

See above. Maintain trash cleanup, fluid leak cleanup and spilled material cleanup frequencies to reduce the potential of stormwater pollutant discharge to the maximum extent practical.

IIIM.4. Certified and Signed

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Authorized Signature:



Comprehensive Maintenance Facility Inspection (NV 0023329, Part III.M.)

Facility Location:	Date:	Wednesday, January 11, 2012
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Fernley Maintenance Station
 750 W. Main St.
 Fernley Nevada 89408

Performed By:	James Murphy / Jeff Cobb
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Title:	Water Quality Specialist / Staff II
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Weather description at time of inspection:

1. Temperature	55-60
2. Precipitation	None
3. Wind	0-5mph

1.) FUELING AREA

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Fueling area is located in the center of the facility. Very clean with no evidence of leaks or spills at the pumps or tanks. A spill kit is located in this area.

2.) VEHICLE/EQUIPMENT PARKING

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

North sander rack location: this location is free from hose leaks and only one area was identified for residual salt/sand from equipment. - (sweep and dispose of all residual salt/sand that may drop from sanders after storage.) South sander rack location: this location does not show evidence of hose leaks or residual salt/sand. Center plug-in equipment area: a skip loader at the south end of this location is leaking anti-freeze. Floor-dry or other appropriate absorbent needs to be applied. This appeared to be a very recent leak.

3.) Equipment Maintenance / Repair Facilities

Include: (location, facility drainage features, leaks, spills, spill kits, housekeeping measures)

Major vehicle repairs are not done at this facility. Minor vehicle maintenance such as brake checks and fluid checks are completed however, used fluids and used batteries are not stored at anytime. The repair shop consists of a large floor drain that runs through a sand/oil interceptor prior to discharging to the sanitary sewer.

8.) Non-Compliance Issues

Include: (detailed description, suggested repair)

The anti-freeze that has leaked at the southeast end of the plug-in equipment storage area must be addressed appropriately. This leak constitutes a non-stormwater discharge that has the potential of being carried off-site during a storm event. Residual sand/salt to be swept up. See above.

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Authorized Signature:

