Nevada Department of Transportation

2013 Stormwater Management Program
Revised, December 2017

LOVE NV WATERS
NDOT STORMWATER PROGRAM

NDOT, Stormwater Division
1263 S. Stewart Street
Carson City, Nevada 89712

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NEVADA DEPARTMENT OF TRANSPORTATION

2013

STORMWATER MANAGEMENT PROGRAM

Revised, December 2017

Nevada Department of Transportation

Stormwater Division

1263 South Stewart Street

Carson City, Nevada 89712

Notice: Comments and questions relating to the NDOT's Stormwater Management Program should be directed to:

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Acknowledgments

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Acronym/Abv.	Definition
AASHTO	American Association of State Highway and Transportation Officials
AGC	Associated General Contractors
ASCE	American Society of Civil Engineers
BCA	Bureau of Corrective Actions
BMP	Best Management Practice
BMP Manual	Construction Site Best Management Practices Manual
CAMU	Corrective Action Management Unit
CCSWMP	Clear Creek Stormwater Management Program
CFR	Code of Federal Regulations
CGP	Construction General Permit
GIS	Geographic Information Systems
CWA	Clean Water Act
EIP	Environmental Improvement Program
EPA	United States Environmental Protection Agency
ERP	Enforcement Response Plan
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FPPP	Facility Pollution Prevention Plan
FWPCA	Federal Water Pollution Control Act
IDDE	Illicit Discharge Detection and Elimination
IFMCP	Industrial Facility Monitoring and Control Program
ILA	Interlocal Agreement
IT	Information Technology
LCCP	Lake Clarity Crediting Program
LID	Low Impact Development
MgCl	Magnesium Chloride
MEP	Maximum Extent Practicable
MMS	Maintenance Management System
MOA	Memorandum of Agreement
MS4	Municipal Separate Storm Sewer System
NaCl	Sodium Chloride (salt)
NDA	Nevada Department of Agriculture
NDEP	Nevada Division of Environmental Protection
NDOT	Nevada Department of Transportation
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NRS	Nevada Revised Statute
PDF	Portable Document Format
PDG	Planning and Design Guide
PS&E	Plans, Specifications, and Estimates

Acronym/Abv.	Definition
QA	Quality Assurance
RCP	Runoff Control Plan
ROW	Right or Rights-of-way
RUP	Restricted Use Pesticides
SAM	Stormwater Asset Mapping
SARA	Superfund Amendments and Reauthorization Act
SOP(s)	Standard Operating Procedure(s)
SPDR	Stormwater Project Design Requirements
SWMP	Stormwater Management Program
SWOMP	Stormwater Operations and Maintenance Plan
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
TRPA	Tahoe Regional Planning Agency
TSD	Treatment, Storage and Disposal Facilities(s)
UNR	University of Nevada, Reno
USFS	United States Forest Service
WLA	Waste Load Allocation
WOUS	Waters of the Unites States
WPCM	Water Pollution Control Manager
WQIR	Water Quality Investigation Report

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Appendices

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Section 1 Introduction

Presented in this document is a description of the Nevada Department of Transportation's (NDOT) Stormwater Management Program (SWMP) and associated practices. In July 2010, the Nevada Division of Environmental Protection (NDEP) re-issued a municipal separate storm sewer (MS4) discharge permit (Permit No. NV0023329) (Permit) to the NDOT. The Permit requires the continued administration, implementation and enforcement of the SWMP to mitigate pollution in stormwater runoff from NDOT facilities, roadways and rights-of-way (ROW) throughout the state for the five-year term of the Permit.

Presented in this section is an introduction to NDOT's SWMP, general program goals and objectives, a discussion of the organization of this SWMP document, and NDOT SWMP staff contact information.

1.1 Forward

This SWMP document is an update to the March 2013 SWMP document and prepared by NDOT with the assistance of Stantec Consulting Services Inc. This document is intended to provide NDOT employees and the public with an overview of NDOT's game plan for administering and implementing its SWMP. The programs and practices listed in the 2013 edition are included in this update in a different format but with similar organization. Programs have been updated accordingly to reflect new policies, practices, and procedures currently being implemented. Due to NDOT maintaining coverage under an "administratively continued" Permit, SWMP updates do not include changes to measurable goals and associated implementation timeframes.

1.2 Program Goals

The overall goal of the NDOT's SWMP is to reduce pollution associated with stormwater from NDOT's MS4 to the maximum extent practicable (MEP). Additional SWMP goals include:

Protect surface and groundwater resources within the MS4 Permit area

Minimize erosion and sedimentation through appropriate controls and practices

Develop programs and practices that are efficient and cost-effective

Maintain and coordinate stormwater activities and implementation with all Districts, Divisions and Sections of NDOT

Work effectively with contractors and service providers in support of the Nevada Stormwater Construction General Permit and to reduce pollution to the MEP

The program outlined in this document was created to help accomplish the above listed goals.

1.3 Document Organization

This SWMP document is organized to present a cohesive and structured program, which specifically addresses each Permit requirement. NDOT developed this SWMP to describe the "minimum control measures" outlined in the Clean Water Act (CWA). These are measures NDOT is taking to reduce the discharge of stormwater pollutant discharges from its owned and operated MS4.

This SWMP Document is organized as follows:

Section 1 – Introduction: Presented in this section is an introduction to the NDOT Stormwater Management Program, goals, document organization, and NDOT stormwater contact information.

Section 2 – Stormwater Regulatory Requirements: This section contains a general description of applicable stormwater regulatory requirements, NDOT's MS4 Permit requirements and the stormwater program elements discussed and addressed in this SWMP document.

Section 3 – NDOT Organization and Responsibilities: Presented in this section is an overview of how NDOT is organized, the various Divisions, their responsibilities with respect to stormwater, and a discussion of NDOT's new Stormwater Division and its organization.

Section 4 – Program Elements: Included in this section is a discussion of the programs, goals, rationale and responsibility for the various practices in-place to address the Permit required elements.

Section 5 – Clear Creek Stormwater Management Program: Outlined in this section is NDOT's Permit required Clear Creek Stormwater Management Program (CCSWMP) describing each program element applicable to the Clear Creek watershed.

Section 6 – Record Keeping: Summarized in this section are NDOT's record keeping practices related to collecting, storing and maintaining records related to the stormwater program.

Section 7 – Annual Report: NDOT's stormwater program is required to submit an annual report to NDEP. Summarized in this section is NDOT's annual reporting requirements.

Section 8 – Implementation Schedule for Measurable Goals: Many of the stormwater best management practices (BMPs) have measurable goals and established implementation schedules. These goals and the progress in meeting them are presented in this section.

Document Appendices:

Appendix A – NDOT MS4 Permit

Appendix B – Sanitary Sewer Discharge Authorizations

Appendix C – Lake Tahoe TMDL Interlocal Agreement

Appendix D – Stormwater Division Organizational Chart

1.4 Contacts

Comments and questions relating to the NDOT SWMP may be directed to:

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1.5 Revised Format

In this revised SWMP document, the information contained in the Fact-Sheets of the 2013 SWMP is presented in paragraph form. Each Programmatic Best Management Practice (BMP) is presented with a Rationale, Objectives(s) and Responsibility section. Implementation schedules and measurable goals are presented in tabular form in Section 8.

1.6 Document Availability

Hard copies of this manual are available for purchase from NDOT Administrative Services. The manual will also be available for download from the NDOT website.

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Section 2 Stormwater Regulatory Requirements

Presented in this section is a summary of the pertinent background history and present current regulatory requirements applicable to NDOT's SWMP.

2.1 Stormwater Regulations

The 1948 Federal Water Pollution Control Act (FWPCA) was amended in 1972 and subsequently referred to as the Clean Water Act (CWA). The CWA was further amended in 1987, forming the legislative basis for all federal stormwater regulations. The 1987 amendments require National Pollution Discharge Elimination System (NPDES) permits for stormwater discharges from MS4s and industrial activities (including construction) into a Waters of the US (WOUS). Stormwater NPDES permitting was implemented in two phases.

Phase I was promulgated in 1990 and required permit coverage to address stormwater runoff from:

- Facilities previously permitted for stormwater discharges
- 10 categories of industrial activity
- Large construction sites (i.e. construction activity disturbing 5 acres of land or greater, or less than 5 acres but part of a common plan of development disturbing 5 acres or more)
- Large (pop.>250,000) and Medium (100,000 <pop. <250,000) MS4s
- Facilities determined to be "significant contributors" of pollutants to waters of the United States (WOUS)

Phase II's Final Rule was published in 1999 and required permit coverage to address stormwater runoff from:

- Regulated Small MS4s (pop. <100,000 within urbanized areas)
- Small construction sites (i.e. construction activity disturbing between 1 and 5 acres, or less than 1 acre but part of a common plan of development disturbing 1 acre or more)

The State of Nevada, i.e. NDEP, has the authority from the US Environmental Protection Agency (EPA) (primacy) to issue NPDES permits.[1] Under Phase I, NDEP issued individual large MS4 permits to the Las Vegas Valley and the Truckee Meadows with NDOT included as a co-permittee[2]. When Phase II went into effect, NDOT would have been a co-permittee with several small MS4s; consequently, NDOT requested coverage under a separate individual MS4 permit. NDOT was issued its first MS4 permit in 2004 and again in 2010.

[1] EPA remains the NPDES permitting authority on Tribal Lands in the State of Nevada.
[2] EPA defined an MS4 to also include road systems owned by states which are in areas with populations > 100,000.

2.2 MS4 Permit Requirements

By obtaining coverage under the Permit, NDOT is authorized to discharge stormwater and specific non-stormwater runoff to WOUS from storm sewer systems owned and operated by NDOT. The Permit covers state and interstate highways and their rights-of-way within NDOT's jurisdictional boundaries. The Permit includes conditions that are intended to protect the quality of the receiving waters. These conditions include:

- Special considerations and actions for discharges to impaired water bodies included on the State of Nevada 303(d) list and those waterbodies having an approved Total Maximum Daily Load (TMDL) as described in the most recent NDEP Water Quality Integrated Report.
- Development, implementation, and enforcement of a statewide SWMP.

Stormwater Program Elements

The Permit requires that NDOT develop and implement a SWMP that includes the following eleven programmatic elements:

- NDOT's Legal Authority
- NDOT's Stormwater Education Program
- NDOT's MS4 Maps and Outfalls
- Discharges to Water Quality Impaired Waters and Sanitary Sewers
- Construction Site Best Management Practices ("BMPs") Program
- New Development and Redevelopment Planning Program
- NDOT's Illicit Discharge Detection and Elimination ("IDDE") Program
- Industrial Facility Monitoring and Control
- Stormwater Discharges from NDOT Maintenance Facilities
- Public Street Maintenance Program
- Herbicide, Pesticide and Fertilizer Application Program

Permissible and Non-Permissible Discharges

The Permit authorizes the discharge of stormwater from NDOT's MS4 into a WOUS. NDOT is also authorized to discharge non-stormwater from the following sources provided that the NDEP has not determined these sources to be substantial contributors of pollutants to NDOT's MS4:

- Potable water line flushing
- Diverted stream flows not requiring a separate permit
- Rising ground waters and springs
- Uncontaminated ground water infiltration into the storm drain system
- Discharges from potable water sources
- Residential foundation drains

- Air conditioning condensation
- Irrigation water from lawns and landscaping
- Water from residential crawl space pumps
- Individual residential car washing
- Flows from riparian habitats and wetlands not requiring a separate permit
- De-chlorinated swimming pool discharges
- Water incidental to street sweeping
- Discharges from firefighting activities
- Dewatering activities not requiring a separate discharge permit

These permit-authorized non-stormwater discharges or flows may require regulation, treatment, or elimination if NDEP considers them to be a substantial contributor of pollutants to a WOUS. If it is determined that NDOT's discharges cause or contribute to an instream exceedance of water quality standards, NDEP may require corrective action or an application for a separate individual permit or alternative.

The Permit does not authorize the following:

- Discharges of any non-stormwater unless the discharges are currently covered under a separate NPDES Permit, or included in the list of authorized discharges listed above
- Approved discharges listed above that are found by NDEP to be a substantial contributor of pollutants
- Stormwater discharges currently covered under a separate NPDES permit
- Discharges that do not comply with Nevada's anti-degradation policy
- Stormwater discharges associated with industrial activity
- Stormwater discharges associated with construction activity

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Section 3 NDOT Organization and Responsibilities

NDOT's duty to administer the statewide transportation program is authorized by the Nevada Legislature through the enactment of statutes, specifically the Nevada Revised Statutes (NRS). Fundamentally, the NRS authorizes NDOT to design, build, and maintain the Nevada Highway System in NRS Chapter 408 – *Highways, Roads and Transportation Facilities*. NDOT is overseen by a seven-member Board of Directors and managed by a Director, Deputy Directors, Assistant Directors, and District Engineers.

3.1 NDOT Organization

There are five primary Divisions within NDOT, those being Administration, Engineering, Operations, Planning, and the Stormwater Program. The Stormwater Program structure is further described in Section 3.2. A summary of the first four divisions are described as follows:

3.1.1 Administration

Administration services provided are Accounting, Civil Rights/Disadvantaged Business Enterprise, Communications, Financial Forecasting, Financial Management, Flight Operations, and Information Technology.

3.1.2 Engineering

Within the Engineering Division there are several Sections, Subsections and Specialties: Design, Environmental Services, Location Services, Project Management, Right-of-Way, and Structures. Notably, the Engineering Division oversees project management and highway project designs.

Hydraulics Division manages the flow of stormwater runoff from NDOT's highway facilities. More information regarding the Hydraulics Divisions role with stormwater quality is described in sub-section 3.4.

3.1.3 Operations

NDOT's Operations Division is responsible for an array of duties essential to the overall scope of NDOT's mission and is divided into several subsections. In part, Operations in its managerial role administers and oversees construction projects, contract compliance, the Partnering Program, material testing and material specifications, and maintenance engineering.

3.1.4 Planning

NDOT's Planning Division consists of the Federal Programs, Performance Analysis, Research, Roadway Systems, Safety Engineering, Traffic Information, and Transportation Multimodal Planning sections.

These sections are responsible for major corridor studies and the development and plan adoption of urban freeway corridor improvements in Nevada as well as a huge amount of data analysis. In addition, the Planning Division oversees NDOT's Transportation Alternatives Program, Nevada's State Bicycle and Pedestrian Program, the State Rail Plan, the Statewide Multimodal Plan, NDOT's Research Program, and the state's transit program.

3.2 Stormwater Program Division

In 2015, the NRS section *Water Pollution Control* in Chapter 408-*Highways, Roads and Transportation Facilities* was amended by Senate Bill No. 324, providing NDOT with the legislative authority to create the Stormwater Division to administer NDOT's SWMP. NDOT was also provided with the necessary legal authority to regulate discharges, material spills, and illegal dumping into its ROW. These amendments to NRS 408 were codified in 2017.The Stormwater Program Division's fundamental structure is illustrated on an organization chart included in Appendix D. The roles of the various sections comprised of:

3.2.1 Executive Administration

Executive Administration applies advanced environmental science and policy, stormwater management and engineering principles, and techniques following established guidelines, policies, and procedures in performing environmental compliance program administration and program management best practices.

They administer, coordinate and manage the NPDES Compliance Program for NDOT; manage compliance strategies, develop and coordinate grant requests; and manage Transportation Board and various State agency reports and presentations. NDOT's Deputy Director overseeing the Stormwater Division heads the Stormwater Executive Administration. The Stormwater Division Chief oversees the day-to-day operations of the Stormwater Division.

3.2.2 Design

The Design Section is responsible for overseeing stormwater quality monitoring and post-construction BMP related programs. Specific functions include characterizing stormwater discharges, evaluating potential impacts to impaired waters, and designing permanent stormwater treatment control measures.

3.2.3 Information Technology

The Stormwater Division's Information Technology (IT) Section delivers customized technology services to the Stormwater Division. This section is responsible for the prioritization and managing of approved IT products and projects, including the geographic information system (GIS) asset management and stormwater inspection system.

3.2.4 Program Development

The Program Development Section's responsibilities include administering NDOT's Stormwater Education Program. Responsibilities also include overseeing the development of the Annual Report, and assisting with various SWMP coordination efforts, including assistance with the procurement of sanitary sewer disposal authorizations and providing general oversight and direction with SWMP development and implementation.

3.2.5 Enforcement and Compliance

The Compliance and Enforcement Section administers NDOT's Legal Authority, Construction Site BMPs, Industrial Facility Monitoring and Control, and IDDE Programs. Specific responsibilities include performing annual maintenance facility stormwater inspections, conducting routine outfall monitoring, performing quality assurance QA construction site inspections, and investigating illicit discharge reports.

3.2.6 Field Support

District Stormwater Division Field Support staff assist with the implementation of NDOT's SWMP at the District level, notably the Stormwater Discharges from NDOT Maintenance Facilities and Public Street Maintenance Programs.

3.3 Hydraulics Division

In addition to managing the flow of stormwater runoff from NDOT's highway facilities, the Hydraulics Division coordinates with the Stormwater Division's Design Section to ensure BMPs are designed to convey or bypass flows that exceed the water quality design flow rate.

Hydraulics Division administers the Lake Tahoe TMDL Program and the Lake Tahoe Environmental Improvement Program (EIP), as well as the Clear Creek Erosion Control Program. Further, the Hydraulics Division performs all stormwater design functions within the Lake Tahoe Basin and Clear Creek watershed; administers Tahoe Regional Planning Agency (TRPA) permitting and TMDL reporting for projects located within the Lake Tahoe Basin; and continues to designate the Lake Tahoe EIP Coordinator.

3.4 Landscape Architecture Section

The Landscape Architecture Section is responsible for overseeing the development of revegetation prescriptions and landscaping plans for disturbed areas within NDOT's ROW. Responsibilities include topsoil management and developing seed/planting specifications.

3.5 Intra-Departmental Stormwater Coordination

Rationale: Integrate SWMP elements into NDOT's activities and operations with coordination and communication with the appropriate NDOT Divisions and the three Districts.

Objective(s):

1) Provide assistance for stormwater related permitting, selection and implementation of BMPs, inspections, and compliance and enforcement.
2) Instill and promote collaboration during the development, enhancement, and implementation of SWMP related programs.

Responsibility: Stormwater Division

Successful SWMP implementation requires the Stormwater Division to work and consult with other Divisions, Sections, and the three Districts to resolve potential regulatory, design, construction, and maintenance issues.

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Section 4 Program Elements

Included in this section is information pertaining to procedures and practices (BMPs) that NDOT has established to address the following:

- Legal Authority
- MS4 Maps and Outfalls
- Stormwater Monitoring Program
- Construction Site Best Management Practices (BMP) Program
- New Development and Redevelopment Planning Program
- Industrial Facility Monitoring and Control Program
- Illicit Discharge Detection and Elimination (“IDDE”) Program
- Stormwater Education Program
- Maintenance Facilities Stormwater Discharge Control Program
- Public Street Maintenance Program
- Herbicide, Pesticide and Fertilizer Application Program
- Discharges to Sanitary Sewers
- Lake Tahoe TMDL
- Discharges to Water Quality Impaired Waters

4.1 Legal Authority and Enforcement

Pursuant to Part III.B of the Permit, the updated SWMP is to describe NDOT's legal authority established by statute, regulation, or contract documents to: prohibit illicit discharges to the MS4; control discharges to the MS4 from spills, dumping or disposal of materials other than stormwater; require compliance with conditions in regulation, ordinances, permits, contracts, or orders; conduct inspections and monitoring as necessary to determine compliance and noncompliance with the prohibition of illicit discharges to the MS4.

4.1.1 Nevada Revised Statutes

Rationale: Establish the legal basis to manage stormwater discharges and prevent non-authorized, i.e. illicit, discharges in NDOT's MS4 areas.

Objective(s):

1) Maintain adequate legal authority to enforce the provisions of the Permit.
2) Identify and address deficiencies in NDOT's legal authority and enforcement ability.

Responsibility: Stormwater Division

NDOT's duty to administer the statewide transportation program is authorized by the Nevada Legislature through the enactment of the NRS. Fundamentally, the NRS authorizes NDOT to design, build, and maintain the Nevada Highway System in NRS Chapter 408 – *Highways, Roads and Transportation Facilities*. In 2015, the NRS Section on *Water Pollution Control* was amended by Senate Bill No. 324 and formally codified in 2017. NRS Section 408.439 – 408.451 explicitly sets forth the legal authority to address dumping, material spills, and illicit discharges impacting NDOT's ROW.

Also, resulting from these amendments was the creation of a Stormwater Division with an appointed Deputy Director with full authority to administer a program that prohibits unauthorized discharges in NDOT's MS4 areas. In the event there is an illegal discharge into the MS4 area, NDOT is authorized to; 1) enter upon any premises to investigate the source of a discharge; 2) issue orders for compliance; 3) seek injunctive relief; 4) impose a civil penalty of up to $25,000 per day for violations; 5) request that the Attorney General pursue criminal prosecution for violations; and 6) conduct independent investigations of potential violations.

For reference, NRS Chapter 408 – *Highways, Roads and Transportation Facilities* of the NRS can be viewed on the Nevada Legislature website.

4.1.2 Standard Specifications

Rationale: Develop and publish specifications for appropriate management of construction site stormwater runoff on NDOT construction projects.

Objective(s):

1) Require contractors through contract documents and standard specifications to implement control measures that will prevent and/or reduce pollutants in construction site stormwater discharges to the MEP.
2) Provide provisions for enforcement.

Responsibility: Stormwater and Construction Divisions, and the three Districts

NDOT's *Standard Specifications for Road and Bridge Construction* (*Standard Specifications*) addresses typical construction site stormwater runoff control on NDOT construction projects. Special provisions may be added to construction contracts on a case-by-case basis that require specific, non-standard stormwater compliance actions. The Stormwater Division reviews project plans, specifications, and estimates (PS&E) and will assist with the development of special provisions as needed.

NDOT requires its contractors to comply with the *Standard Specifications* and other project-specific requirements. Section 637 *Temporary Pollution Control* of the *Standard Specifications* requires contractor compliance with NDOT's *Construction Site Best Management Practices Manual*, the development of a stormwater pollution prevention plan (SWPPP), and the designation of a Water Pollution Control Manager (WPCM) to be responsible for compliance with water quality permits (notably the Construction General Permit (CGP)), BMP implementation, and conducting routine construction site stormwater inspections.

Section 637 also describes NDOT's escalation policy for construction site stormwater non-compliance on NDOT's construction contracts. Minor infractions are typically resolved by a verbal or email notice and documented. Should these measures fail to initiate corrective actions by the potential violator, then further enforcement actions may be required as authorized through the NRS and Section 637. In instances where compliance cannot be achieved through inspection or Engineer intervention, NDOT may assess fines to the contractor and/or terminate the contract. Additional enforcement escalation is provided through the NRS; however, NDOT reserves the right to apply these enforcement measures on a case-by-case basis.

4.1.3 Encroachment Permit Terms and Conditions

Rationale: Continue to apply terms and conditions to permitted activity within NDOT's ROW to other parties for appropriate management of site stormwater runoff.

Objective(s):

1) Require encroachment permittees through permit terms and conditions to implement control measures that will prevent and/or reduce pollutants in applicable site stormwater discharges to the MEP.

2) Provide provisions for enforcement.

Responsibility: Stormwater and Right-of-Way Divisions, and the three Districts

NDOT issues encroachment permits to grant permission for work within NDOT's ROW. These permits are for temporary occupancy only. Events requiring encroachment permits typically include the following:

- Street improvements
- Utility work
- Traffic signals and related installations
- Drainage work
- Landscaping improvements
- Multi-use trails
- Commercial off-site use
- Interchanges, grade separations
- Other special uses or events

Encroachment permit applications are submitted to the local NDOT District Administrative Office. A site plan is typically required along with an advance meeting to review preliminary plans with an NDOT District Traffic Engineer. Encroachment permittees are subject to the terms and conditions specified in NDOT's *Terms and Conditions Relating to Right-of-Way Occupancy Permits*.

NDOT has incorporated language into the encroachment permit terms and conditions requiring compliance with environmental laws, notably the CWA. In the event a permittee fails to comply with any environmental laws, NDOT may take appropriate action including; (1) revoking the encroachment permit issued; (2) requiring the Permittee to undertake corrective or remedial action; and (3) expressly consenting to entry of injunctive relief to enforce any listed remedies.

More reference to the applicability of encroachment permits included in the Construction Site BMP Program outlined in Section 4.4.

4.1.4 Stormwater Enforcement Response Plan

Rationale: To document response and enforcement procedures used by NDOT to enforce provisions of the Permit when responding to identified non-authorized discharges within the MS4 area.

Objective(s):

1) Develop and implement enforcement procedures designed to encourage a timely response by a contractor/permittee/discharger.

2) Ensure a consistent response by NDOT for compliance with the Permit and provide a framework for NDOT to impose enforcement when necessary.

Responsibility: Stormwater Division

NDOT is developing an *Enforcement Response Plan (ERP)* to address stormwater compliance deficiencies associated with NDOT construction sites, encroachment permits, and illicit discharges and illegal connections to NDOT's MS4. This document will assist NDOT with implementing a consistent approach to stormwater non-compliance issues, as well as provide the framework to impose enforcement as appropriate. Informal enforcement will be utilized to resolve as many deficiencies as possible. However, should these measures fail to achieve the desired compliance response, formal enforcement measures may be initiated. The *ERP* will also provide discussion and guidance on NDOT's current escalating enforcement procedures for confirmed instances of stormwater noncompliance.

4.2 MS4 Mapping and Outfalls

The Permit Part III.C requires NDOT to develop and maintain maps of the MS4 Permit area and major outfalls (as defined by the Permit). The Stormwater Division's Information Technology (IT) Section manages and coordinates the Geographical Information System (GIS) mapping of stormwater infrastructure, maintenance facilities, BMPs, major outfalls, and waterways. The mapping of these features has been completed throughout the State, and NDOT continues to build and refine the maps and features.

4.2.1 Inventory of NDOT's Storm Sewer System

Rationale: To maintain a comprehensive GIS based inventory of NDOT's storm sewer system and associated features including outfalls, post-construction BMPs, maintenance facilities, and industrial facilities.

Objective(s):

1) Maintain a GIS-based inventory of NDOT owned and operated storm sewer system assets, including post-construction BMPs.
2) Maintain a GIS-based inventory of active NDOT Maintenance facilities, including industrial facilities (as appropriate).
3) Utilize the GIS-based inventory as a tool for SWMP implementation, notably assessing potential impacts to receiving waters from roadway runoff and illicit discharges.

Responsibility: Stormwater Division

NDOT has completed an inventory of its storm sewer system including all inlets, pipes, major outfalls, and post construction BMPs (e.g. retention/detention basins, constructed wetlands for water quality purposes, media filtration systems, oil/water separators, etc.). A web based mapping application depicting the location of specific NDOT stormwater assets and facilities has been developed and is available for viewing by NDOT employees and the public on NDOT's Stormwater Program website (refer to Section 4.2.2).

The Stormwater Division has developed an internal process to receive new construction information and incorporate stormwater BMPs and infrastructure into the existing GIS inventory as described in NDOT's internal document *Storm Sewer System Map-Work Completed and Maintenance Plan*.

4.2.2 Web-Based Mapping of NDOT's Storm Sewer System

Rationale: Provide web-based mapping for NDOT employees and the public depicting stormwater assets and other NDOT facilities.

Objective(s):

1) Maintain a GIS web-based map of NDOT's active construction sites, and include information such as the type of project, NDOT project manager, and the prime contractor.
2) Maintain a GIS web-based map of NDOT's stormwater assets, including major outfalls, and post-construction BMPs.
3) Illustrate waterbodies with NDEP assessed water quality impairments or approved TMDLs on a GIS map layer in relation to NDOT's facilities.

Responsibility: Stormwater Division

NDOT's has developed a web-based map of its MS4 areas. Map features include maintenance facilities, active material sites, storm sewer system assets (including major outfalls) and post-construction BMPs, and impaired waters. The web-based map is accessible to NDOT employees and the public via an online GIS map interface. Additionally, storm sewer system asset map files (i.e. Google Earth.kmz files) are available for download specifically for the following three geographic areas: Clark County, Washoe County, and rural areas of the state.

A Stormwater Priority Map has also been posted, which illustrates NDOT's prioritization of areas in the state based on potential impacts to surface waters resulting from pollutants in stormwater runoff. Priority 1 areas have the highest potential impact to water quality because of the close proximity (one quarter of a mile) to the waterbody. Priority 2 areas have a moderate potential impact to water quality while Priority 3 areas have the lowest potential impact to water quality and consist of all areas that are not Priority 1 or Priority 2.

NDOT's mapping resources are available for viewing on NDOT's Stormwater Program website.

4.3 Stormwater Monitoring Program

Provided in this section is a summary of NDOT's Stormwater Monitoring Program addressing Part IV.A of the Permit.

4.3.1 Stormwater Monitoring Plan

Rationale: To characterize the quality of stormwater discharges within NDOT's MS4 to assist with evaluating program compliance and BMP effectiveness.

Objective(s):

1) Develop a stormwater monitoring plan and submit to NDEP annually.
2) Evaluate the existing data collection programs annually to determine if they sufficiently characterize stormwater quality from NDOT's MS4 areas.
3) Collect data that will aid in determining if stormwater discharges from NDOT's MS4 areas contribute directly or indirectly to a waterbody that has been listed as impaired or has an approved TMDL.
4) Demonstrate a reduction of stormwater pollutant discharges from NDOT's MS4 areas resulting from SWMP implementation.
5) Evaluate the effectiveness of BMPs for different elements of NDOT's operations, including post-construction, regular roadway use, and maintenance activities.
6) Utilize monitoring results to support operational and maintenance-based decisions.

Responsibility: Stormwater Division

Part IV of the Permit requires NDOT to develop a stormwater monitoring plan and submit it to NDEP on or before October 1st each year. Part III.W of the Permit requires an annual evaluation of the effectiveness of NDOT's data collection programs.

All monitoring conducted by NDOT will be representative of the volume and nature of the monitored discharge, and will utilize test procedures under 40 *Code of Federal Regulations* (CFR) 136. Monitoring records will include the information required under Part IV.A.3 of the Permit. Specific details pertaining to NDOT's current water quality monitoring efforts are described in NDOT's *Annual Stormwater Monitoring Plan.*

NDOT's Stormwater Division is developing a *Quality Assurance Program Plan* which will detail standard operating procedures/plans for water quality monitoring efforts. NDOT conducts an annual review of the Stormwater Monitoring Program to determine whether monitoring efforts are sufficient for characterizing stormwater discharge quality from NDOT's MS4, and to help evaluate the effectiveness of BMPs with treating stormwater discharges. Modifications to these programs will be made as appropriate.

4.3.2 Demonstration Projects

Rationale: Identify viable means to improve approaches to implementing the stormwater management program.

Objective(s):

1) Identify and evaluate new technologies and practices for improving stormwater runoff by conducting, researching, or pursuing demonstration projects.
2) Incorporate viable technologies and advances into NDOT's SWMP when appropriate.
3) Consider collaborating and leveraging funding opportunities with other MS4s on regional demonstration projects.

Responsibility: Stormwater and Design Divisions

NDOT continually strives to improve stormwater runoff quality. One of the ways this is achieved is through identifying and evaluating new technologies and practices. Low Impact Development (LID) techniques, improved street sweeping technologies, alternate deicing systems, and stormwater treatment vaults are all examples of past NDOT demonstration projects.

Manufacturers and researchers have made enormous strides in the technologies and techniques to treat and mitigate stormwater pollution. With this programmatic BMP, NDOT acknowledges the importance of testing, evaluating, and incorporating the latest technologies and techniques for improving stormwater runoff quality. Once evaluated, viable technologies can then be advanced into practice. Details of the demonstration projects will be summarized in NDOT's *Annual Stormwater Monitoring Plan* and *Annual Report* accordingly.

- The protocol for conducting stormwater demonstration projects may vary with the technology or procedure being evaluated. Possible steps may include:
- Identify the need
- Identify technologies and partners (e.g. vendors or university personnel)
- Identify funding
- Establish a trial/testing location
- Develop evaluation protocols
- Conduct the project
- Evaluate results
- Disseminate results
- Incorporate viable technologies into practice
- Where appropriate, results of the demonstration projects will be incorporated into training and educational materials, and utilized to assist with BMP selection and design.

4.4 Construction Site Best Management Practices (BMPs) Program

NDOT's Construction Site Best Management Practices (BMPs) Program consists of BMPs, guidance documents, training, construction specification requirements, inspection, and enforcement practices to mitigate potential construction site stormwater pollutant discharges from NDOT ROW. The tools developed for the program enable NDOT and associated business partners to maintain compliance with the State and Federal NPDES construction site stormwater permits.

Listed in Part III.G of the Permit are the specific requirements for this program. Also, applicable are the Permit requirements relating to contractors performing construction activities for NDOT within the MS4 Permit area (Part III.H).

4.4.1 NDEP's Stormwater General Permit for Construction

Construction projects may require coverage under a NPDES stormwater discharge permit. In Nevada, NDEP (the NPDES authorized permitting authority) has issued a CGP to facilitate the permitting of construction projects that warrant stormwater permit coverage. Permitted "construction activity" includes clearing, grading, excavating, stockpiling of fill material, and other similar activities.

Construction projects that will be subject to CGP coverage are projects that disturb:

One acre or more of land and discharges to a WOUS

Less than one acre but is part of a larger common plan of development or sale totaling one acre or more of soil disturbing activities and discharges to WOUS

Less than one acre of land but is determined by NDEP to impact receiving WOUS or their tributaries within one-quarter (1/4) mile radius of the project

Temporary concrete, asphalt, and material plants or operations, i.e. "construction support activities", may require CGP coverage. If the plant or operation is dedicated to a permitted construction project, the stormwater discharge from that plant or operation is covered under the CGP for that contract.

Coverage under NDEP's CGP requires filing of a Notice of Intent (NOI), development and implementation of a SWPPP, and filing of a Notice of Termination (NOT) upon the project meeting final stabilization.

4.4.2 EPA's General Construction Permit on Tribal Lands

The EPA retains the stormwater-related permitting authority for construction activities on tribal lands in Nevada. Construction contractors conducting a project on tribal lands warranting permit coverage, must apply to the EPA Region IX for permit coverage under the EPA's Construction General Permit (NVR12000I). Similar to NDEP requirements, the EPA

requires the filing of a NOI, preparation and implementation of a SWPPP, and filing of a NOT. The applicant is to contact the appropriate tribal authority to determine if additional permits and approvals are required.

4.4.3 TRPA Construction Permit

Within the Lake Tahoe Basin, the TRPA issues permits for construction projects. These permits are in addition to the contractor's requirement for obtaining project coverage under a CGP. Construction permits issued by TRPA include standard conditions of approval, but may include project specific terms and conditions. NDOT construction contractors are required to obtain coverage under the TRPA Construction Permit for all projects within the Lake Tahoe Basin.

Generally, TRPA permit conditions include:

- Compliance with all conditions of the TRPA permit and the CGP
- The contractor's engineer must attend a pre-grading meeting with TRPA and the TRPA Contract Compliance Officer to identify all BMPs required for the project
- TRPA-required BMPs are to be included in the contractor's SWPPP

4.4.4 Project Design and Plan Review for Construction Sites

Project planning from a stormwater quality perspective includes considerations for design, construction, implementation, and operation. The Stormwater Division reviews project plans and includes designs for post-construction stormwater controls (as appropriate). Considerations such as scope of work and receiving water quality are taken into account during BMP design. It is also during the plan review that determinations for appropriate water quality permit coverage are documented. The rationale, objectives and responsibilities for project design and plan review is further discussed in the New Development and Redevelopment Planning Program (Section 4.5).

Per the contract documents, contractors are required to contact NDOT Stormwater Division staff prior to applying for CGP coverage. In addition, upon receiving the Notice of Award, the Stormwater Division's Program Development Section will contact the project Engineer and summarize water quality permitting requirements, including whether construction activities will require CGP coverage. Procedures are in place for NDOT Construction Crew and Stormwater Division personnel to verify procurement of CGP coverage (as appropriate), SWPPP development, and appropriate BMP implementation prior to earth disturbing activities.

4.4.5 Standard Specifications

NDOT's *Standard Specifications* is applied to all NDOT-administered construction projects. The *Standard Specifications* provide basic requirements governing the material, equipment, and methods used in construction contracts administered by NDOT. Section 637 of the

Standard Specifications addresses construction site runoff control management, including the development and implementation of a SWPPP, and installation and maintenance of temporary pollution control measures. *Standard Specification's* rationale, objectives, and responsibilities are further discussed in the Legal Authority and Enforcement (Section 4.1).

The Stormwater Division is responsible for providing updates and revisions to Section 637, specifically, of the *Standard Specifications*.

4.4.6 Stormwater Pollution Prevention Plans

Rationale: Address and mitigate off-site migration of construction site stormwater runoff through the implementation of a SWPPP.

Objective(s):

1) Form the basis to protect receiving water quality by documenting construction activities, potential pollutant sources, receiving waterways, and appropriate construction site BMPs.
2) Provide a consistent approach for addressing construction site stormwater discharges.
3) Provide guidance to the inspector for verifying appropriate construction site BMP implementation.
4) Provides for documentation of BMP performance under varying conditions and applied changes.

Responsibility: Stormwater and Construction Divisions, the three Districts, and Contractors

The SWPPP is used to describe, amongst other things, the construction project layout, construction activities, and the stormwater BMPs implemented for mitigating potential construction site stormwater pollutant discharges. The SWPPP is a "living document" that requires periodic updating to document changes and modifications to the construction plans, contractor activities, and associated stormwater pollution prevention control measures.

Both Nevada's and EPA's CGP require the development and implementation of a SWPPP and a filing of a NOI. To comply with a CGP, a SWPPP must be prepared prior to submittal of the NOI, and a working copy must remain at a readily accessible location.

The items required in a SWPPP include: site maps showing drainage and discharge locations, receiving waters, the locations of control measures, a description of the site and BMPs, inspection and maintenance procedures, and required reports.

NDOT has established a standardized SWPPP template to provide a consistent and thorough approach. The SWPPP template is available on the NDOT Stormwater Division

website in a writable Portable Document Format (PDF). NDOT's *Standard Specifications* include language specifically pertaining to SWPPP requirements.

4.4.7 Construction Project Prioritization

NDOT has developed a strategy for prioritizing construction projects based upon several factors considering the nature of the construction activity, topography, soil characteristics, and receiving water quality. This prioritization scheme is utilized for permanent BMP consideration, and Stormwater Division QA inspection frequency. Project sites will be classified by the Stormwater Division as Level I (high priority), Level II (mid priority), or Level III (low priority). NDOT's internal document, *Stormwater Guidance Manual for Construction Projects* (referenced in sub-section 4.4.15), describes the prioritization in greater detail.

4.4.8 Construction Site Stormwater Inspections

This section is intended to provide a brief overview of contractor inspections/responsibilities, NDOT oversight inspections (contracts and encroachment permits), and QA inspections performed by the Stormwater Division Compliance and Enforcement Staff.

Construction Project Sites

Contractor and District Construction Crew Inspections

The WPCM and the District Construction Crew designated stormwater inspector shall perform and document a simultaneous stormwater inspection of the construction site:

- Prior to the commencement of any earth disturbing activities
- At intervals of once every 7 days and within 24 hours following precipitation events 0.25 inch or greater
- Prior to the submission of a request for relief of maintenance

The WPCM will document inspections using NDOT's furnished construction site stormwater inspection form, which can be accessed on the NDOT Stormwater Program website.

The District Construction Crew designated BMP inspection personnel will document their simultaneous site inspection using NDOT's construction site stormwater inspection form, as well.

Stormwater Division Quality Assurance Inspection Schedule

Quality assurance (QA) inspection frequencies are based upon a priority classification established by the Stormwater Division. The Stormwater Division's Compliance and Enforcement staff, embedded within the respective Districts, will provide QA inspections of construction projects per the following schedule:

Level I – High priority construction sites will be inspected once every 30 calendar days

Level II – Mid priority construction sites will be inspected once every 60 calendar days regardless of any approved and implemented reduced inspection frequency

Level III – Low priority construction sites will be inspected on an as available basis

QA inspections will begin within 30 calendar days from commencement of earth disturbing activities for designated projects.

Compliance and Enforcement Section staff will conduct a simultaneous site inspection with the WPCM and the Engineer, as applicable, using NDOT's construction site stormwater inspection form for all inspections.

Encroachment Permit Construction Sites

Based on the classification established by the District Stormwater Division Compliance staff within their respective Districts, the permittee/contractor shall perform stormwater inspections in accordance with the following schedule:

At a minimum:

Level I – High priority encroachment permit projects will be inspected in accordance with the appropriate CGP requirements

Level II – Low priority encroachment permit projects that require coverage under a CGP will be inspected in accordance with the appropriate CGP requirements. Low priority encroachment permit projects that do not require coverage under a CGP will be inspected once every 7 days and within 24 hours of precipitation events 0.50 inch or greater

The encroachment permit staff within the Districts will perform stormwater inspections in accordance with the following schedule:

Level I – All high priority encroachment permit project sites will be inspected once every 14 calendar days during construction, and upon completion of permit activities prior to NDOT acceptance and/or closure of the permit

Level II – During active land disturbing activities, all low priority encroachment permit project sites will be inspected on an as available basis

The permittee/contractor and the District encroachment permit staff will document their stormwater inspections using NDOT's construction site stormwater inspection form. However, the permittee/contractor may document their stormwater inspections in another format if approved in advance by the District Engineer.

The Stormwater Division Compliance staff will provide stormwater QA inspections of the encroachment permit projects in accordance with the following schedule:

Level I – All high priority encroachment permit project sites will be inspected once every 30 calendar days during construction, and upon completion of permit activities prior to NDOT acceptance and/or closure of the permit

Level II – Low priority encroachment permit project sites will be inspected on an as available basis

The QA site inspections will be documented using NDOT's construction site stormwater inspection forms for all inspections.

4.4.9 Water Pollution Control Manager

Rationale: To have appropriate contractor oversight of construction site stormwater management.

Objective(s):

1) Designate contractor personnel to be responsible for the preparation of applications for coverage under the CGP and other applicable contractor-obtained water quality permits (as appropriate).
2) Designate contractor personnel responsible for developing and implementing a SWPPP, performing stormwater inspections, and for installing, maintaining, and removing all temporary pollution control BMPs shown in the SWPPP.
3) Designate a primary contractor contact for issues related to the SWPPP, permits, and implementation of construction site stormwater controls throughout the life of the project.

Responsibility: Contractors

Section 637 in NDOT's *Standard Specifications* requires contractors to designate a WPCM to administer construction site stormwater management on NDOT's construction sites. The WPCM must be knowledgeable in the principles and practices of construction site water pollution control, and possess the skills to assess conditions at the construction site that could impact stormwater quality, including the identification of illicit discharges and illicit connections to the storm sewer system. The WPCM must also be capable of identifying existing and predictable effects of the contractor's operations, and have complete authority to direct the contractor's personnel and equipment to implement the requirements described in the project specifications.

4.4.10 CGP Transfer

Rationale: Maintain current procedures to ensure continual CGP coverage for those construction projects that have not achieved final stabilization when NDOT's contractors are granted relief of maintenance.

Objective(s):

1) Implement a process to facilitate transfer of CGP responsibilities from the contractor to NDOT.

There are circumstances where construction activities have been completed per design but closing out the CGP is not possible due to areas of the project not meeting the final stabilization requirements. In this situation, the contractor may be allowed to transfer CGP responsibilities to NDOT District staff upon the contractor being granted relief of maintenance. At that time, NDOT becomes the CGP "Owner" and "Operator" until final stabilization is achieved. If a project is approved for relief of maintenance without terminating the CGP, then NDOT has a standard operating procedure for facilitating the transfer of maintenance responsibilities from the project contractor to the appropriate NDOT District.

This situation requires written notification to NDEP from NDOT designating NDOT as the "Operator" of the CGP. A detailed description of procedures and protocol for the transfer of CGP responsibilities is provided in NDOT's *Stormwater Guidance Manual for Construction Projects.*

Upon acceptance, the project is then turned over to the appropriate District, who will then be responsible for ensuring that the project site is compliant with the CGP, including inspecting and maintaining any temporary BMPs until final stabilization is achieved, and filing the Notice of Termination to terminate CGP coverage.

4.4.11 Encroachment Permits (or Right-of-Way Occupancy Permits)

Rationale: Review encroachment permits to ensure a level of construction site stormwater management is addressed.

Objective(s):

1) Require encroachment permittees through permit terms and conditions to implement stormwater control measures as appropriate.
2) Provide provisions for inspection and enforcement.

Responsibility: Stormwater and Construction Divisions, and the three Districts

NDOT issues encroachment permits to grant permission for work within a state roadway or ROW. These permits are for temporary occupancy only. Typical events requiring encroachment permits include the following:

- Street improvements
- Utility work
- Traffic signals and related installations
- Drainage work

- Landscaping improvements
- Multi-use trails
- Commercial off-site use
- Interchanges, grade separations
- Other special uses or events

Encroachment permits must be secured before work is performed.

Encroachment permit applications (including site plans) are submitted to the local NDOT District Administration Permits Office for review. During the review, the potential for discharge of stormwater related pollutants is considered during and post-construction. Any encroachment permit projects involving earthwork disturbance of any kind fall into two categories:

1) Projects meeting requirements that warrant CGP coverage.
2) Projects that do not require CGP coverage.

For encroachment projects that do not require CGP coverage, NDOT requires a Runoff Control Plan (RCP) to be developed and implemented in lieu of a SWPPP.

At a minimum, the RCP shall include the following items:

- A description of all Permittee activities
- Contact information for the individual responsible for stormwater pollution control implementation
- A description of temporary and permanent stormwater pollution control measures to be implemented
- A topographic map depicting the project area(s), location of all receiving waterbodies within a one-mile radius of the project area, NDOT's roadway system, and a north arrow
- A plan set depicting the location of all stormwater hydraulic facilities and stormwater discharge points, all temporary and permanent erosion control measures, land disturbance areas including equipment staging and material stockpile areas, and NDOT's ROW within the project area(s)
- A description for conducting documented stormwater inspections performed by the Permittee once every seven (7) calendar days and within 24 hours after a storm event 0.50 inches or greater

Construction site oversight stormwater inspections are performed by NDOT per the process described previously in Section 4.4.8. Appropriate legal authority to ensure stormwater compliance is provided by permit terms and conditions and described in the Legal Authority and Enforcement Section 4.1.

4.4.12 Construction Site Best Management Practices (BMPs) Manual

Rationale: Provide guidance to construction personnel for the implementation of stormwater pollution control measures on construction sites.

Objective(s):

1) Present temporary pollution control options to mitigate stormwater impacts from construction activities.
2) Maintain and update the manual as needed to ensure material is current and relevant to road and highway projects.
3) House the manual at a location that is accessible by the public and NDOT employees.

Responsibility: Stormwater and Construction Divisions

NDOT's *Construction Site Best Management Practices (BMPs) Manual (BMP Manual)* is designed to assist both NDOT staff and contractors with implementing appropriate stormwater pollution control measures at construction sites. Included in the *BMP Manual* are topics such as permit requirements, and BMP selection, implementation, operation, and maintenance. A copy of the manual is available for viewing/downloading on NDOT's Stormwater Program webpage.

4.4.13 Nevada Contractors Field Guide for Construction Site BMPs

Rationale: Provide personnel on active NDOT construction sites with supplemental general guidance for incorporating erosion and sediment control BMPs.

Objective(s):

1) Support periodic updates, reproduction, and dissemination of this stormwater BMP field guide.

Responsibility: Stormwater Division

The *Nevada Contractor's Field Guide for Construction Site Best Management Practices (Nevada Field Guide)* was first released in 2008 and updated in 2013. The *Nevada Field Guide* includes sections on pre-project planning and operational activities, as well as common guidance for erosion prevention and sediment control. The document also provides numerous illustrations and photos of acceptable and non-acceptable construction site structures and practices to control runoff, as well as providing suggested solutions.

The *Nevada Field Guide* was developed by NDEP, the Truckee Meadows Stormwater Permit Coordinating Committee, the Western Regional Water Planning Commission, and the Las Vegas Valley Stormwater Quality Management Committee. Local contractor BMP

training courses utilize the *Nevada Field Guide* as it has been recognized by NDEP as an acceptable resource for implementing construction site BMPs.

Under this program, the use of this guide is acknowledged. This is not a NDOT document; however, NDOT served as a technical reviewer for the 2013 update and anticipates being a reviewer for future updates. On NDOT contracts, construction site BMPs shall be implemented per NDOT's *BMP Manual* with the *Nevada Field Guide* utilized as an optional supplemental resource.

4.4.14 Stormwater Guidance Manual for Construction Projects

Rationale: Establish documented administrative procedures for construction site stormwater compliance on NDOT construction projects from pre-construction through the relief of maintenance.

Objective(s):

1) Identify the roles and responsibilities of the Engineer, contractor, and Stormwater Division staff.
2) Provide a comprehensive, consistent, and clearly defined process and assignment of responsibility for NDOT staff.

Responsibility: Stormwater Division

The processes and procedures described in this manual apply to all NDOT construction contracts subject to NDOT's *Standard Specifications*.

NDOT's *Stormwater Guidance Manual for Construction Projects* is intended to serve as a guidance document for NDOT personnel for the administration of stormwater compliance on NDOT construction projects. Included in the document is information pertaining to:

- Pre-construction conference discussion of stormwater requirements, project priority, and inspection schedules
- Requirements prior to the commencement of earth-disturbing activities
- Inspection procedures and required documentation during active construction by the contractor's WPCM, the project Engineer, and Stormwater Compliance and Enforcement staff
- Procedures for enforcement escalation are described for project Engineers as it pertains to construction site BMP implementation
- A copy of NDOT's SWPPP template, and SWPPP checklist to provide a straightforward means for a SWPPP reviewer with determining whether the contractor's SWPPP contains the essential elements required by the CGP
- Construction site stormwater inspection forms
- Procedures for DocuSign

- A project stormwater checklist that must be completed by the project Engineer prior to the commencement of earth-disturbing activities
- The *Form to Request to Reduce Frequency of Construction Site Stormwater Inspections*
- Example letters addressing construction site stormwater non-compliance
- The *Construction Stormwater General Permit Transfer Memorandum* and associated procedures
- A construction workflow process flowchart

4.4.15 Stormwater Inspection Prioritization Plan for Construction and Encroachment Projects

Rationale: Establish the frequency of stormwater oversight inspections for construction and encroachment permit projects based upon prioritization criteria.

Objective(s):

1) Provide a consistent, and clearly defined process for inspection schedules and procedures for contractors, and NDOT District and Stormwater Division staff. Items addressed include:
   a. active construction project sites
   b. construction projects that have been transferred from the contractor to NDOT
   c. encroachment permits

Responsibility: Stormwater Division

The *Stormwater Inspection Prioritization Plan for Construction and Encroachment Projects* developed by the Stormwater Division's Compliance and Enforcement Section, documents the process for NDOT personnel conducting construction site oversight inspections.

4.5 New Development and Redevelopment Planning Program

NDOT's New Development and Redevelopment Planning Program consists of planning and design practices that collectively minimize the potential of stormwater water quality impacts from new development and redevelopment projects.

4.5.1 Applicability

Areas of new highway development and redevelopment that result in a land disturbance of 1 acre or more, including projects that are less than 1 acre, that are part of a larger common plan of development disturbing 1 acre or more.

4.5.2 Post-Construction Controls

Post-construction controls consist of non-structural and structural BMPs. Some non-structural BMPs include: LID strategies, planning procedures, scheduling, cleaning, street sweeping, reduction of over-irrigation, outreach and training programs, research, etc. Post-construction structural controls are permanent BMPs designed to minimize potential surface water pollution through the reduction of stormwater peak flow rates and volumes, minimizing erosion, and by reducing the pollutants present in stormwater runoff via sedimentation, evapotranspiration, filtration, or biological or chemical actions. For the purposes of the Permit and this SWMP, NDOT considers permanent BMPs to include stormwater retention/detention basins, constructed wetlands for water quality purposes, media filtration systems, oil/water separators, check dams, and grassy swales.

NDOT has developed protocols for selecting and designing structural control BMPs and for incorporating them into the appropriate documents. NDOT's *Planning and Design Guide (PDG)* has been developed to provide guidance for incorporating permanent BMPs, including LID strategies, into new projects during the planning and design phases. The PDG is described below in Section 4.5.4 in greater detail.

4.5.3 Inventory and Maintenance of Post-Construction Control Measures

Rationale: Maintain an inventory of post-construction BMPs and ensure the proper long-term monitoring and maintenance of those structural BMPs.

Objective(s):

1) Maintain a GIS based inventory of NDOT stormwater post-construction BMPs.
2) Implement procedures and protocols for the routine inspection and maintenance of post-construction BMPs.

Responsibility: Stormwater Division, Maintenance and Asset Management Division, and the three Districts

NDOT has developed a GIS-based inventory and map of NDOT's stormwater assets, including post-construction control BMPs.

NDOT has developed a *Stormwater Operations and Maintenance Plan (SWOMP)* which identifies minimum maintenance schedules for post-construction BMPs, provides approaches to assessing post-construction BMP condition, and establishes priorities for the maintenance of post-construction BMPs (refer to Section 4.10.6).

4.5.4 Planning and Design Guide

Rationale: Document technical standards and provide guidance on permanent BMP selection and design (including LID techniques) suitable for NDOT's roadside environments.

Objective(s):

1) To provide direction to design staff regarding permanent stormwater BMP selection, design, and implementation.
2) Describe and document NDOT's plan review process to ensure post-construction BMPs are considered during project design.

Responsibility: Stormwater Division

As required by Permit Part III.I.1, NDOT has developed and implemented comprehensive planning procedures and BMPs to prevent or minimize water quality impacts from areas of new development and redevelopment within NDOT's MS4. These are documented in the *PDG*, which provides guidance on post-construction BMP planning, selection, and design considerations (including LID) for new development and redevelopment projects. The *PDG* also addresses key regulatory, policy, and technical requirements to implement permanent stormwater BMPs and LID strategies into the design of applicable NDOT projects.

Sections within the *PDG* are devoted to the project planning and design phase to assist project engineers and planners in identifying and mitigating potential water quality impacts from NDOT projects. Presented in the *PDG* are NDOT processes and procedures including the Stormwater Project Design Requirements (SPDR) flowchart, Water Quality Investigation Report (WQIR) guidelines, and a chart illustrating the process for stormwater quality considerations during project planning and design.

Also described in the *PDG* are documents (e.g. the Alternative Design Field Survey Report, Preliminary Design Field Study Report, environmental documents, and the PS&E) that must be prepared prior to project construction that will assist in evaluating the need for, and the subsequent incorporation of, post-construction BMPs. The *PDG* is available for viewing and downloading from NDOT's Stormwater Program website.

4.6 Industrial Facility Monitoring and Control Program

Summarized in this section is a description of NDOT's Industrial Facility Monitoring and Control Program (IFMCP). Part III.K of the Permit provides the specific requirements of the IFMCP. Note that potential discharges into NDOTs MS4 associated with construction, municipal or encroachment activities are addressed elsewhere in this document.

4.6.1 NDOT Industrial Facilities

Part III.S of the Permit states that NDOT maintenance facilities are considered municipal activities rather than industrial. With this acknowledgement, NDOT does not own or operate any industrial facilities that fall within the purview of the Permit.

4.6.2 Industrial Facility Monitoring and Control Procedures

Rationale: Reduce the potential for illicit discharges from industrial facilities that directly discharge stormwater runoff into NDOT's MS4.

Objective(s):

1) Determine the location of industrial facilities that have the potential to directly discharge into NDOT ROW.
2) Assess how these facilities directly discharge into NDOT ROW.
3) Identify priorities and develop/implement procedures for inspecting industrial facilities that NDOT determines to be (or has the potential to be) significant contributors of pollutants into NDOT ROW.
4) Develop and implement an industrial facility monitoring and tracking database.
5) Implement appropriate compliance and enforcement measures to eliminate industrial illicit discharges, or mitigate industrial stormwater pollutant discharges, into NDOT's ROW.

Responsibility: Stormwater Division

NDOT is required by Permit Part III.K.1. to develop a program to monitor and control pollutants in stormwater discharges into its MS4 from industrial facilities. These facilities include municipal landfills, hazardous waste treatment, disposal and recovery facilities, and industrial facilities that are subject to regulation under Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986. Additionally, this program will apply to industrial facilities that NDOT determines have the potential to discharge into NDOT's MS4.

To meet these goals and objectives, NDOT's Stormwater Division has developed and is implementing a comprehensive IFMCP. Included is a monitoring program intended to identify and assess industrial facilities.

NDOT has a written standard operating procedure (SOP), i.e. *Industrial Facility Assessments* document, outlining the IFMCP. Highlights of this program are listed below:

- Information was used from EPA's database of Section 313 SARA Title III industries, NDEP's current listing of waste treatment, storage and disposal (TSD) facilities, corrective action management units (CAMU), landfills, NDEPs information on current industrial or mining General Permit holders, and NDOT roadways and ROW.
- Stormwater Division Compliance and Enforcement staff are tasked with determining if the industry discharges directly into the NDOT ROW and to identify the means of discharge (e.g., sheet-flow, pipe/culvert, etc.).
- For each facility that discharges directly into NDOT ROW, a facility report is generated that documents the location, hydraulic facilities, nearby waterways, aerial mapping, and photographs.
- Facility reports are evaluated to determine if future monitoring is warranted.
- Annually, the industrial facility related information obtained from EPA and NDEP is reviewed to identify new industrial facilities requiring monitoring, or if existing industrial facilities have been re-classified, re-categorized, or removed, and thus no longer require monitoring.
- NDOT's Stormwater Division Compliance and Enforcement Section staff are responsible for assisting with the assessment and inspection/monitoring components of the IFMCP. A summary of the FFMCP's progress, development, and implementation will be included in NDOT's *Annual Report*.

NDOT's SOP for industrial facility assessments provides for annual evaluation and inspections of identified industrial facilities. Should NDOT identify any unauthorized industrial discharges, NDOT will utilize their legal authority, as appropriate, to mitigate illicit discharges to the MS4.

4.7 Illicit Discharge Detection and Elimination Program

Part III.J of the Permit requires a description of NDOT's Illicit Discharge Detection and Elimination (IDDE) Program intended to reduce non-stormwater illicit discharges from NDOT's MS4 areas. The following subsections summarize NDOT's IDDE Program, with key elements highlighted and the tools created to meet the intent, rationale, and objectives for a successful program.

4.7.1 Illicit and Authorized Discharges

Per 40 CFR 122.26(b)(2) an "illicit discharge" is defined as "any discharge to a municipal separate storm sewer that is not composed entirely of stormwater except discharges pursuant to a National Pollutant Discharge Elimination System (NPDES) permit (other than the NPDES permit for discharges from the MS4) and discharges resulting from firefighting activities".

Per 40 CFR 122.26(b) (13), "stormwater" is defined as stormwater runoff, snowmelt runoff, and surface runoff and drainage.

The following are examples of illicit discharges into NDOT's storm drain system:

- Sanitary sewer line connections and exfiltration
- The disposal of automobile and household chemicals (pesticides, paint, oil, antifreeze, etc.)
- Discharges from dry cleaners, laundromats, and municipal car washes
- Discharges from equipment wash pads
- Sanitary wastewater
- Septic tank waste
- Industrial wastewaters

The following are some acceptable examples of non-stormwater discharges within NDOT's MS4[3]:

- Potable water line flushing during testing or fire hydrant testing
- Diverted stream flows not requiring a separate permit
- Springs or rising ground waters
- Uncontaminated groundwater infiltration (infiltration is defined as water other than wastewater that enters a storm sewer system, including sewer service connections and foundation drains, from the ground through such means as defective pipes, pipe

[3] Provided NDEP or NDOT does not consider the discharge to be a significant contributor of pollutants into NDOT's MS4.

joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow[4])

- Discharges from potable water sources not requiring a separate permit
- Residential foundation and/or footing drains
- Air conditioning condensate
- Irrigation water from lawns and landscaping
- Water from residential crawl space pumps
- Flows from natural riparian habitats and wetlands not requiring a separate permit
- De-chlorinated swimming pool discharges
- Individual residential car washing
- Water incidental to street sweeping (including associated sidewalks and medians) and that is not associated with construction activities
- Discharges or flows from firefighting activities
- Dewatering activities not requiring a separate permit

4.7.2 Routine Outfall Screening and Field Investigations

Rationale: To monitor major outfalls for illicit discharges and detect unauthorized flows, activities, and cross-connections.

Objective(s):

1) Identify and eliminate illicit discharges into the MS4 through routine screening of major outfalls.
2) Classify each major outfall as to its priority category for routine screening.
3) Conduct routine screenings based upon the frequency established by the priority.

Responsibility: Stormwater Division, assigned District Inspectors

NDOT has inventoried and mapped major outfalls statewide and has incorporated them into a GIS platform. Each major outfall has been categorized as a high or low priority for routine field screening for illicit discharge detection. The priority and inspection frequency procedures are detailed in NDOT's *Dry Weather Outfall Inspection Plan (Outfall Inspection Plan)* (Refer to section 4.7.10).

Major outfalls identified as high priority will be inspected at least annually. These are major outfalls that:

- Have a history of previous dry weather discharges
- Are located adjacent to a parcel with industrial zoning

[4] The result of groundwater flowing freely into the storm sewer system from porous material, e.g. perforated pipe, dewatering trenches, etc.

- Drain to an impaired waterbody, a waterbody with an approved TMDL, or other unique characteristics or sensitive environmental areas
- Have been identified as having an increased likelihood of illicit discharges

All other outfalls will be considered low priority and will be inspected at least every three years.

Under this BMP, "routine" screening of major outfalls will occur during dry weather conditions. Guidance for the screening and investigation process is provided in NDOT's *IDDE Field Guide* and *Outfall Inspection Plan*. Should a dry weather flow be a result of a natural occurring condition, i.e. spring flow, snowmelt, etc., an illicit discharge investigation will not ensue and will be noted in the outfall inspection documentation.

In the event an illicit discharge is suspected or confirmed, an illicit discharge investigation will be conducted pursuant to the *Illicit Discharge Field Investigation Procedures Manual* and *Outfall Inspection Plan* (refer to Section 4.7.9).

4.7.3 Sanitary Sewer Exfiltration

Rationale: To protect NDOT's MS4 from sanitary sewage discharges resulting from exfiltration from sanitary sewer lines.

Objective(s): To identify and eliminate instances of sanitary sewer exfiltration into NDOT's MS4.

Responsibility: Stormwater and Construction Divisions, and the three Districts

Part III.J.1.g of the Permit requires an assessment of the IDDE program to ensure it is sufficient to identify instances of exfiltration from the sanitary sewer to the storm sewers, and a description of additional activities undertaken to control exfiltration.

NDOT employees, notably field personnel (e.g., Maintenance, Construction, and NDOT contractors, are provided IDDE related training through NDOT's stormwater training courses (emphasizing NDOT's *IDDE Field Guide),* which will assist with the identification of sanitary sewer exfiltration. Examples in the *IDDE Field Guide* will help to further educate employees on how to identify and eliminate sanitary sewer discharges to the MS4.

For NDOT projects that may impact underground utilities, NDOT's Right-of-Way and Design Divisions coordinate efforts to identify utilities, including sanitary sewer lines, within the project limits and display them on design plan sheets. This effort assists both NDOT's contractor and Construction Crew personnel with understanding where sewer lines are located within the ROW should an instance of sanitary sewer exfiltration be observed during construction.

Routine outfall screening performed by the Stormwater Division's Compliance and Enforcement Section provides an opportunity to identify and eliminate instances of sanitary sewer discharges into the storm drain system.

Procedures for investigating and eliminating the discharge are described in NDOT's *Illicit Discharge Field Investigation Procedures Manua*l.

4.7.4 Spill Control, Prevention, and Response

Rationale: Reduce potential illicit discharges from NDOT's MS4 areas resulting from spills and releases.

Objective(s):

1) Implement and maintain an effective Spill Control and Prevention Program.
2) Provide a level of response for all spills within NDOT's MS4 areas.

Responsibility: Stormwater and Construction Divisions, and the three Districts

Under Part III.J.1.d of the Permit, NDOT must describe procedures to prevent, contain, and respond to spills that may discharge into the MS4.

Spill prevention, containment, and response are important elements in protecting the storm drain system and receiving waters from hazardous discharges. Reducing the discharge of toxic and/or hazardous materials is critical to environmental health and safety. The control and cleanup of spills is addressed in general housekeeping practice BMPs for construction and maintenance activities. For transportation agencies, spills are most likely to occur on roadways from vehicle accidents or from mishaps at maintenance and construction sites.

NDOT addresses spill control, prevention, and response through a variety of practices, including legal authority, BMPs, education, and outreach. Additionally, NDOT maintains a state-wide on-call contract with a hazardous materials cleanup vendor as an additional resource to ensure spills within NDOT's ROW are responded to, regardless of the responsible party.

4.7.5 Illicit Discharge Reporting

Rationale: To provide mechanisms that will facilitate the reporting of potential illicit discharges within NDOT's MS4.

Objective(s):

1) To provide multiple avenues for NDOT employees and the public for the reporting of illicit discharges.
2) To promote interagency communication and cooperation regarding illicit discharge detection and elimination.

3) Encourage the detection and elimination of illicit discharges within local communities.

Responsibility: Stormwater Division

The following mechanisms for reporting illicit discharges into the MS4 have been established.

Website

NDOT has developed an Illicit Discharge Reporting webpage within its stormwater website to facilitate the reporting of illicit discharges from NDOT employees and the public. This webpage provides information describing what an illicit discharge is, signs of a potential illicit discharge, and the avenues for reporting illicit discharges.

Reporting by Other Means

A phone number for reporting spills, discharges, and illegal dumping within NDOT's ROW is prominently displayed on NDOT's stormwater webpage. This is NDOT's Stormwater Division number which is answered during working hours (8 AM to 5 PM PST) and has a recording feature during off-hours. Also listed on NDOT's Stormwater Webpage is NDEP's Spill Reporting Hotline phone number.

Through inter-agency cooperation, the NDEP Bureau of Corrective Actions (BCA) provides NDOT's Stormwater and Environmental Services Divisions with notifications and copies of all spill reports documenting reportable discharge incidences statewide. Should an incident be known to have occurred within NDOT's ROW and a copy of the spill report was not received by the NDOT, NDEP (BCA) will be contacted to verify that a spill report was submitted.

For any potential illicit discharge incident reported by either NDOT personnel or the public, investigations will be conducted by the Stormwater Division's Compliance and Enforcement Section per the procedures outlined in NDOT's *Illicit Discharge Field Investigation Procedures Manual*.

4.7.6 IDDE Flowchart

Rationale: To document NDOT's general process for responding to potential illicit discharge incidents.

Objective(s):

1) Provide a basic flow chart or other illustration summarizing NDOT's general process for responding to potential illicit discharges.

Responsibility: Stormwater Division

Figure 4-1 illustrates the overall process that NDOT's Stormwater Division adheres to when responding to a potential illicit discharge incident.

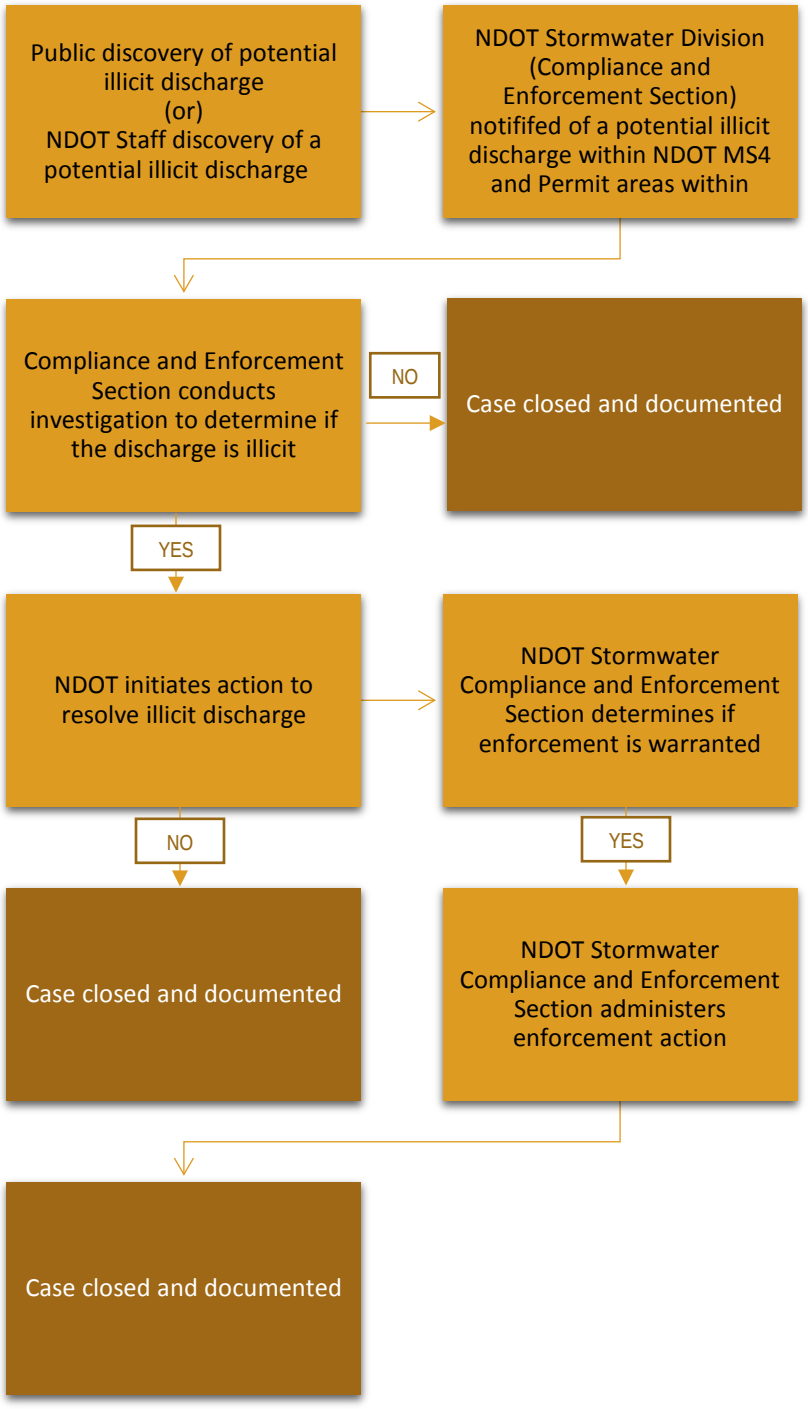

Figure 4.1: Illicit Discharge Detection and Elimination Flowchart

4.7.7 IDDE Report Database

Rationale: Implement procedures to document and track all potential illicit discharge incidents reported to NDOT's Stormwater Division.

Objective(s):

1) Document all reported potential illicit discharges occurring within NDOT's ROW and their associated investigations.
2) Utilize the database to track illicit discharges and identify potential problem areas, i.e. "hotspots", or trends within NDOT's MS4 areas.
3) Utilize the database to track and document appropriate follow-up measures for all reported potential illicit discharge incidents within NDOT's MS4 areas.

Responsibility: Stormwater Division

Under Part III.F.5.m of the Permit, NDOT is required to implement a reporting system to facilitate and track public reports of spills, discharges, and dumping to its storm sewer system or receiving waters. In addition, Part III.F.5.n requires NDOT to record and report the number of reports received from the public and investigated in the Annual Report.

The IDDE Response Database, maintained by the Stormwater Division's Compliance and Enforcement Section, facilitates the documentation process, the identification of problem areas, and the reporting of NDOT response, follow-up, and corrective actions (as appropriate). The information in the IDDE Response Database is used to help track appropriate investigative and response measures, and to ensure all incidents have been appropriately addressed.

The Stormwater Division's Compliance and Enforcement will review the information in the database and determine if a particular area or specific location (i.e. "hotspot") is subject to illicit discharges on a repeat basis. Should a "hotspot" be identified, Compliance and Enforcement Section staff will coordinate a plan for increased monitoring/surveillance of the area in question, with the goal of deterring future illicit discharge activities.

A summary of illicit discharge incidents will be provided in the Annual Report.

4.7.8 Field Guide for the Detection and Elimination of Illicit Discharges

Rationale: To educate and inform NDOT employees and the public of what an illicit discharge is, common indicators of potential illicit discharges, and mechanisms to report a suspected illicit discharge.

Objective(s):

1) Provide guidance pertaining to allowable and illicit discharges within NDOT's MS4 areas.
2) Provide examples of field indicators suggesting the presence of a potential illicit discharge.
3) Present options for reporting potential illicit discharges.

Responsibility: Stormwater Division

NDOT's *Field Guide for Illicit Discharge Detection and Elimination* was developed to educate and inform NDOT employees as to what an illicit discharge is and what to do if one is observed. The field guide addresses field indicators of suspected illicit discharges and illegal connections to the storm sewer system. In addition, the field guide provides contact information for the reporting of suspected illicit discharges.

4.7.9 Illicit Discharge Field Investigation Procedures Manual

Rationale: To develop guidance, procedure, and protocol for NDOT Stormwater Division Compliance and Enforcement Section staff when responding to illicit discharge incidents within NDOT's ROW.

Objective(s):

1) Document procedures for the investigation of a potential illicit discharge or reportable spill.
2) Collect information and document findings in a manner that promotes accuracy and consistency.
3) Provide field investigation approaches and procedures.

Responsibility: Stormwater Division

The *Illicit Discharge Field Investigation Procedures Manual* was developed to serve as a tool for Compliance and Enforcement Section staff who conduct field investigations in response to a potential illicit discharge or reported spill within NDOT ROW. Stormwater Division staff may encounter a variety of scenarios when called to investigate a potential illicit discharge or spill. By following the procedures outlined in this manual, staff will collect information and document findings in a systematic manner and report any incidences for further investigation and/or corrective actions.

4.7.10 Dry Weather Outfall Inspection Plan

Rationale: To provide a standardized and systematic approach for conducting routine outfall inspections.

Objective(s):

1) Identify illicit connections and/or illicit discharges at NDOT's major outfalls through routine screening.
2) Inspect major outfalls based upon a prioritized approach.
3) Characterize any flow observed during a dry weather period.
4) Document the inspections in a GIS database.

Responsibility: Stormwater Division

The *Dry Weather Inspection Plan* was developed to assist Stormwater Division staff with administering routine outfall inspections. The comprehensive plan establishes a priority criterion, procedures for inspections, investigations, tracking and enforcement, and procedures for record keeping. Procedures for illicit discharge investigation to trace and eliminate illicit discharges are included. Standard forms have been developed to facilitate consistent collection of data and information. The inspection form requires inspectors to record physical outfall conditions, any flow characteristics (including color, odor, clarity, solids, foam, oil sheen, etc.), and information about the surrounding area, including receiving waters. Paper versions of the forms can be used; however, NDOT has created a "Stormwater Collector" Application for use with mobile devices where information can be stored digitally in a GIS database.

4.7.11 IDDE Training

Rationale: To raise awareness of NDOT employees and its contractors regarding IDDE.

Objective(s):

1) Incorporate IDDE related subject matter into all stormwater training curriculum.

Responsibility: Stormwater Division

Stormwater training efforts are ongoing and occur several times annually within NDOT's three districts. IDDE subject matter has been incorporated into all NDOT stormwater training modules and includes information such as identifying common signs of potential illicit discharges (e.g. off-colors, strong odors, staining, floatables, etc.), unauthorized pipe-to-pipe connections to the storm sewer system, environmental concerns regarding illicit discharges, proper management and disposal of used oil and toxic materials, and the appropriate avenues for reporting potential illicit discharges.

4.8 Stormwater Education Program

Listed in Part III.F of the Permit are the specific requirements for NDOT's Stormwater Education Program, including public outreach, public participation, and training.

NDOT implements a multi-pronged approach to implementing programs, activities, and practices that collectively make up a comprehensive and diverse Stormwater Education Program. The purpose of this program is to create awareness about stormwater pollution, and provide education on approaches to reduce the discharge of stormwater pollutants and improve the quality of receiving waters.

NDOT's Stormwater Division participates in numerous collaborative community events around the State targeting a variety of audiences including the public, industry, students ranging from elementary school to college, NDOT employees, and public officials. In addition to conversational interaction, stormwater education and outreach is achieved using handouts, displays, and promotional items carrying the tag line "Love NV Waters". The Stormwater Division is active on popular social media platforms and currently maintains NDOT's Stormwater Program webpage, which can be found on NDOT's website.

The overarching goal of NDOT's Stormwater Education Program is to foster community stewardship and instill behavior change to preserve the quality of receiving waterways.

4.8.1 Public Outreach and Education Events

Rationale: Increase awareness of water quality issues, stormwater pollution, and NDOT's role and responsibilities with respect to stormwater management, and continue to be actively engaged with public involvement.

Objective(s):

1) Educate the public about stormwater quality, BMPs, and NDOT's efforts to improve the quality of stormwater runoff.
2) Inform the public of the effects of roadside dumping and litter and potential effects on water quality.
3) Provide opportunities for one-on-one dialogue with the public and stake holders.

Responsibility: Stormwater Division

NDOT participates in a variety of collaborative community events around the State each year to provide stormwater public outreach and education. At these events, NDOT and its partners strive to bring awareness to the public about how their individual involvement can help reduce stormwater pollutants and improve water quality. In addition to conversation with the public, education and outreach is achieved using a variety of handouts, displays and promotional items.

Under this BMP, NDOT will continue attending and supporting stormwater partners at public events throughout the state. Examples include:

- The Annual Lake Tahoe Summit
- Tri-State Seminar
- Nevada Water Resources Association Annual Conference
- Keep Truckee Meadows Beautiful Events
- Carson City Stormwater Tour
- Clark County Public Works Events
- Associated General Contractors of America Events
- Elko Take Pride-Clean Up Green Up
- Las Vegas GreenFest
- Reno River Festival
- Truckee River Snapshot Day

4.8.2 Stormwater Management Program Website, Social Media, and Digital Outreach

Rationale: Promote public awareness of water quality issues, stormwater pollution, and NDOT's role in statewide stormwater management using online resources and social media platforms.

Objective(s):

1) Provide an online resource for information pertaining to NDOT's SWMP, and the reporting of illicit discharges.
2) Provide mechanisms for public input as well as stormwater outreach and education.
3) Utilize social media to call attention to the public of various activities, events, and accomplishments.
4) Continue to focus outreach efforts around the "Love NV Waters" campaign to encourage behavioral change regarding stormwater pollution and protecting Nevada's waters.
5) Provide mapping information to benefit employees, contractors, and the public to promote a greater understanding of NDOT facilities and projects in relationship to waterways.

Responsibility: Stormwater Division

As part of its main website, NDOT maintains its Stormwater Program webpage. On this webpage, important information pertaining to NDOT's SWMP can be found, including various SWMP documents for viewing and download, and contact information. NDOT considers the webpage to be an essential tool in its ability to readily disseminate stormwater information to employees and the public.

Although web content is dynamic, it is expected that NDOT's stormwater web page will contain information such as:

- Stormwater Division's real-time continuous monitoring projects
- NDOT's Permit and associated Consent Decree
- Resources and documents
- Current training materials
- MS4 outfall mapping and the mapping tool
- Lake Tahoe environmental improvement efforts
- Stormwater events calendar
- How to report an illicit discharge
- Public participation opportunities
- Media and news
- Links to NDOT's Adopt-A-Highway and Sponsor-A-Highway web page
- Frequently asked questions

Presently, NDOT is utilizing the following social media platforms for stormwater messaging and to promote public involvement:

- Facebook@LoveNVWaters: Facebook is a place to share photos, updates, and general news with those who follow or "like" you
- Twitter@LoveNVWaters: Twitter is a way to share brief messaging, build relationships with interested followers and generate website traffic. The use of hashtags allow for the reach to a potentially wider audience than just your followers by getting involved in existing conversations
- Instagram@LoveNVWaters: With Instagram, snapping a photo of a stormwater related event and tagging your location enables the user to view all the photos that have been shared and facilitates information dissemination and messaging
- YouTube: YouTube is the leading video-sharing platform in the world. NDOT's Stormwater Division has its own "channel" for broadcasting stormwater related videos

4.8.3 Public Litter Removal Programs

Rationale: Encourage the public, service organizations, and businesses to participate in removing litter from MS4 areas.

Objective(s):

1) Remove litter before it enters the stormwater conveyance system and/or the waterways of the state.
2) Improve the visibility of roadway areas to help encourage litter prevention.
3) Acknowledge sponsors and participants through sign postings.

Responsibility: Administrative Services Division

NDOT's statewide public litter removal campaign plays an important role in keeping the highways clean and preventing trash and debris from entering receiving waterways. These programs provide a mechanism for Nevada's citizens, organizations, and businesses to assist and become actively involved in keeping NDOT's highways clean, and to ultimately reduce the likelihood of undesirable materials being washed into the state's waterways. Currently, NDOT administers two successful public litter removal programs. They are:

- Adopt-A-Highway: A program for litter removal on most state highways for individuals and community service groups. The program raises public awareness of litter and roadside dumping through signage and participation. Volunteers contribute to the community by adopting and maintaining a section of highway. NDOT posts signs acknowledging the volunteers and their efforts, thereby increasing public awareness.
- Sponsor-A-Highway: A program for litter removal on high-traffic volume urban freeways in the Las Vegas and Reno metropolitan areas. Firms and organizations seeking an outlet for community service may select pre-qualified litter removal contractors for litter removal services. In turn, NDOT provides signage and recognition of the sponsor partners.

4.8.4 Stormwater Partnerships and Affiliations

Rationale: Develop, foster and maintain relationships with other Nevada MS4 permit holders, municipalities, county agencies, contractor associations, and other stakeholders and interest groups to provide mutual stormwater related support needs.

Objective(s):

1) Maintain existing mutually beneficial partnerships and affiliations.
2) Explore opportunities to develop new mutually beneficial partnerships, relationships and affiliations.

Responsibility: Stormwater and Construction Divisions, and the three Districts

NDOT maintains numerous partnerships and affiliations with a variety of organizations, groups, and agencies throughout the State that share common stormwater program related objectives. These relationships allow NDOT to maximize expertise, share technical and educational resources, and pool economic resources to increase public awareness about stormwater management. These affiliations also allow NDOT the ability to communicate aspects of its SWMP to a diverse audience.

Under this BMP, NDOT will continue to foster and strengthen the existing relationships with its partners and affiliations. In addition, NDOT will continue to seek new partnerships that

can help improve, support, and proliferate common stormwater related goals and objectives. Some examples of NDOT's current partners and affiliations are:

- American Association of State Highway and Transportation Officials (AASHTO)
- Association of General Contractors (AGC)
- American Society of Civil Engineers (ASCE)
- Federal Highway Administration (FHWA)
- Nevada Division of Environmental Protection (NDEP)
- Tahoe Regional Planning Agency (TRPA)
- Truckee Meadows Storm Water Permit Coordinating Committee
- Las Vegas Valley Stormwater Quality Management Committee
- Elko Stormwater Advisory Committee
- Cities of Carson, Reno, Sparks, Las Vegas, Henderson, North Las Vegas, and Fallon
- Counties of Washoe, Clark, Douglas, Elko, and Lyon
- University of Nevada, Reno (UNR)
- United States Geological Survey (USGS)

NDOT receives stormwater committee meeting agendas from MS4 affiliates and provides representation at those meetings when appropriate.

In cooperation with the AGC and the regional contractor community, NDOT has developed the *Guide to Partnering on NDOT Projects* to support its commitment to partnering as a way of doing business. Partnering is a critical tool in promoting an open dialogue of communication between NDOT and its contractors in all aspects of a highway construction project, including construction site stormwater management. Formal partnering is a contractual requirement for NDOT's construction contractors as specified in NDOT's *Standard Specifications*.

4.8.5 Employee and Contractor Stormwater Training

Rationale: Maintain and improve water quality through stormwater education and training commensurate with the level of job responsibilities related to stormwater management for NDOT employees and contractors.

Objective(s):

1) Develop educational content of NDOT's Stormwater Training Program that is appropriate with employee and contractor job duties and responsibilities.
2) Ensure that stormwater training material is kept current and relevant.
3) Provide training at adequate frequencies.
4) Continue promoting intra-departmental and inter-agency communication efforts to facilitate Permit compliance.
5) Ensure that NDOT's contractors receive construction site runoff control training.

6) Maintain training records.

Responsibility: Stormwater Division

NDOT has created training courses with a focus on specific areas of stormwater management for varying levels of employee and contractor responsibility.

The various courses offered, and the targeted attendee level and frequency, are summarized below:

Introduction to Stormwater

This course presents the topic of stormwater management at its most fundamental level. The primary course goal is for students to have a rudimentary understanding of what stormwater runoff is, implications of stormwater pollution, illicit discharge detection and elimination, and common BMPs.

This is a web based course approximately 30 minutes in length. The target audience for this course is all NDOT staff who are not required to complete a discipline specific stormwater training module (as described in subsequent sections). Current and new hires have one year to complete the training. NDOT employees will be required to complete this course only one time during their tenure with NDOT.

The requirement to complete this course will be satisfied for staff who elect to complete one of the training modules described below or previously completed NDOT's 8-hour Stormwater Certification training course.

Maintenance Stormwater Training Module

This training course is specifically tailored towards NDOT District Maintenance Crew and Equipment personnel. This course provides a basic understanding of BMP implementation at maintenance facilities and in the field while performing day-to-day routine maintenance activities. Subject matter includes illicit discharge detection and elimination, and facility pollution prevention plan administration and implementation.

This course is four hours in length and will be held in all three NDOT Districts at least annually. Maintenance and Equipment personnel will have to complete this course within one year of hire and once every three years afterwards.

Construction Stormwater Training Module

This training course is specifically tailored towards NDOT District Construction Crew personnel not tasked with performing stormwater inspections on NDOT construction sites, personnel overseeing encroachment permit compliance, and District Stormwater Division staff. This course provides a general introduction into construction site BMP implementation, illicit discharge detection and elimination, and key aspects of NDOT's

Construction Site Runoff Control Program. This class is intended to be a precursor to the Water Pollution Control Manager (WPCM) Training course.

This course is four hours in length and will be held in all three NDOT Districts as part of Construction Division's series of inspection courses (i.e. General, Concrete, and Asphalt Inspection), which are offered annually during the winter months. Additional stand-alone trainings will be offered should there be a need to increase training opportunities within the three NDOT Districts. Personnel will have to complete this course within one year of hire and once every three years afterwards.

The requirement to complete this course will be satisfied for staff who elect to complete the WPCM Training course instead.

Post-Construction Stormwater Management Training

The Design Section within the Stormwater Division is responsible for performing and/or overseeing NDOT's stormwater treatment related design work, i.e. post-construction stormwater management. Due to the dynamic and multifaceted nature of the subject matter, coupled with the difficulty in developing a single training that would fully meet NDOT's stormwater design needs, NDOT is taking the a la carte approach to training its stormwater design staff. Design Section staff will be afforded the opportunity to seek out stormwater design related training that specifically suits their individual needs, e.g. modeling, low impact design, etc. Staff will be required to complete a minimum of three credit/professional development hours annually. Requirements can be fulfilled by completing training offered by private vendors and other government agencies, webinars, workshops, conference peer exchanges, etc.

The Design Section management and supervisor staff will be responsible for ensuring staff are trained on internal policies, procedures, and guidance documents (e.g., NDOT's *PDG*) pertaining specifically to the day-to-day operations of the Design Section.

Water Pollution Control Manager Training

NDOT has established a requirement in its *Standard Specifications* (i.e. Section 637 - *Temporary Pollution Control*) that each construction project have a designated WPCM. NDOT has collaborated with the Southern Nevada branch of the Associated General Contractors of America/Nevada Contractor's Association (AGC) to develop a stormwater training course emphasizing construction site stormwater management. The development and implementation of the WPCM training course is the result of this collaborative effort.

The WPCM training course focuses specifically on construction site stormwater management. Subject matter includes temporary pollution control implementation, illicit discharge detection and elimination, and key aspects of NDOT's Construction Site Best Management Practices (BMPs) Program. NDOT's prime construction contractors,

specifically the contractor's designated WPCM, are required to complete this course prior to the start of construction activities for their respective contracts.

This course is also required for select NDOT District Construction Crew personnel (i.e. Resident Engineers, Assistant Resident Engineers, and designated BMP oversight inspectors). NDOT's Resident and Assistant Resident Engineers are required to complete this course within one year of hire. NDOT's District Construction Crew personnel are required to complete this course prior to conducting BMP oversight inspections on NDOT construction projects. Certification for both NDOT's contractors and construction personnel is valid for three years.

This course is 16 hours in length and will continue to be instructed in all three NDOT Districts annually by representatives of the AGC.

Other Training Opportunities

NDOT will continue to seek out and promote other training opportunities as a means of supplementing and augmenting current training efforts. The ability of NDOT staff to attend these training opportunities will be dependent on a variety of factors, including course availability and funding. Proof of course completion will be documented accordingly with each employee's training record.

Reporting

NDOT shall report the number and types of employees trained each year in the *Annual Report.*

NDOT's stormwater training database is maintained by the Stormwater Division's Program Development Section.

Updating Course Content

Updates to NDOT provided training material will be developed and/or overseen by the Stormwater Division's Program Development Section.

4.9 Maintenance Facility Stormwater Discharge Control Program

This section addresses requirements identified in various maintenance related sections of the Permit, including: Stormwater Discharges from NDOT Maintenance Facilities (III.L), Comprehensive Maintenance Facility Inspections (III.M), Scope of Inspections (III.N), and NDOT Maintenance Yards Management Program (III.S). This program consists of a collection of BMPs, requirements, controls, and procedures, that collectively mitigate the adverse effect of stormwater runoff from NDOT's Maintenance Facilities to the MEP.

4.9.1 Major and Minor Maintenance Facilities

Rationale: Designate "Major" and "Minor" Maintenance facilities statewide.

Objective(s):

1) Evaluate Maintenance facility operations and determine their appropriate Major and Minor designation.
2) Ensure new and existing Maintenance facilities are properly designated on an annual basis.

Responsibility: Stormwater Division and the three Districts

Part III.S.3.b of the Permit requires NDOT to identify which Maintenance facilities are considered "Major" and which are considered "Minor," and set out the reasons for the facility designations.

The methodology for designating Maintenance facilities is:

- Major Facility: Maintenance stations that accommodate multiple crews and serve as a location for equipment repairs beyond routine maintenance.
- Minor-A Facility: Maintenance stations that do not accommodate multiple crews and do not conduct equipment repairs beyond routine maintenance. Maintenance yards, which are typically offsite and serve as ancillary material and/or equipment storage areas for nearby Maintenance stations, are also included in this designation.
- Minor-B Facility: Material storage/stockpile areas located offsite of a Maintenance station or yard, e.g. stand-alone sand/salt piles located throughout the State.

NDOT's Stormwater Division coordinates with the three Districts annually regarding Maintenance facility status, i.e. active vs. non-active, and Maintenance facility designation. A newly constructed facility, e.g. a new Maintenance station, will be assessed and assigned an appropriate designation, i.e. "Major" or "Minor". Additionally, existing Maintenance facilities are assessed annually to determine if changes in their respective operations warrant a change in designation, i.e. Major to Minor or vice versa.

4.9.2 Maintenance Facility Pollution Prevention Plans

Rationale: Develop a document that describes appropriate control measures to be implemented at NDOT Maintenance facilities to reduce potential stormwater pollutant discharges.

Objective(s):

1) Prevent or reduce potential stormwater pollutant discharges from NDOT Maintenance facilities.
2) Understand and identify Maintenance facility operations and their potential for contributing pollutants to stormwater runoff.
3) Develop and implement BMPs appropriate to Maintenance facility operations
4) Maintain and update the facility plans as needed to ensure content is current and relevant to Maintenance facility operations.

Responsibility: Stormwater Division and the three Districts

The Maintenance Yards Management Section of the Permit (Part III.S) requires the development and implementation of SWPPPs for all NDOT's Maintenance yards, storage areas, batch plants and facilities.[5] NDOT has chosen to identify these plans as Facility Pollution Prevention Plans (FPPPs) for consistency and differentiation from transitory construction sites. Note that the content of the FPPPs is consistent with that described in the Permit for a SWPPP or a runoff control plan.

NDOT is required to identify, list, develop, and implement FPPPs for NDOT owned and/or operated facilities (those that do not have coverage under an individual NPDES stormwater permit). Applicable facilities include:

- Vehicle Maintenance facilities (maintenance includes equipment rehabilitation, mechanical repairs, painting, fueling, and lubrication)
- Asphalt and concrete batch plants
- Solid-waste transfer stations
- Exposed stockpiles of materials, including stockpiles of road deicing salt, salt/sand, sand, and roto-mill material
- Sites used for snow dumps, and/or for temporary storage of sweeper tailings or other waste piles

Parts III.S.3.e and III.S.3.f of the Permit require that copies of the 'major' FPPP(s) be kept on the facility site and on file with NDOT's "main office" and copies of the 'minor' FPPP(s) shall be kept on file with the "Regional District Office". Consequently, copies of the FPPP(s)

[5] Sites solely serving the purpose of "chip" storage are not included due to their extremely low pollutant potential and transitory nature.

shall be housed at all Maintenance stations and within the Stormwater Division at NDOT's Headquarters in Carson City.

NDOT has developed a single FPPP format that addresses all facility types, including facility specific considerations as appropriate. The FPPP format includes or addresses:

- Site maps
- Type of operation, size of the facility, and receiving water drainage basin
- Identification of potential pollutant sources
- Inspection and maintenance procedures and reports
- Inclusion of stormwater management and pollution prevention BMPs such as:
  - Description of general BMPs
  - Facility specific BMPs
  - Identification of the FPPP Administrator
  - General and specific housekeeping requirements
  - Hazardous waste management components
  - Spill control and prevention
  - Illicit discharge detection and elimination
  - Employee training

The FPPP also includes a "stormwater pollutant potential rating", a straightforward, qualitative evaluation of a potential pollutant contribution to stormwater runoff for a given Maintenance operation/activity. The rating was based upon typical, average conditions observed at NDOT's Maintenance facilities over time. Ratings of *not applicable (N/A), very low*, *low*, *moderate*, or *high* were given with respect to a particular operation as it relates to each facility designation.

The FPPP is considered a "living document". Consequently, the FPPP will undergo changes resulting from various circumstances, which could include the following:

- Discrepancies identified during facility stormwater inspections that require a modification to internal policy or procedure
- Notification from a local, state, or federal official indicating the occurrence of a non-compliance activity requiring modification of an existing or development of a new BMP
- Physical modifications to a facility requiring changes to a site map, e.g. installation of a manufactured stormwater treatment device
- Changes in regulatory requirements
- A change in a facility designation, e.g. Minor facility becoming a Major facility
- Significant changes in site specific BMPs

FPPPs will be reviewed annually by the Stormwater Division's Compliance and Enforcement Section and updated appropriately. Changes to the FPPP(s) will be described in the *Annual Report*.

4.9.3 Hazardous Materials Management

Rationale: Prevent the release of toxic and/or hazardous materials at Maintenance facilities to ensure employee safety as well as protect the quality of stormwater runoff.

Objective(s):

1) Document and implement best management practices and procedures for the safe handling, storage and disposal of toxic and hazardous materials at Maintenance facilities.
2) Mitigate potential releases of toxic and hazardous materials through appropriate spill prevention, control, and response practices.

Responsibility: Stormwater Division and the three Districts

Other than fuels and small amounts of lubricants, toxic and hazardous materials are generally found only at the Major Maintenance facilities. Typical examples of toxic and/or hazardous materials that can be found at Maintenance facilities include petroleum products, antifreeze, non-chlorinated flashpoint adjusted solvents, various surface cleaners, and surface coating materials (e.g. latex paint). BMPs for the handling, storage, use and disposal of hazardous materials are included in each FPPP.

4.9.4 Maintenance Facility Stormwater Inspections

Rationale: Conduct routine stormwater inspections of all “Major” and “Minor” Maintenance facilities.

Objective(s):

1) Ensure implementation of effective BMPs to prevent or reduce potential stormwater pollutant discharges from NDOT Maintenance facilities.

Responsibility: Stormwater Division and the three Districts

Part III.M of the Permit requires that NDOT conduct a “Comprehensive Maintenance Facility Inspection” for all its facilities at least once per year, as well as routine visual inspections. The required scope of these inspections can be found in Permit Part III.N. NDOT will focus its stormwater inspection efforts on active Maintenance facilities.

The inspection frequencies of “Major” and “Minor” Maintenance facilities are set forth in the FPPP. Guidance for the implementation of general BMPs is available in NDOT’s *Maintenance Facility Best Management Practices (BMPs) Manual*. Standardized inspection forms for “Major” and “Minor” facilities are included in the FPPP. FPPP Administrators are tasked with overseeing the day-to-day implementation of the FPPP, including routine visual inspections of their respective Maintenance facilities.

The Stormwater Division's Compliance and Enforcement Section will perform and document a minimum of one annual stormwater inspection at all Major and Minor facilities. Following the inspection, an inter-Departmental memo will be submitted to the appropriate FPPP Administrator(s) summarizing the inspection findings, discrepancies and non-compliance, along with recommendations for appropriate corrective action(s).

A summary of annual Maintenance facility inspection activities will be provided in the *Annual Report.*

4.9.5 Maintenance Facility Best Management Practices (BMPs) Manual

Rationale: Provide and maintain a guidance document to assist NDOT District personnel with implementing and maintaining BMPs at Maintenance facilities.

Objective(s):

1) Present pollution prevention options to mitigate stormwater impacts from Maintenance facilities.
2) Maintain and update the manual as needed to ensure material is current and relevant to Maintenance facility operations.
3) Maintain accessibility of the manual in locations, physically and/or digitally, for NDOT employees.

Responsibility: Stormwater Division

Maintenance facilities are strategically located throughout the NDOT's three Districts to provide a level of service necessary in keeping the state's highway system in a safe and operable condition. Stormwater runoff from NDOT's Maintenance stations and yards, sand/salt and aggregate piles, and various material storage areas can impact receiving water quality. This guidance document provides options for stormwater pollution control practices for a variety of activities that commonly occur at NDOT's Maintenance facilities. The *Maintenance Facility Best Management Practices (BMPs) Manual* serves as a reference for incorporating BMPs into day-to-day facility operations, helps to facilitate the implementation of FPPPs, and serves as a guidance tool when conducting facility stormwater inspections.

The Stormwater Division will periodically review the document and incorporate changes as necessary.

4.10 Public Street Maintenance Program

Summarized in the following subsections are the practices and procedures related to the maintenance of public streets, highways, and ROW to control potential stormwater pollutant discharges from NDOT's MS4. These measures are consistent with NDOT's goals of optimizing public safety, efficiently operating the state's transportation system, and effectively preserving and managing public transportation assets

The following programs and BMPs address requirements identified in four different Permit sections, including: Public Street Maintenance Program in Urbanized Areas (Part III.O), Measures to Control Discharges from Roadways (Part III.P), Storm Sewer System and Highway Maintenance (Part III.Q), and Proper Operation and Maintenance (Part V.I).

4.10.1 Highway Maintenance Program

Rationale: Incorporate stormwater BMPs into routine highway maintenance activities to minimize potential stormwater pollutant discharges from NDOT's MS4.

Objective(s):

1) Implement appropriate BMPs for maintenance activities.
2) Perform preventive maintenance measures to minimize pollutants and maintain the proper working order of stormwater assets.

Responsibility: Stormwater, Maintenance and Asset Management Divisions, and the three Districts

Routine highway maintenance is performed to maintain a level of service to the traveling public, and to help delay, prevent, or correct asset deterioration. To help ensure highway maintenance activities are conducted in a fashion that will prevent or minimize water quality impacts to receiving waters, NDOT's Maintenance staff receive stormwater training as described in the Stormwater Education Section (see Section 4.8). NDOT has also developed and/or adopted stormwater BMP guidance documents for Maintenance staff to reference when performing maintenance activities, notably:

- *Construction Site Best Management Practices (BMPs) Manual*
- *Field Guide for the Detection and Elimination of Illicit Discharges*
- *Maintenance Facility Best Management Practices (BMPs) Manual*
- *AASHTO's Maintenance Stormwater Field Guide*

4.10.2 Street Sweeping Program

Rationale: Perform scheduled/routine street sweeping activities for the removal of accumulated roadway material before it can be potentially mobilized with stormwater flows.

Objective(s):

1) Conduct street sweeping at routine frequencies.
2) Ensure proper disposal of sweeper wastes.

Responsibility: Stormwater, Maintenance and Asset Management Divisions, and the three Districts

Street sweeping is widely acknowledged as an effective source control stormwater BMP, as it removes contaminants from paved surfaces before they can be transported off site. Street sweeping activities and responsibilities are relegated to the individual NDOT Districts. NDOT Maintenance Crews and District contractors routinely sweep the streets, highways, and paved maintenance facility areas to remove leaf litter, tracked dirt, sand, and other accumulated debris.

In general, urban streets and highways are swept at least twice a year – once in the spring and once in the fall. Following the application of deicing agents or abrasives, all roads are swept as soon as weather, logistics, and site conditions permit after snow storms, but no later than four (4) days after the last snowfall.

Sweeper wastes are properly disposed in approved areas following approved disposal practices. Sweeper waste may be temporarily stored at Maintenance facilities prior to transport to final disposal areas, (e.g. landfills). NDOT continues to examine the feasibility of recycling or re-using a portion of the sweeper wastes. In addition to the locations of street sweeping activities, the amount of material collected via street sweeping is documented and reported in the *Annual Report*.

4.10.3 Snow and Ice Control Program

Rationale: Mitigate potential adverse effects from stormwater runoff containing anti-icing, deicing, and abrasive agents used for public safety during snow and ice events.

Objective(s):

1) Effectively train staff on BMPs associated with the application of anti-icing and deicing agents and abrasives.
2) Implement BMPs in a manner consistent with NDOT's policies and guidelines for product application.

Responsibility: Stormwater and Maintenance and Asset Management Divisions, and the three Districts

NDOT applies abrasives, anti-icing, and de-icing agents on highways across the state where near freezing or freezing winter temperatures occur to maintain a level of safety for the traveling public. Salt (NaCl), brine solutions, and magnesium chloride (MgCl) are commonly used as anti-icing or de-icing agents. Sand is the primary abrasive used,

although volcanic cinders are occasionally used in selected areas. If not properly managed, these materials have the potential to runoff NDOT ROW and adversely impact receiving waters.

NDOT has established policies to address the use of anti-icing, de-icing agents and abrasives. NDOT's *Maintenance Manual* is the primary guidance document for Maintenance Crews to reference when performing winter operations, including the maintenance of equipment, required composition testing of anti-icing, deicing, and abrasive agents, and other relevant maintenance tasks and responsibilities. In general, NDOT staff follow routine practices, including: vehicle and equipment inspections prior to leaving the NDOT facility, regular calibration of spreading equipment, proper selection of materials, performing spill control activities within the facilities, etc. NDOT has adopted AASHTO's *Maintenance Stormwater Field Guide* which includes BMP practices when performing winter operations. NDOT strives to determine optimal application rates while minimizing adverse impacts to receiving waterways without compromising public safety.

NDOT's *Maintenance Facility Best Management Practices (BMPs) Manual* includes information regarding proper storage practices of ant-icing and de-icing agents and abrasives at NDOT Maintenance facilities to minimize the potential of discharge to the MS4. Many of these locations have covered structures to house the sand and salt stockpiles, and have secondary containment structures around liquid agents to further minimize potential migration off site.

Additionally, the stormwater training that Maintenance personnel receive incorporates stormwater BMP information associated with the application of abrasives and anti- and de-icing agents.

4.10.4 Testing of Abrasives, Anti-Icing and De-icing Agents

Rationale: Analyze anti-icing, deicing, and abrasive agents used for public safety during snow and ice events.

Objective(s):

1) Require sampling and analysis of anti-icing, deicing, and abrasive materials used during winter operations.

Responsibility: Stormwater and Maintenance and Asset Management Divisions, and the three Districts

NDOT has incorporated into their "notice to bidders" and bid documents that the vendors bidding to supply NDOT with anti-icing, deicing, and abrasive agents must include the Permit required test results from a Nevada certified lab with their annual contract bid prices or they will not be awarded the bid.

4.10.5 Routine Inspection and Maintenance of Stormwater Assets

Rationale: Implement a program to inspect and assess condition, prioritize and schedule maintenance, and systematically maintain NDOT's stormwater assets.

Objective(s):

1) Inspect and assess the condition of NDOT's storm sewer system, including post-construction control measures, outfalls, and steep slopes.
2) Maintain, repair, and clean storm sewer system assets to ensure proper functioning condition.
3) During repair, maintenance or cleaning activities, assess for evidence of illicit discharges or illegal dumping.

Responsibility: Stormwater and Maintenance and Asset Management Divisions, and the three Districts

The Permit sections III.P and III.Q have numerous provisions pertaining to the inspection, prioritization, performance of maintenance, and repair activities, of roadways, steep slopes (3:1 or greater), and storm sewer system assets.

NDOT has implemented a comprehensive program of routine inspections and maintenance of the MS4. These activities are documented in NDOT's Stormwater Asset Mapping (SAM) database and Maintenance Management System (MMS).

The *SWOMP*, described in sub-section 4.10.6, identifies minimum maintenance schedules, the approach to assess the condition of assets, and establish priorities for maintenance. Also included in the *SWOMP* are checklists to document inspections of various hydraulic assets, stormwater treatment assets, slopes, and outfalls. NDOT has also developed a road operations plan specifically for the Lake Tahoe Basin (Sub-section 4.10.7).

Maintenance schedules are maintained at the District level.

While performing inspections and maintenance, personnel are trained to look for any indication of illicit discharges and to follow reporting procedures established under the IDDE Program (Section 4.7).

4.10.6 Stormwater Operations and Maintenance Plan

Rationale: Provide direction and establish consistency of inspection and maintenance of storm sewer system hydraulic assets, post-construction BMPs, and other water quality treatment assets, outfalls, as well as slopes greater than 3:1.

Objective(s):

1) Establish procedures and frequencies for the inspection of stormwater assets.

2) Provide operation and maintenance guidance practices necessary to ensure stormwater assets are functioning as intended.
3) Set forth condition assessment criteria for NDOT's stormwater assets to identify and prioritize the need for repair projects or maintenance.
4) Provide documentation protocol for verifying and recording the condition and maintenance of stormwater assets.

Responsibility: Stormwater Division and Maintenance and Asset Management Divisions, and the three Districts

The Permit requires NDOT to inventory, inspect, and maintain post-construction BMPs and general storm sewer infrastructure. NDOT developed the *SWOMP* to provide guidance for inspection and maintenance of stormwater structures and conveyances associated with the NDOT's MS4. The practices identified in the *SWOMP* help define the level and extent of service required for the inspection and maintenance of MS4 components. Inspection considerations and examples to assist the inspector to assess the condition, and inspection checklists for typical post-construction structural BMPs are included in the *SWOMP*. Also addressed in this document is NDOT's system used to identify, track, and prioritize timely stabilization and repairs to road segments where slopes are 3:1 or greater, are actively eroding (or are prone to erosion), and have sediment leaving the NDOT ROW or discharging to a WOUS. Included are inspection considerations, i.e. examples to assist in condition assessment, and a checklist to document the assessment. Slope stabilization BMP application is specifically discussed in detail in NDOT's *PDG*.

4.10.7 Lake Tahoe Basin Road Operations Plan

Rationale: Implement a plan that outlines NDOT's maintenance efforts within the Lake Tahoe Basin to reduce stormwater pollutant discharges into Lake Tahoe.

Objective(s):

1) Identify maintenance related stormwater control measures on specific NDOT owned and operated roadways within the Lake Tahoe Basin.
2) Satisfy requirements outlined in the *Lake Clarity Crediting Program (LCCP) Handbook* as part of the Lake Tahoe Total Maximum Daily Load (TMDL).

NDOT developed the *Lake Tahoe Basin Road Operations Plan* to meet the requirements of the *Lake Clarity Crediting Program (LCCP) Handbook* associated with the Lake Tahoe TMDL. The plan provides supporting documentation for the Lake Tahoe TMDL road registration process for specific roadways owned and maintained by NDOT, which includes identifying maintenance related pollutant control measures, expected road conditions that will be achieved from the implementation of the control measures, and a roadway facility inspection plan.

Maintenance schedules are maintained at the District level.

4.11 Herbicide, Pesticide, and Fertilizer Application Program

Summarized in the following text is NDOT's Herbicide, Pesticide, and Fertilizer Application Program and Vegetative Control Program as required by Part III.R of the Permit. For clarity, the term "pesticide" encompasses the subset of insecticides, pesticides, fungicides, rodenticides, etc.

4.11.1 Herbicide and Fertilizer Application Practice

Rationale: Implement BMPs that reduce the actual or potential discharge of pollutants related to the application or storage of herbicides, pesticides, and fertilizers.

Objective(s):

1) Implement appropriate housekeeping, cleaning, and product application BMPs to prevent, or reduce, discharges of herbicide, pesticide, or fertilizer products.

Responsibility: Stormwater Division and Maintenance and Asset Management Divisions, and the three Districts

NDOT strictly uses pesticides which are approved under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Herbicides are the primary pesticide used within NDOT's ROW; however, small quantities of household-type pesticides are used at maintenance facilities for everyday pest control.

Established procedures and guidelines for the roadside application of herbicides can be found in NDOT's *Maintenance Manual.* The *Maintenance Manual* covers: the use of only approved chemicals at prescribed rates, strict use of approved and calibrated application equipment, annual review of product appropriateness, inventory and storage requirements, safe disposal practices, equipment requirements, daily equipment check procedures, as well as product selection considerations (e.g., applicator safety, target effectiveness and intended use, and potential effects on nearby lands, plants, animals, and aquatic life), special application restrictions for sensitive areas and near water bodies, etc. Avoidance of chemical application, when feasible, is also discussed.

NDOT's Landscape and Aesthetics Program emphasizes the use of native plant species that, after establishment, do not require fertilizer or irrigation. In general, fertilizers are limited to a small subset of projects to help reestablish vegetation after construction activities. In addition, routine fertilizer application for the maintenance of established vegetation is limited to specific landscaped areas within NDOT's Permit area and not applied statewide. Fertilizer type and application rates are prescribed by NDOT's Registered Landscape Architects and/or manufacturer specifications. BMPs associated with fertilizer application are also addressed in stormwater trainings provided to Maintenance personnel.

4.11.2 Herbicide and Fertilizer Application Training Program

Rationale: Ensure that contractors and NDOT staff tasked with herbicide or fertilizer application within the NDOT's MS4 areas receive proper training to reduce the potential of unintended discharges into the environment.

Objective(s):

1) Provide appropriate training to NDOT Maintenance personnel that are charged with applying herbicides and fertilizers.

2) Ensure that contractors applying herbicides in NDOT rights-of-way are properly trained on the use and application of approved products.

Responsibility: Maintenance and Asset Management Division, three Districts, and Contractors

The Permit requires that all staff directly involved in the application of pesticides, herbicides, and fertilizers be properly trained. Stormwater trainings provided to Maintenance personnel address BMPs for herbicide and fertilizer application and management. Training content includes a discussion of the potential contamination of stormwater resulting from misapplication or over-application of chemicals, proper product application, and general housekeeping BMPs.

State and federal laws require that only certified applicators apply or supervise the application of restricted use pesticides (RUPs). The Nevada Department of Agriculture (NDA) provides certification training for pesticide applicators. NDOT staff and contractors[6] that apply RUPs to vegetation in NDOT ROW are required to complete NDA Certified Applicator Training Course. The requirement for contractor certification is included as a contract requirement and validated during contracting. NDA training certifications are renewed per state requirements, with NDOT employee certification records being maintained at the appropriate NDOT District offices.

4.11.3 Vegetative Control Program

Rationale: Develop/maintain a program to encourage the growth of native and sustainable plants in NDOT ROW so that supplemental irrigation, fertilizer, and maintenance needs are minimized, public safety is protected, and the incursion of weed species is minimized.

Objective(s):

1) Enhance the use of appropriate native and adapted vegetation within NDOT ROW to assist with minimizing erosion and improving stormwater quality.

[6] Nevada state law requires all pest control businesses to obtain a pest control license.

2) Reduce the discharge of pollutants in stormwater (e.g. erosion control), while maintaining a level of safety for the traveling public (e.g., line of site and reducing wildfire potential).
3) Minimize the need for supplemental water and fertilizer use while maintaining aesthetics.

Responsibility: Landscape Architecture Section, Stormwater, Maintenance and Asset Management, and Hydraulics Divisions, and the three Districts

The Permit requires the development of a Vegetative Control Program that: 1) enhances use of native vegetation; 2) controls the application of fertilizers to minimize nutrient runoff to surface water; 3) integrates existing vegetation control management plans into an overall statewide plan; and 4) provides program updates in the *Annual Report*.

NDOT has developed *Pattern and Palette of Place: A Landscape and Aesthetics Master Plan for the Nevada State Highway System (Master Plan)*. This document represents NDOT's formal program for ensuring landscape and aesthetics are considered in all phases of every highway design and construction project. As part of the *Master Plan*, NDOT has developed a series of Corridor Plans for the eleven major state highways. A Corridor Plan is a written guide for landscape and aesthetic improvements for future projects. All plans emphasize the use of native, drought tolerant, plant species in all new re-vegetation projects, which inherently reduces herbicide and fertilizer use. Corridor Plans include vegetation, precipitation, habitat, and soil considerations for project planning in Nevada's various ecosystems, including approaches to control invasive and noxious weeds. Nevada contains numerous distinct and diverse ecosystems with many different vegetation communities, thus necessitating the need for region-specific approaches.

The management and implementation of NDOT's Vegetative Control Program is a collaborative effort among various Divisions and Sections. Vegetation control efforts within NDOT's ROW are administered by the NDOT's Maintenance and Asset Management Division and the three Districts. Maintenance Crews throughout the state control vegetation within certain areas of the roadway prism (e.g., immediate shoulder areas), to maintain a safe "clear zone" for traveling motorists and reduce fire hazard. This is typically accomplished using conventional methods such as mowing and herbicide application. By utilizing appropriate weed control practices, established in the Corridor Plans, NDOT strives to minimize the spread of invasive and state-listed noxious weed species. AASHTO's *Maintenance Stormwater Field Guide* is used by NDOT Maintenance personnel as a resource for BMP guidance for vegetated areas and invasive species management.

Vegetation, as prescribed in the Corridor plans, is not only utilized for its aesthetic qualities, but is also considered an important erosion control practice. NDOT's Landscape Architecture Section assists with the planning and long-term management of floral communities and is tasked with designing landscaping features along state routes and corridors with an emphasis in urbanized settings. Many of NDOT's landscaping architecture

efforts incorporate a native vegetation component integrated with various structural components (e.g., decorative rock providing visual enhancement and contrast along with stormwater and erosion control qualities).

4.12 Discharges to Sanitary Sewer Systems

Part III.E of the Permit requires NDOT to have written confirmation from the utility or agency allowing pollutants from stormwater discharges into facilities treating, recycling, or reclaiming municipal or domestic sewage that are not owned or operated by NDOT.

4.12.1 Sanitary Sewer Systems Discharge Authorizations

Rationale: Obtain written approval from any utility or agency for any NDOT stormwater discharges into facilities treating domestic sewage that are not owned or operated by NDOT.

Objective(s):

1) Identify instances of disposal of NDOT stormwater runoff or waste materials into sanitary sewer systems.
2) Obtain written approvals from the wastewater utility accepting NDOT's stormwater runoff or waste materials.

Responsibility: Stormwater Division

NDOT's Stormwater Division coordinates with each District to learn of current stormwater waste disposal practices and/or if there are any intentional stormwater connections made to the sanitary sewer system.

NDOT will contact the appropriate wastewater utility to secure written authorization for such discharges. NDOT currently has written authorization from the following municipal entities for stormwater disposal:

- Storey County Public Works
- Incline Village General Improvement District
- Clark County Department of Public Works
- Truckee Meadows Water Reclamation Facility
- Carson City Public Works
- City of Fallon

Approval letters authorizing such discharges are included in the Appendix B of this SWMP document.

4.13 Lake Tahoe TMDL Program

Part II.C. of the Permit requires NDOT to enter into a Memorandum of Agreement (MOA) with NDEP for the implementation of the Lake Tahoe TMDL within one year of the TMDL approval.

4.13.1 Lake Tahoe TMDL Memorandum of Agreement

Rationale: Enter into a MOA, or appropriate legal instrument with NDEP for the implementation of the Lake Tahoe TMDL.

Objective(s):

1) Cultivate collaboration and cooperation with NDEP to create a framework for successful implementation of the Lake Tahoe TMDL.
2) Implement controls to reduce fine sediment particle and nutrient loads.

Responsibility: Hydraulics Division

To restore Lake Tahoe's water quality and clarity to acceptable levels, the EPA approved the Lake Tahoe TMDL in August of 2011. Part II.C.2 of the Permit requires NDOT and NDEP to enter into a Memorandum of Agreement (MOA) following the approval of the Lake Tahoe TMDL.

Washoe and Douglas Counties, NDOT, and NDEP concluded that an MOA would not be an adequate means to uphold the goals and objectives of the TMDL, and therefore it was agreed upon by all parties that an interlocal agreement (ILA) would be more appropriate. Consequently, NDOT entered the ILA with NDEP in August of 2013, with an updated ILA signed November of 2016 to implement the Lake Tahoe TMDL. The ILA states what roles, commitments, and actions are expected of NDOT to help restore and protect Lake Tahoe's clarity. The current ILA is set to expire in August of 2021. A copy of the ILA is included in Appendix C.

4.14 Discharges to Impaired Waters

Presented in this section are the programmatic details pertaining to NDOT's management practices and procedures to evaluate and mitigate the influence of stormwater runoff to impaired waters or waters with an NDEP approved TMDL within the State of Nevada.

4.14.1 Impacts to Impaired Waters

Rationale: To identify and minimize impacts to impaired waterbodies due to the discharge of stormwater from NDOT's MS4 areas.

Objective(s):

1) Determine if NDOT has stormwater discharges to waters on the current 303(d) list.
2) Evaluate if stormwater discharges from NDOT's MS4 contribute directly or indirectly to the listed impairment.
3) If it is determined that runoff from NDOT's MS4 area contributes to the impairment of a waterbody, evaluate and identify (as appropriate), BMPs that would make a substantial improvement on water quality.

Responsibility: Stormwater Division

Part II.A. of the Permit requires NDOT to determine if stormwater discharges from the NDOT's MS4 contribute to the impaired waterbody listing (referred to as the 303(d) list in the most current *Nevada Water Quality Integrated Report*).

NDOT has assessed all waterbodies included on the current 303(d) list for the potential to be impacted by stormwater discharges from the NDOT MS4. NDOT compiled all waterbodies placed on the current 303(d) list, i.e. those included in the 2014 Nevada Water Quality Integrated Report, and assessed if the impairments were caused by transportation-related pollutants.[7] Utilizing GIS capabilities, NDOT ascertained locations where NDOT owned roadways and facilities either intersected or paralleled the waterbodies. NDOT conducted further evaluation on those waterbodies that receive stormwater discharge from NDOT's MS4. Evaluation factors included surround land use, location of water quality monitoring sites used for 303(d) assessment, and connectivity between the waterbody and NDOT's MS4. NDOT will conduct field assessments to finalize this analysis and use this information to determine where to focus stormwater monitoring efforts and implementation of BMPs as determined necessary. A summary of these efforts is provided in Table 4-1.

[7] NDOT considers the following pollutants to be transportation-related: sediments, (total dissolved solids, total suspended solids, turbidity), nutrients, (nitrate, nitrite, total nitrogen, orthophosphorus, and total phosphorus), metals (cadmium, chromium, copper, lead, iron, nickel, manganese, and zinc), herbicides and pesticides, bacteria (E. coli, and fecal coliform), hydrocarbons (oil, grease, polycyclic aromatic hydrocarbons, and total petroleum hydrocarbons), and temperature.

The Stormwater Division's Design Section will evaluate the need to incorporate appropriate permanent BMPs into future project designs.

Expanded stormwater quality monitoring will assist NDOT with ongoing efforts with determining/confirming if stormwater discharges from NDOT's MS4 contribute directly or indirectly to the listing of a waterway on the state's current 303(d) list.

A summary of the on-going impaired water evaluations will be provided in NDOT's *Annual Report*.

Table 4.1: Summary of Waterbodies Impaired by Transportation-Related Pollutants Based on NDEP's 2014 Integrated Report.

303(d) Listed Waterbodies Impaired by Transportation-Related Pollutants								
Impairment Cause	**Total Stream Reaches**	**Stream Reaches Potentially Receiving Discharge from NDOT MS4**	**Stream Reaches-Potential WQ Impact by NDOT MS4 (Direct or Indirect)**	**Total Lakes/Reservoirs**	**Lakes/Reservoirs Potentially Receiving Discharge from NDOT MS4**	**Lakes/Reservoirs-Potential WQ Impact by NDOT MS4 (Direct or Indirect)**	**Total Wetlands**	**Wetlands Potentially Impacted by NDOT MS4**
Sediment Related								
Sulfate	10	5	0	--	--	--	--	--
Total Dissolved Solids	30	16	5	6	2	1	1	0
Total Suspended Solids	9	3	2	2	1	1	--	--
Turbidity	13	6	5	3	3	3	--	--
Hydrocarbons								
Oil & Grease	0	--	--	0	--	--	0	--
PAHs	0	--	--	0	--	--	0	--
TPH	0	--	--	0	--	--	0	--
Nutrients								
Nitrite	0	--	--	0	--	--	0	--
Nitrate	1	1	0	0	--	--	0	--
Nitrogen, Total	0	--	--	1	1	1	0	--
Phosphorus, Total	54	26	6	13	7	6	1	0
Phosphorus, Ortho	2	2	0	0	--	--	--	--
Toxic Materials								
Herbicides	0	--	--	0	--	--	0	--
Pesticides	0	--	--	0	--	--	0	--
Cadmium	4	1	0	0	--	--	0	--
Chromium	0	--	--	0	--	--	0	--
Copper	3	2	0	0	--	--	0	--
Iron	40	25	12	6	1	0	1	0
Lead	0	--	--	0	--	--	--	--
Manganese	7	3	0	2	1	0	--	--
Nickel	6	1	0	0	--	--	--	--
Zinc	6	2	0	0	--	--	--	--
Pathogens								
Escherichia coli	23	15	3	0	--	--	--	--
Fecal coliform	1	1	1	0	--	--	--	--
Other								
Temperature	70	32	1	7	5	0	1	0

*Stream reaches and lakes/reservoirs that require additional evaluation have the potential to have a greater than de minimis impact on 303(d) listings.

Note: Some waterbodies may be impaired by more than one cause.

4.14.2 Impacts to Waterbodies with Approved TMDLs

Rationale: To minimize impacts to impaired waterbodies for which a TMDL has identified NDOT's stormwater discharges to be a contributor to the impairment.

Objective(s):

1) Determine whether the approved TMDL is for a pollutant likely to be found in stormwater discharges from NDOT's MS4.
2) Determine whether the TMDL includes a pollutant waste load allocation or other performance requirements specifically for stormwater discharge from NDOT's MS4.
3) If an established TMDL determines that runoff from the NDOT MS4 area is contributing to the impairment of a waterbody, NDOT will identify, list and develop appropriate BMPs to mitigate the impacts to the MEP.

Responsibility: Stormwater Division

Part II.B of the Permit requires NDOT to determine if there are stormwater discharges from NDOT's MS4 to a waterbody for which a TMDL has been approved.

Currently there are 15 waterbodies with NDEP approved TMDLs, some with multiple reaches and pollutants. TMDLs have been developed for specific segments of the following waterbodies:

- Owyhee River
- Mill Creek
- Rio Tinto Gulch
- Humboldt River
- Hanks Creek and Hanks Creek, South Fork
- Dixie Creek
- Lake Tahoe
- Truckee River
- Bryant Creek
- Carson River
- Brockliss Slough
- Walker River
- Lake Mead
- Virgin River

NDOT has completed the initial steps with evaluating impacts of stormwater discharges from its MS4 into TMDL listed waterways. Methods for evaluation were similar to those described previously for evaluating stormwater discharges into 303(d) listed waterways. A summary of these efforts is provided in Table 2. The Stormwater Division's Design Section will use this information to determine where to focus stormwater monitoring efforts and to identify BMPs that would help mitigate the impairment. Expanded stormwater quality monitoring will assist NDOT with continuing evaluating stormwater quality impacts to TMDL waterbodies. It should be noted

that waste load allocations for stormwater discharges have not been issued to NDOT; however, performance related measures have been issued to NDOT associated with the Lake Tahoe TMDL.

A summary of the status of the on-going evaluation will be provided in NDOT's *Annual Report*.

Table 4.2: Summary of Waterbodies with TMDLs for Transportation-Related Pollutants Based on NDEP's 2014 Integrated Report.

Waterbodies with TMDLs for Transportation-Related Pollutants						
TMDL Cause	Total Stream Reaches	Stream Reaches Potentially Receiving Discharge from NDOT MS4	Stream Reaches- Potential WQ Impact by NDOT MS4 (Direct or Indirect)	Total Lakes/Reservoirs	Lakes/Reservoirs Potentially Receiving Discharge from NDOT MS4	Lakes/Reservoirs- Potential WQ Impact by NDOT MS4 (Direct or Indirect)
Sediment Related						
Sulfate	0	--	--	0	--	--
Total Dissolved Solids	7	6	5	1	1	1
Total Suspended Solids	22	18	18	0	--	--
Turbidity	16	12	12	0	--	--
Hydrocarbons						
Oil & Grease	0	--	--	0	--	--
PAHs	0	--	--	0	--	--
TPH	0	--	--	0	--	--
Nutrients						
Nitrite	0	--	--	0	--	--
Nitrate	0	--	--	0	--	--
Nitrogen, Total	3	3	3	0	--	--
Phosphorus, Total	20	19	17	1	0	0
Phosphorus, Ortho	0	--	--	0	--	--
Toxic Materials						
Herbicides	0	--	--	0	--	--
Pesticides	0	--	--	0	--	--
Cadmium	2	1	0	0	--	--
Chromium	0	--	--	0	--	--
Copper	3	2	0	0	--	--
Iron	5	3	2	0	--	--
Lead	0	--	--	0	--	--
Manganese	0	--	--	0	--	--
Nickel	0	--	--	0	--	--
Zinc	0	--	--	0	--	--
Pathogens						
Escherichia coli	0	--	--	0	--	--
Fecal coliform	0	--	--	0	--	--
Other						
Temperature	6	4	0	0	--	--

*Stream reaches and lakes/reservoirs that require additional evaluation have the potential to have a greater than de minimis impact on 303(d) listings.
Note: Some waterbodies may be impaired by more than one cause.

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Section 5 Clear Creek Stormwater Management Program

The Clear Creek watershed is located in Northern Nevada (southwest of Carson City) and is the only area specifically identified in NDOT's MS4 Permit (Part III.D Discharges to the Clear Creek watershed) requiring a separate SWMP.

The Clear Creek watershed is on the eastern front of the Sierra Nevada Carson Range with boundaries that span Spooner Summit (on the west, at the rim of the Lake Tahoe basin) and the Clear Creek confluence with Carson River (east). The Clear Creek watershed has an area of approximately 23 square miles and lies within both the Carson City and Douglas County jurisdictional boundaries with the State of Nevada. In addition to private land holdings, the United States Forest Service (USFS) and the Washoe Tribe of Nevada and California are the two other significant land owners.

All NDOT's stormwater runoff control programs and practices described in the statewide SWMP apply to the Clear Creek watershed as well. One difference, however, is the implementation of an erosion control program specifically for the Clear Creek watershed. Over the past decade, NDOT's Hydraulics Division has been, and will continue to be, tasked with addressing highway related erosion and sedimentation impacts to the Clear Creek watershed as part of NDOT's Clear Creek Erosion Control Program.

5.1 Clear Creek SWMP Elements

The Clear Creek Stormwater Management Program (CCSWMP) consists of the same elements and practices as NDOT's statewide SWMP. Note that Clear Creek has not been identified as a small MS4 Permit Area. Rather NDEP has elected to protect the Clear Creek watershed by including permit requirements in several different State issued MS4 permits (i.e., Carson City, Douglas County and the Indian Hills General Improvement District, and NDOT). Summarized below are NDOT's Clear Creek SWMP elements.

5.1.1 Legal Authority

NDOT's duty to administer the statewide transportation program and stormwater controls is authorized by the Nevada Legislature through the enactment of statutes, specifically the NRS. These same statutes as described in Section 4.1 apply to the Clear Creek watershed as well.

5.1.2 Inventory and Mapping Program

NDOT has completed a full inventory and GIS map of stormwater features and outfalls within the Clear Creek watershed. Additional details related to inventory and mapping can be found in Section 4.2.

5.1.3 Construction Site Best Management Practices (BMPs) Program

NDOT's Construction Site Best Management Practices (BMPs) Program for the Clear Creek watershed consists of the same practices described in Section 4.4

5.1.4 New Development and Redevelopment Planning Program

NDOT's New Development and Redevelopment Planning Program for Clear Creek consists of the same practices described in Section 4.5. However, NDOT currently implements the stand alone Clear Creek Erosion Control Program administered by NDOT's Hydraulics Division. This program addresses the implementation of post-construction (structural/permanent) erosion control measures along, and immediately adjacent to, NDOT's ROW within the Clear Creek watershed.

5.1.5 Industrial Facility Monitoring and Control Program

The Clear Creek Industrial Facility Monitoring and Control program is the same as described in Section 4.6

5.1.6 Illicit Discharge Detection and Elimination Program

NDOT's IDDE Program as described in Section 4.7 is applicable to the Clear Creek watershed as well.

5.1.7 Stormwater Education Program

NDOT's Stormwater Education Program activities for Clear Creek are the same as those described in Section 4.8. NDOT will continue to use social media, its stormwater website and informational outreach efforts to support the CCSWMP.

5.1.8 Maintenance Facility Stormwater Discharge Control Program

NDOT has one Maintenance facility located within the Clear Creek watershed (the Spooner East Maintenance Yard). NDOT's Maintenance Facility Stormwater Discharge Control Program for this facility is consistent with all other NDOT Maintenance facilities as described in Section 4.9.

5.1.9 Public Streets Maintenance Program

NDOT's Public Streets Maintenance Program as described in Section 4.10 is applicable to the Clear Creek watershed as well.

5.1.10 Herbicide, Pesticide, and Fertilizer Application Program

The program for the use and BMPs relating to herbicide, pesticide, and fertilizer application within the Clear Creek watershed are the same as those described in Section 4.11

5.2 Other Clear Creek SWMP Components

Other important CCSWMP components include water quality impairments, monitoring, and future projects planned for the area. These items are briefly highlighted below.

5.2.1 Discharges to Water Quality Impaired Waters/TMDLs

As described in Sub-Section 4.I4, NDOT continues to assess if stormwater discharges from NDOT's MS4 areas contribute directly or indirectly to the listing of a waterway on the State's current 303(d) list, and whether stormwater from NDOT's MS4 areas discharges to a waterbody for which an NDEP approved total TMDL has been developed. The Clear Creek watershed does not contain any waterways listed on the State's current 303(d) list, nor contain any waterways with an NDEP approved TMDL.

5.2.2 Annual Monitoring Program

Specifics pertaining to the Annual Monitoring Program for Clear Creek are described in NDOT's *Annual Stormwater Monitoring Plan*.

5.2.3 Implementation and Schedule for Future Clear Creek Projects

NDOT's Hydraulics Division will continue to monitor, design, and implement erosion control improvement projects at select drainage and outfall locations within the Clear Creek watershed to reduce the impacts of stormwater discharges from NDOT's ROW. NDOT works directly with the Carson River Conservation District to fund and implement many of the erosion control efforts. Erosion control improvements typically include culvert work, riprap channel lining and aprons, slope stabilization, re-grading, sediment removal, applying wood chipped material to disturbed areas, and making general improvements to stormwater conveyances. Clear Creek Erosion Control Program project summaries for projects underway (with updated schedules), or those recently completed are provided in NDOT's *Annual Report*.

Projects and priorities with respect to stormwater and erosion control needs within the Clear Creek watershed change with some regularity. Rather than being listed in this SWMP document, a project listing and implementation schedule for NDOT related Clear Creek projects will be included in NDOT's *Annual Report* to better provide accurate and timely updates.

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Section 6 Record Keeping

Provided in this section is a summary of NDOT's record keeping practices, addressing Part IV.B. of the Permit.

6.1 Maintenance of Records

Rationale: Maintain SWMP records for a period of at least three years from the Permit termination date.

Objective(s):

1) Implement proper procedures to ensure all records related to stormwater monitoring, including all calibration and maintenance records, and all original strip chart recordings for continuous monitoring instrumentation, are retained.
2) Retain all Permit required reports in an accessible location.
3) Maintain a copy of this Permit.
4) Maintain records and all data used to complete the application for this Permit.
5) House the SWMP in a location that is readily available to NDOT employees and the public.

Responsibility: Stormwater Division

NDOT is required to adhere to the record keeping requirements stated in Part IV.B. of the Permit.

The following documents are maintained in accordance with the permit:

- Sampling equipment calibration and maintenance records
- Original strip chart recordings for continuous monitoring instrumentation
- Copies of all reports required by the Permit
- A copy of the Permit
- Records of data used to apply for this Permit

Records will be provided to NDEP upon request, and made available to the public upon written request. A copy of NDOT's SWMP is currently housed on NDOT's Stormwater Program website, which is readily accessible to NDOT employees and the public.

If monitoring projects are administered by the Stormwater Division, then the Stormwater Division is responsible for housing and retaining the appropriate records. If a monitoring project is administered by a partnering agency, then that agency is responsible for housing the appropriate records. NDOT will ensure that those partnering agencies are aware of NDOT's record keeping requirements.

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Part III.U of the Permit states that NDOT must complete an annual review of the SWMP in conjunction with the preparation of the *Annual Report*. Annual reporting requirements are detailed in Permit Part IV.C. New BMPs or revised programmatic elements must be described each year in NDOT's stormwater program *Annual Report* to NDEP.

7.1 Annual Review of the SWMP

Rationale: Evaluate the SWMP for Permit compliance and modify NDOT's SWMP (as appropriate) through an iterative approach of planning, implementation, and program assessment.

Objective(s):

1) Submit the *Annual Report* by the Permit specified deadline (October 1st)
2) Include summaries of SWMP related activies, progress towards meeting measurable goals, and status with Permit comliance.
3) Identify areas of the SWMP in need of modification

Responsibility: Stormwater Division

NDOT's Stormwater Division will perform an annual review of the SWMP. Opportunities for program improvement often become apparent when the components are evaluated separately and/or collectively. Each of the SWMP elements and associated programmatic BMPs will be examined, and progress with respect to the achievement of specified measurable goals will be evaluated.

As per Part IV.C of the Permit, NDOT's *Annual Report* is to include summaries of SWMP related activities performed during the previous state fiscal year (July 1st through June 30th), progress towards meeting measurable goals, and status with Permit compliance. The *Annual Report* is to be submitted to NDEP no later than October 1st annually. *Annual Report* content is to include the following:

- Permit compliance status
- Evaluation of selected BMPs appropriateness
- Progress towards reducing pollutants to the MEP
- Achievement status of measurable goals
- If any, monitoring data review, description of water quality improvements and/or degradation from SWMP activities, and description of attainment of water quality standards from SWMP activities
- NDOT stormwater activities for next reporting cycle
- Modifications to the SWMP
- NDOT's coordination with other MS4s to satisfy Permit requirements
- Expected pollutant load reduction resulting from the SWMP

- Inspection and enforcement summary
- Summary of public outreach and education activities
- Annual expenditures for major SWMP elements for the reporting period, and the budget for the following reporting period.

Summarized in Table 7.1 are the Permit requirements related to the required *Annual Report* content.

Table 7.1: Annual Report Requirements Specified in the Permit

Permit Section	Subject	Reporting Requirement
II.B.2.e	TMDL and the WLA	Document all control measures that are currently being implemented or planned to be implemented and are consistent with the WLA. These measures shall be reported in the Annual Report.
II.B.2.f	TMDL and WLA	Estimate reductions of pollutants through established and accepted BMP performance studies (such as referenced in the Truckee Meadows Structural Controls Design Manual, Appendix A), calculations, models or other evidence that shows that the WLA will be addressed through the implementation of the approved SWMP, and shall be reported in the Annual Report.
II.B.3	303(d) Listed waterbodies	NDOT must determine whether the MS4 discharges to a water on the current State of Nevada 303(d) List of Impaired Waters. If a waterbody is listed, NDOT shall include a section in the Annual Report describing the conditions(s) for which the water(s) was listed, evaluating possible BMPs that might practicably be implemented, examining whether these BMPs would make a substantial improvement on water quality, and identifying any BMPs that are selected for implementation.
III.F.5	NDOT Staff Stormwater Training	NDOT shall provide specific stormwater training to educate personnel who are directly involved in activities that may impact stormwater quality or that may generate or manage non-stormwater discharges. For each topic, the number of trainings offered, the number of employees trained, and other appropriate measurable goals shall be presented in the Annual Report.
III.F.5.m	Public Complaints or Reports of Spills	NDOT shall record and report the number of reports received from the public and investigated in the Annual Report.
III.F.5.p	Adopt-A-Highway Program	NDOT shall report the number of volunteer groups participating in the Adopt-A-Highway program, number of miles cleaned, and the amount of trash collected in the Annual Report.
III.H.5	Final Stabilization of Construction Projects	NDOT shall include a list of all construction projects in the Annual Report, including the name of the project and its associated NDEP construction stormwater permit number(s) (e.g. CSW-xxxx), that have achieved final stabilization and that NDOT considers to be complete.
III.H.6	Contractor Enforcement Actions	NDOT shall provide in the Annual Report, a list and description of all violations and their resolution, including any enforcement actions taken against its contractors.
III.I.7	Program Summary of all Post-Construction	NDOT shall inventory, inspect, and maintain all post-construction stormwater pollution control BMPs. A program summary shall be included in the Annual Report.
III.L.2.f.v	Records of Spills to the Storm Sewer	NDOT shall maintain records of spills to the storm sewer system or receiving waters and include the records in the Annual Report.
III.M.4	Inspection Reports of Compliance or Non-Compliance	(Inspection reports shall identify any incidents of non-compliance with the permit conditions.) The report shall be signed and certified in accordance with Part V.G (Signatory Requirements) of this permit and copies included in the SWPPP and the Annual Report.
III.N.14	NDOT's List of Industrial Facilities	NDOT shall develop or update its list of industrial facilities and maintenance yards subject to stormwater permitting requirements within their control. The list shall be included in the Annual Report.
III.O.1.e	Documentation of Sweeper Wastes	Sweeper wastes shall be disposed of properly. Recycling of sweeper wastes shall be considered. The amount of sweeper waste accumulated, recycled and/or disposed of shall be documented and included in the Annual Report.

Table 7.1: Annual Report Requirements Specified in the Permit (continued)

Permit Section	Subject	Reporting Requirement
III.O.1.f III.O.1.g	Magnesium chloride practices	If magnesium chloride is used for snow management, application practices shall be used to minimize any negative effects to waters of the U.S. to the MEP. Results of any studies on magnesium chloride shall be considered when relevant. A narrative summary of the program will be included in the Annual Report.
III.P.1.a.iv	Erosion abatement projects on road segments with slopes (3:1 or greater) that are prone to erosion and discharge of sediment	NDOT shall develop a system to identify, track, and prioritize timely stabilization and repairs to road segments where slopes are 3:1 or greater and actively eroding and sediment is leaving NDOT's ROW or discharging to a water of the U.S. This system shall be described in the revised SWMP, and each Annual Report thereafter shall summarize erosion abatement projects conducted during the year. NDOT shall identify road segments with slopes that are prone to erosion and discharge of sediment and stabilize these slopes to the MEP.
III.P.1.b.i.7	Documentation of volume of abrasives and deicing agents	Volume of abrasives and deicing agents used on individual highway segments shall be documented in the Annual Report.
III.P.1.c.i	Removal of debris and sediment from drain inlets	NDOT shall remove all debris and sediment from those inlets that pose a significant threat to water quality on an annual basis prior to the winter season each year. All debris and sediment removed from drain inlets shall be managed in accordance with all applicable laws and regulations. The amount of material removed shall be documented and included in the Annual Report.
III.Q.1.b.i III.Q.1.b.ii	Inspect and record conditions of NDOT's storm sewer system	The revised SWMP shall outline a program, including measurable goals, to inspect and record conditions of its storm sewer system including roadways used for stormwater conveyance, catch basins, storm drain inlets, open channels, washes, culverts, and retention/detention basins to identify potential sources of pollutants and determine maintenance needs; and NDOT shall maintain records of inspections and conditions found and shall present the number of inspections in each Annual Report.
III.Q.1.E.iii	Disposal of waste removed from NDOT's storm sewer system and facilities	NDOT shall properly dispose of waste removed from its storm sewer system and NDOT facilities, including dredge spoil, accumulated sediments, and floatable or other debris. The amount removed and disposed of shall be documented and included in the Annual Report.
III.R.1.a.v III.R.1.a.vi	Certification/ licensing of staff and commercial pesticide applicators	NDOT shall continue to require certification/licensing of staff and commercial applicators that apply pesticides at NDOT facilities, public areas, and right-of ways. A narrative summary of the program will be included in the Annual Report.
III.R.1.b.i.4	Vegetation control management plans	In places where NDOT has already developed vegetation control management plans, NDOT shall continue to implement these plans and integrate them into their overall statewide plan. In instances where elements of these plans are to be changed or dropped, NDOT shall discuss any changes in the Annual Report.
III.S.3.d.i.9	SWPPP compliance	A summary of compliance with the SWPPPs shall be submitted by each plan administrator to the NDOT's Carson City Office by September 1 of each year. Summaries of the separate SWPPPs shall be included in the Annual Report.
III.S.3.i	SWPPP compliance and amendments	SWPPPs may be amended at any time and any amendments shall be described in the Annual Report.
III.U.1	Annual review of SWMP	NDOT must complete an annual review of the SWMP in conjunction with preparation of the Annual Report required under Part IV.C of this permit.

Table 7.1: Annual Report Requirements Specified in the Permit (continued)

Permit Section	Subject	Reporting Requirement
III.V.1	Annual review of Guidance Documents	NDOT shall annually review its 2006 Planning and Design Guide Manual and its 2006 Construction Site BMP Manual and update as needed. Erosion and sediment control BMP detail drawings shall also be updated as needed. NDOT shall describe all updates to these manuals in the Annual Report.
IV.A.5	Reporting stormwater monitoring results	If NDOT performs stormwater monitoring more frequently than required by the stormwater monitoring plan the results of such monitoring shall be reported. The monitoring results and analyses shall be submitted as part of the Annual Report.
IV.G.1 IV.G.2	Implementation of SWMP on areas added to NDOT's portion of the MS4	NDOT must implement the SWMP on all new areas added to NDOT's portion of the MS4 (or for which NDOT become responsible for implementation of stormwater quality controls) no later than one (1) year from addition of the new areas; and Information on all new annexed areas and any resulting updates required to the SWMP must be included in the Annual Report.
V.F.1	Submission of any relevant fact in NDOT's SWMP	If NDOT becomes aware that it has failed to submit any relevant facts in its revised SWMP, Annual Report or in any other report to NDEP, NDOT must promptly submit such facts or information to NDEP.

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8.1 Implementation Schedule

Part III.A.6 of the Permit requires NDOT to provide a "list of narrative and/or numerical measurable goals" for each program element listed in in Part III.A.4 of the Permit (see Section 4 of this document for a discussion of program elements). Additionally, the Permit requires that time frames be provided in which NDOT will achieve each measurable goal.

Summarized in Table 8-1 are the BMPs associated with the various program elements, the document section, BMP title, and the established measurable goal, with an "X" in the fiscal year that this goal was scheduled for attainment. Progress with achieving measurable goals is provided in the appropriate *Annual Report*.

Table 8.1: Implementation Schedule for Measurable Goals

SWMP Section	BMP Title	Measurable Goal	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Construction Site BMP Program	*Construction Site Inspections*	Regularly inspect all construction sites within the MS4 Permit area	X	X	X	X	X
		Revise NDOT's Weekly Construction Site Discharge Inspection Checklist		X			
Construction Site BMP Program	*Construction Site SWPPPS*	Verify General Permit coverage and SWPPP development and implementation (as appropriate)	X	X	X	X	X
		Upon project completion, ensure the NOT and NOC is filed (as appropriate)	X	X	X	X	X
Construction Site BMP Program	*NV Contractors Field Guide for Construction Site BMPs*	Provide access to current version of the document on NDOT's website		X	X	X	X
		Assist with future document revisions as necessary	This is not an NDOT document, therefore the time frame for revisions is unknown at this time				
Construction Site BMP Program	*NDOT's Construction Site BMPs Manual*	Review the current BMPs Manual, identifying material requiring revision and new material for inclusion		X			
		Develop a revised document and disseminate for use on construction projects within the MS4 Permit area			X		
		Develop and implement a protocol for conducting annual reviews and incorporating subsequent changes (as needed)				X	
New Development and Re-Development Planning Program	*Planning and Design Guide*	Review the current PDG, identifying material requiring revision and appropriate new material for inclusion (including LID practices)		X			
		Develop a revised document and disseminate for use on new projects within the MS4 Permit area			X		
		Develop and implement a protocol for conducting annual reviews and incorporating subsequent changes (as needed)				X	
New Development and Re-Development Planning Program	*Plan Review Process*	Review project plans to ensure that stormwater runoff from new and re-development projects is adequately addressed and treated to the MEP	X	X	X	X	X

Table 8.1 Implementation Schedule for Measurable Goals (continued)

SWMP Section	*BMP Title*	Measurable Goal	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Legal Authority	*Legal Authority and Enforcement*	Exercise current legal authority to enforce the provisions of NDOT's MS4 permit	X	X	X	X	X
		Provide written notice to NDEP of any proposal to modify the regulation or ordinances for stormwater discharges into the MS4	X	X	X	X	X
NDOT Organization & Responsibility	*Departmental Stormwater Coordination*	Continue to facilitate, develop, and promote inner Department and inter-agency relationships	X	X	X	X	X
Annual Report	*Annual Review of the SWMP*	Assess the overall effectiveness of the Department's SWMP by conducting an annual evaluation of the individual and collective programs	X	X	X	X	X
		Prepare an Annual Report summarizing SWMP related activities for the previous state fiscal year for submittal to NDEP by October 1st annually	X	X	X	X	X
		Incorporate and implement NDEP approved changes to the SWMP	X	X	X	X	X
Water Quality Impaired Waters	*Impaired Waters*	Identify locations where NDOT roads and ROWs intersect or parallel water bodies that are on the 2008-2010 303(d) list within the Northwest and Central Hydrographic Regions	X				
		Determine if the impaired constituents are commonly found in stormwater discharge from NDOT's MS4	X				
		Identify locations where NDOT roads and ROWs intersect or parallel water bodies that are on the 2008-2010 303(d) list within the Truckee River, Tahoe basin, and Steamboat Creek Hydrographic Regions		X			
		Determine if the impaired constituents are commonly found in stormwater discharge from NDOT's MS4		X			
		Identify locations where NDOT roads and ROWs intersect or parallel water bodies that are on the 2008-2010 303(d) list within the Carson River Basin and Walker River Basin Hydrographic Regions			X		
		Determine if the impaired constituents are commonly found in stormwater discharge from NDOT's MS4			X		

Table 8.1 Implementation Schedule for Measurable Goals (continued)

SWMP Section	*BMP Title*	Measurable Goal	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
		Identify locations where NDOT roads and ROWs intersect or parallel water bodies that are on the 2008-2010 303(d) list within the Snake River Basin and Humboldt River Basin Hydrographic Regions				X	
		Determine if the impaired constituents are commonly found in stormwater discharge from NDOT's MS4				X	
		Identify locations where NDOT roads and ROWs intersect or parallel water bodies that are on the 2008-2010 303(d) list within the Blackrock and Colorado River Hydrographic Regions					X
		Determine if the impaired constituents are commonly found in stormwater discharge from NDOT's MS4					X
		Initiate a process to identify BMPs for implementation as appropriate		X	X	X	X
Water Quality Impaired Waters	*TMDL Listed Waters*	Identify locations where NDOT owned roadways and ROWS intersect or parallel waterbodies that have NDEP approved TMDLs	X	X	X	X	X
		Determine if the TMDL constituents are commonly found in stormwater discharge from NDOT's MS4		X	X	X	X
		Initiate a process to identify BMPs for implementation as appropriate		X	X	X	X
Lake Tahoe TMDL Program	*Lake Tahoe TMDL Memorandum of Agreement*	Enter into the MOA within one year of TMDL approval	X	X			
		Upon entering into the MOA, begin developing a plan to accomplish NDOT's responsibilities for TMDL compliance	X	X			
MS4 Maps & Outfalls	*Mapping and Inventory of Structural BMPs and Major Outfalls*	Continue mapping and stormwater infrastructure inventory efforts	X	X	X	X	X
		Develop criteria to be mapped and inventoried	X				
		Develop a multi-year implementation plan for the mapping and inventory of stormwater infrastructure and outfalls.		X			
Discharges to Sanitary Sewer Systems	*Discharges into Sanitary Sewer Systems*	Contact District personnel annually to identify instances of stormwater disposal into the sanitary sewer system	X	X	X	X	X
		In the event a new connection is found, immediately solicit an approval letter from the appropriate wastewater utility	X	X	X	X	X

Table 8.1 Implementation Schedule for Measurable Goals (continued)

SWMP Section	*BMP Title*	Measurable Goal	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Industrial Facility Monitoring & Control Program	*Industrial Facility Monitoring and Control Program*	Perform annual review of NDOT owned facilities and determine if any are considered industrial facilities based on Permit criteria for industrial categories	X	X	X	X	X
		Should an NDOT facility be classified as industrial, develop an Industrial Facility Monitoring and Control Program	X	X	X	X	X
New Development and Re-Development Planning Program	*Low Impact Development (LID) Techniques*	Begin developing a preliminary list of potential LID techniques suitable for use along NDOT's highway environments	X	X	X	X	X
		From the list, identify the most viable LID techniques for use on highway projects in Nevada	X	X	X	X	X
		Incorporate the viable LID practices into future projects as appropriate	X	X	X	X	X
Stormwater Education Program	*Public Outreach and Education Events*	Participate in at least one public stormwater related outreach and education event annually	X	X	X	X	X
		Assess the need to further develop or build upon public outreach and education efforts	X	X	X	X	X
Stormwater Education Program	*Public Litter Removal Programs*	Continue the Adopt-A-Highway and Sponsor-A-Highway programs	X	X	X	X	X
Stormwater Education Program	*Partnerships and Affiliations*	Continue partnering efforts and affiliations	X	X	X	X	X
		Seek opportunities for new partnerships and affiliations	X	X	X	X	X
Stormwater Monitoring Program	*Demonstration Projects*	Continue evaluating new technologies and practices for improving stormwater runoff quality	X	X	X	X	X
		Explore options to disseminate information and/or knowledge gained to the public from stormwater related projects		X	X	X	X
		Begin disseminating this information			X	X	X
Stormwater Education Program	*Stormwater Management Program Webpage*	Maintain and provide current information on SWMP webpage	X	X	X	X	X
		Provide webpage links to relevant NDOT SWMP documents			X	X	X
		Evaluate the need for webpage improvements annually	X	X	X	X	X

Table 8.1 Implementation Schedule for Measurable Goals (continued)

SWMP Section	*BMP Title*	Measurable Goal	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Stormwater Monitoring Program	*Stormwater Monitoring Plan*	Submit a stormwater monitoring plan to NDEP by October 1st annually	X	X	X	X	X
		Evaluate the data collected to assist with stormwater related decision making	X	X	X	X	X
		Conduct a yearly assessment of the adequacy of the stormwater monitoring program	X	X	X	X	X
Record Keeping	*Record Keeping*	Develop a procedure to collect and retain stormwater monitoring related records	X				
		Implement the record keeping plan		X	X	X	X
Herbicide, Pesticide & Fertilizer Application Program	*Fertilizer Application*	Collect and assess fertilizer use data for a two-year period		X	X		
		Evaluate the need for a fertilizer applicator training program				X	
Herbicide, Pesticide & Fertilizer Application Program	*Vegetative Control Program*	Conduct internal project review meetings to facilitate ongoing collaboration between appropriate Divisions and Sections	X	X	X	X	X
		Assess current vegetation control practices; provide recommendations for improvement as necessary	X	X	X	X	X
Illicit Discharge Detection & Elimination Program	*Illicit Discharge Reporting Website*	Maintain web-based IDDE reporting hotline on an annual basis	X	X	X	X	X
		Assess the need for additional IDDE reporting telephone numbers on an annual basis	X	X	X	X	X
Illicit Discharge Detection & Elimination Program	*Illicit Discharge Reporting and Response Database*	Update the Database to record and track illicit discharges reported in the MS4 Permit areas	X	X	X	X	X
		Maintain the database annually	X	X	X	X	X
Illicit Discharge Detection & Elimination Program	*Special Investigations*	Conduct special investigations as needed to evaluate and resolve potential water quality related issues that may or may not be directly related to illicit discharges in the MS4 Permit area	X	X	X	X	X
Illicit Discharge Detection &	*Spill Control and Prevention*	Assess the need for program refinements on an annual basis	X	X	X	X	X

Table 8.1 Implementation Schedule for Measurable Goals (continued)

SWMP Section	*BMP Title*	Measurable Goal	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Elimination Program							
Illicit Discharge Detection & Elimination Program	*IDDE Response, Corrective Action and Response*	Respond to all reported discharges and spills within the MS4 Permit area	X	X	X	X	X
		Follow-up on reported events to ensure the situation is remedied	X	X	X	X	X
Illicit Discharge Detection & Elimination Program	*Sanitary Sewer Exfiltration*	Continue training and inspections for sanitary sewer exfiltration	X	X	X	X	X
		Continue to identify sanitary sewers during the plan review process	X	X	X	X	X
Maintenance Facility Stormwater Discharge Control Program	*Hazardous Materials Management*	Continue the implementation of the NDOT's existing Hazardous Waste Management Program	X	X	X	X	X
		Identify any deficiencies in the existing program with respect to the requirements outlined in the Permit		X	X	X	X
		Develop BMPs as needed to address any deficiencies in the program			X	X	X
Public Streets Maintenance Program	*Snow and Ice Control Program*	Continue implementing the NDOT's current Snow and Ice Control Program	X	X	X	X	X
		Collect and analyze composite samples of sand and salt as specified in the Permit	X	X	X	X	X
		Identify any deficiencies in the existing program with respect to the requirements outline in the Permit		X	X	X	X
		Develop BMPs as needed to address any deficiencies in the program			X	X	X
Public Streets Maintenance Program	*Street Sweeping Program*	Continue implementing the NDOT's Street Sweeping Program	X	X	X	X	X
		Continue sweeping urban streets at least twice a year (once in the spring and the fall)	X	X	X	X	X
		Continue sweeping sanded streets as soon as practicable after application, but no later than 4 days after the last snowfall.	X	X	X	X	X
		Assess the idea of recycling sweeper waste	X	X	X		

Table 8.1 Implementation Schedule for Measurable Goals (continued)

SWMP Section	*BMP Title*	Measurable Goal	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Public Streets Maintenance Program / IDDE	*Outfall Screening and Investigations*	Continue inspecting major outfalls within the MS4 Permit area	X	X	X	X	X
		Identify, track, and prioritize the stabilization and repairs to road segments where slopes are 3:1 or greater	X	X	X	X	X
		Develop schedules and a tracking system for the inspection and screening of major outfalls	X	X	X	X	X
		Report any evidence of illicit discharges	X	X	X	X	X
Public Streets Maintenance Program	*Inspection and Maintenance of Structural BMPs*	Continue inspecting and maintaining post-construction BMPs, storm sewer facilities, and highway slopes as part of NDOT's routine activities	X	X	X	X	X
		Determine post-construction BMP criteria and features to be mapped and inventoried		X			
		Develop an inventory listing of post-construction BMPs	X	X	X	X	X
Maintenance Facility Stormwater Discharge Control Program	*Maintenance Facility FPPPs*	Develop FPPPs for the NDOT's Major Maintenance Facilities	X	X			
		Develop FPPPs for the NDOT's designated Minor Maintenance Facilities		X			
		Develop FPPPs, or incorporate into existing Minor Facility FPPPs (as appropriate), new Department Maintenance facilities within 6 months of being designated a Major or Minor Facility	X	X	X	X	X

Table 8.1 Implementation Schedule for Measurable Goals (continued)

SWMP Section	*BMP Title*	Measurable Goal	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Maintenance Facility Stormwater Discharge Control Program	*Maintenance Facility Inspections*	Perform annual inspections at designated Major and Minor Facilities. Modify or add BMPs as necessary within 30 calendar days of the inspection	X	X	X	X	X
		Perform routine inspections at designated Major and Minor Facilities according to frequencies specified in the FPPPs. Modify or add BMPs as necessary within 30 calendar days of the inspection		X	X	X	X
		Maintain BMPs listed in the FPPP in effective operating condition. Perform maintenance eon ineffective BMPs within 7 calendar days of discovery and before the next anticipated storm event	X	X	X	X	X
		Review Maintenance Facility Inspection forms annually and revise as necessary	X	X	X	X	X
Maintenance Facility Stormwater Discharge Control Program	*Maintenance Facility BMP Manual*	Develop a Maintenance Facility-specific BMP manual and disseminate for use		X	X		
		Develop and implement a protocol for conducting annual reviews and incorporating subsequent changes (as needed)				X	X
Maintenance Facility Stormwater Discharge Control Program	*Maintenance Facility Updates*	Request an updated list of Maintenance facilities from the Asset Management and Maintenance Division, including information pertaining to facility operational changes, on an annual basis		X	X	X	X
		Apply the appropriate modifications to FPPP designations		X	X	X	X
		Modify, create, or annul Minor and Major FPPPs as appropriate		X	X	X	X

Table 8.1 Implementation Schedule for Measurable Goals (continued)

SWMP Section	*BMP Title*	Measurable Goal	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Stormwater Education Program	*Stormwater Certification Training-Internal*	Continue implementing the NDOT's Stormwater Certification Training Program	X	X	X	X	X
		Develop a Construction-specific stormwater training module			X	X	
		Develop a Maintenance-specific stormwater training module			X	X	
		Develop a Design-specific stormwater training module			X	X	
		Develop a Stormwater Certification Training 3-year refresher course			X	X	
		Ensure stormwater education material is current and relevant	X	X	X	X	X
Stormwater Education Program	*Contractor Stormwater Education and training-External*	Continue with contractor partnering efforts with regards to construction sit stormwater management	X	X	X	X	X
		Continue support of third party contractor stormwater education and training sessions as a means of meeting the Department's contractor stormwater education requirements	X	X	X	X	X
		Develop a stormwater training/outreach program for NDOT's contractors		X	X		
Herbicide, Pesticide and Fertilizer Application Program	*NDOT Herbicide Applicator Training*	Ensure NDOT staff and service providers are properly certified for herbicide applications	X	X	X	X	X
		Continue to track and monitor the certification status of Department applicators	X	X	X	X	X

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APPENDICES

A –MS4 Permit

B – Sanitary Sewer Discharge Authorizations

C – Lake Tahoe TMDL Interlocal Agreement

D – Stormwater Division Organizational Chart

Permit NV0023329

National Pollutant Discharge Elimination System

Permit for Discharges from Nevada Department of Transportation

Municipal Separate Storm Sewer Systems

Authorization to Discharge under the National Pollutant Discharge Elimination System in compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq.), except as provided in Part I.C of this permit, and Chapter 445A of the Nevada Revised Statutes, the Nevada Department of Transportation is authorized to discharge municipal stormwater runoff to waters of the United States in accordance with the conditions and requirements set forth herein:

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

This permit shall become effective on July 7, 2010, and the authorization to discharge shall expire at midnight July 6, 2015.

Signed this 7th day of July, 2010.

Steve McGoff, P.E.
Staff Engineer III
Bureau of Water Pollution Control

Part I. Permit Coverage and Authorized Discharges under this Permit

I.A. Permit Area

I.A.1. This permit covers state and interstate highways and their right-of-ways within the jurisdictional boundary of the Nevada Department of Transportation ("NDOT" or "Permittee") served by, or otherwise contributing to discharges into receiving waters of the United States from municipal separate storm sewer systems ("MS4s") owned or operated by NDOT.

I.B. Authorized Discharges

I.B.1. This permit authorizes new or existing discharges composed entirely of stormwater (and allowable non-stormwater discharges) into NDOT's MS4 (excluding Indian Lands), as defined in 40 Code of Federal Regulations ("CFR") §122.26. NDOT is authorized to discharge in accordance with its approved Stormwater Management Program ("SWMP"), and other terms and conditions of this permit.

I.B.2. The following are authorized discharges:

I.B.2.a **Stormwater discharges.** This permit authorizes stormwater discharges to waters of the United States from NDOT's MS4 identified in Part I.B.2.b, except discharges excluded in Part I.C.

I.B.2.b **Non-stormwater discharges.** NDOT is authorized to discharge the following non-stormwater sources provided that the Nevada Division of Environmental Protection ("NDEP") has not determined these sources to be substantial contributors of pollutants to NDOT's MS4:

I.B.2.b.i Potable water line flushing during testing or fire hydrant testing;
I.B.2.b.ii Diverted stream flows not requiring a separate permit;
I.B.2.b.iii Springs or rising ground waters;
I.B.2.b.iv Uncontaminated groundwater infiltration (infiltration is defined as water other than wastewater that enters a storm sewer system, including sewer service connections and foundation drains, from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.);
I.B.2.b.v Discharges from potable water sources not requiring a separate permit;
I.B.2.b.vi Residential foundation and/or footing drains;
I.B.2.b.vii Air conditioning condensate;
I.B.2.b.viii Irrigation water from lawns and landscaping;
I.B.2.b.ix Water from residential crawl space pumps;
I.B.2.b.x Flows from natural riparian habitats and wetlands not requiring a separate permit;

I.B.2.b.xi De-chlorinated swimming pool discharges;
I.B.2.b.xii Individual residential car washing;
I.B.2.b.xiii Water incidental to street sweeping (including associated side walks and medians) and that is not associated with construction activities;
I.B.2.b.xiv Discharges or flows from fire fighting activities; and
I.B.2.b.xv Dewatering activities not requiring a separate permit.

I.C. Non-Authorized Discharges

I.C.1. This permit does not authorize the following:

I.C.1.a Discharges of non-stormwater, whether or not mixed with stormwater, unless such non-stormwater discharges are:

I.C.1.a.i Currently covered under a separate National Pollution Discharge Elimination System ("NPDES") permit, or

I.C.1.a.ii Included in Part I.B. 2 of this permit, or

I.C.1.a.iii Determined not to be a substantial contributor of pollutants to waters of the U.S. by NDEP.

I.C.1.b Stormwater discharges currently covered under a separate NPDES permit.

I.C.1.c Discharges that do not comply with the Nevada's anti-degradation policy for water quality standards.

I.C.2. Stormwater discharges associated with industrial activity as defined in 40 CFR§122.26(b)(14)(i)-(ix) and (xi) are identified and permitted through a separate NPDES General Industrial Activity permit. These discharges are authorized under NDEP's General Permit NVR050000.

I.C.3. Stormwater discharges associated with construction activity as defined in 40 CFR§122.26(b)(14)(x) or 40 CFR§122.26(b)(15) are identified and permitted through a separate NPDES General Construction Activity permit. These discharges are authorized under NDEP's General Permit NVR100000.

I.C.4. If it is determined that NDOT's discharges cause or contribute to an instream exceedance of water quality standards, NDEP may require corrective action or an application for a separate individual permit or alternative.

I.C.5. NDOT shall comply with all applicable Federal, State, or local laws, regulations, or ordinances.

Part II. Discharges to Water Quality Impaired Waters

II.A. Impaired Waters Listing on 303(d) List

II.A.1. NDOT must evaluate whether stormwater discharges from any part of the MS4 contributes directly or indirectly to the listing of a waterbody on the most current 303(d) list (i.e. impaired waterbody). Information concerning the most current 303(d) list can be found on NDEP's website. If NDOT has discharges meeting this criterion, or if there is a Total Maximum Daily Load ("TMDL") on receiving waters, NDOT must comply with Part II.B. Part II does not apply if NDOT does not have discharges meeting this criterion.

II.B. Total Maximum Daily Load

II.B.1. NDOT must determine whether the MS4 discharges to a waterbody for which a TMDL has been developed and approved by NDEP. If there is a TMDL, NDOT must comply with Part II.B.2. If there is no TMDL, NDOT must comply with Part II.B.3.

II.B.2. If a TMDL is approved for any waterbody into which NDOT discharges, NDOT shall:

II.B.2.a Determine and report whether the approved TMDL is for a pollutant likely to be found in stormwater discharges from NDOT's MS4;

II.B.2.b Determine and report whether the TMDL includes a pollutant wasteload allocation ("WLA") or other performance requirements specifically for stormwater discharge from NDOT's MS4;

II.B.2.c Determine and report whether the TMDL addresses a flow regime likely to occur during periods of stormwater discharge;

II.B.2.d Assess whether the WLAs are being met through implementation of existing stormwater control measures or if additional control measures are necessary;

II.B.2.e Document all control measures that are currently being implemented or planned to be implemented and are consistent with the WLA. These measures shall be reported in the Annual Report. A schedule of implementation for all planned controls shall be included in the revised SWMP as described in Part III of this permit.

II.B.2.f Estimate reductions of pollutants through established and accepted BMP performance studies (such as referenced in the Truckee Meadows Structural Controls Design Manual, Appendix A), calculations, models or other evidence that shows that the WLA will be addressed through the implementation of the approved SWMP, and shall be reported in the Annual Report;

II.B.2.g The monitoring program required by Section IV.A of this permit shall be customized to determine whether the stormwater controls are adequate to meet the WLA to the Maximum Extent Practicable ("MEP"); and,

II.B.2.h If no WLA currently exists, but is developed during the term of this permit, then NDOT's BMPs outlined in the approved, updated SWMP are expected to be sufficient for the duration of the existing permit period; and

II.B.2.i The need for an iterative approach to control pollutants in stormwater discharges is recognized. If NDOT determines that additional or modified controls are necessary, the SWMP will be updated pursuant to Part III.U.2 of this permit and will describe the type and schedule for the control additions and/or revisions, and an analysis that demonstrates the overall effectiveness.

II.B.3. NDOT must determine whether the MS4 discharges to a water on the current State of Nevada 303(d) List of Impaired Waters. If a waterbody is listed, NDOT shall include a section in the Annual Report describing the conditions(s) for which the water(s) was listed, evaluating possible BMPs that might practicably be implemented, examining whether these BMPs would make a substantial improvement on water quality, and identifying any BMPs that are selected for implementation.

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

II.C.1. The Lake Tahoe TMDL, scheduled to be adopted by EPA in 2011, identifies urban stormwater as the primary source of fine sediment particles and phosphorous that impairs the clarity of Lake Tahoe. The TMDL Implementation Plan identifies NDOT as a responsible party that will be required to implement controls to reduce fine sediment particle and nutrient loads consistent with specified TMDL WLAs for stormwater.

II.C.2. Within one year of NDEP's approval of the Lake Tahoe TMDL, NDOT shall enter into a Memorandum of Agreement ("MOA") with NDEP for the implementation of the Lake Tahoe TMDL. The MOA shall establish programmatic activities and responsibilities to which NDOT shall commit for implementation of the TMDL. Anticipated elements for inclusion in the MOA include, but are not limited to: a method for calculating and establishing baseline WLAs for stormwater; pollutant load reduction milestone schedule based on TMDL allocations; a Stormwater Load Reduction Plan that describes the strategies and actions that will be implemented to achieve TMDL pollutant reduction milestones; and participation in the Lake Clarity Crediting Program and Regional Stormwater Monitoring Program.

II.C.3. Part II.C of this permit may be reopened for modification by NDEP in order to

incorporate WLAs for stormwater or to amend provisions requiring consistency with changes to the Lake Tahoe TMDL or the MOA.

Part III. Stormwater Management Program

III.A. SWMP Revision

III.A.1. NDOT shall review its existing SWMP to determine whether its current programs need revising to meet the requirements of this permit. NDOT shall implement and enforce its revised SWMP to reduce the discharge of pollutants from NDOT's MS4 to the maximum extent practicable ("MEP") to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act ("CWA").

III.A.2. NDOT shall review, revise as necessary and submit an updated SWMP to NDEP for its review and approval within eighteen (18) months of the effective date of this permit and shall implement the revised SWMP no later than two (2) years after receiving NDEP's approval;

III.A.2.a Before the updated SWMP is submitted to NDEP for its review, it shall be made available for public comment at a meeting noticed in accordance with the Nevada open meeting law;

III.A.2.b The Permittees shall compile any comments received as part of the process in III.A.2, describe the actions taken concerning the public comments and include this information in the revised SWMP;

III.A.3. Within thirty (30) days after the revised SWMP has been approved by NDEP, NDOT shall make the revised SWMP available to the public on its Web page or at another public location (i.e. NDOT office(s)).

III.A.4. The revised SWMP shall include, at a minimum, information about the following programs:

III.A.4.a NDOT's Legal Authority;

III.A.4.b NDOT's Stormwater Education Program;

III.A.4.c NDOT's MS4 Maps and Outfalls;

III.A.4.d Discharges to Water Quality Impaired Waters and Sanitary Sewers;

III.A.4.e Construction Site Best Management Practices ("BMPs") Program;

III.A.4.f New Development and Redevelopment Planning Program;

III.A.4.g NDOT's Illicit Discharge Detection and Elimination ("IDDE") Program;

III.A.4.h Industrial Facility Monitoring and Control;

III.A.4.i Stormwater Discharges from NDOT Maintenance Facilities;

III.A.4.j Public Street Maintenance Program; and

III.A.4.k Herbicide, Pesticide and Fertilizer Application Program.

III.A.5. NDOT shall fully implement all program elements outlined in the revised SWMP before the expiration date of this permit, unless other dates are specified;

III.A.6. NDOT shall provide a list of narrative and/or numerical measurable goals for each program listed in Part III.A.4. At a minimum, the revised SWMP shall include any measurable goals indentified in this permit. NDOT may also identify additional measurable goals, as appropriate, priorities, frequencies, amounts, time-frames, or steps toward development of a program;

III.A.7. NDOT shall provide the dates, including the month and year in which NDOT will achieve each measurable goal;

III.A.8. NDOT shall provide the rationale for how and why NDOT selected each of the program elements and any measurable goals associated with the program;

III.A.9. NDOT shall provide the title(s) of the person(s) responsible for implementing and coordinating each program element;

III.A.10. NDOT shall describe any proposed programs, if applicable, that it may implement during the life of this permit to require additional controls on a system wide basis, a watershed basis, a jurisdictional basis, or on individual outfalls;

III.A.11. NDOT may partner with other permitted MS4s to develop and implement all or part of NDOT's SWMP.

III.A.12. NDOT's SWMP shall clearly describe which Permittee is responsible for implementing each of the control measures; and

III.A.13. Pending submittal of the SWMP, NDOT shall continue to implement and maintain current BMPs detailed in NDOT's current SWMP.

III.B. Legal Authority

III.B.1. The revised SWMP shall describe NDOT's' legal authority that has been established by statute, regulation, or contract documents which authorizes or enables NDOT to:

III.B.1.a Prohibit illicit discharges to the MS4;

III.B.1.b Control discharges to NDOT's MS4 from spills, dumping or disposal of materials other than stormwater;

III.B.1.c Require compliance with conditions in regulation, ordinances, permits, contracts or orders; and

III.B.1.d Carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with the prohibition of illicit discharges to the MS4s.

III.B.2. NDOT shall provide written notice to NDEP of any formal proposal to modify the regulation or ordinances regulating stormwater discharges into the MS4. Before any regulation or ordinance is modified, NDEP shall at least thirty (30) days to review and comment on the proposed modification.

III.C. MS4 Maps and Outfalls

III.C.1. The revised SWMP shall include, at a minimum, maps of NDOT's MS4 for different sections of Nevada, including the location of any major outfall that discharges to waters of the United States. An outfall is defined in Part VI of this permit.

III.D. Discharges to the Clear Creek Watershed

III.D.1. NDOT shall include a separate Clear Creek Master Stormwater Management Program ("CCSWMP") in its revised SWMP. The CCSWMP shall be implemented and enforced to reduce the discharge of pollutants to the Clear Creek watershed to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the CWA. The revised CCSWMP shall include the following information:

III.D.1.a A detailed description of BMPs that have been, or will be, implemented on NDOT construction projects located in the Clear Creek watershed;

III.D.1.b A detailed description of sediment controls for all down-slope boundaries (and for those side-slope boundaries deemed appropriate as dictated by individual site conditions) that have been, or will be, used by NDOT on NDOT construction areas located in the Clear Creek watershed;

III.D.1.c A detailed description of control techniques that have been or will be used

by NDOT to the MEP to ensure no illicit discharge of pollutants into Clear Creek;

III.D.1.d A detailed description of system design and engineering methods NDOT has used, or plans to use, to protect Clear Creek from illicit discharges of pollutants;

III.D.1.e A schedule of implementation for all future short-term and long-term activities describing program development, implementation and maintenance;

III.D.1.f An annual monitoring program to ensure the overall quality and health of Clear Creek;

III.D.1.g An inventory and tracking program for all industrial facilities or maintenance yards that have the potential to discharge pollutants into Clear Creek;

III.D.1.h NDOT's inspection program on its MS4 or construction sites to ensure that no illicit discharges of pollutants enter Clear Creek; and

III.D.1.i Other provisions as NDEP determines appropriate for the control of such pollutants.

III.D.2. NDOT may partner with other MS4s to develop and implement the CCSWMP.

III.E. Discharges into Sanitary Sewer Systems

III.E.1. For discharges into facilities treating domestic sewage, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, that are not owned or operated by NDOT, the following shall be provided by NDOT:

III.E.1.a Written and signed confirmation from each facility authorizing the discharge of pollutants into the facility's sanitary sewer system; and,

III.E.1.b All authorizations obtained by NDOT shall be included with the revised SWMP.

III.F. Stormwater Education Program

III.F.1. NDOT shall implement a stormwater education program that includes training, public education and outreach, public participation and involvement, and intra- and inter-governmental coordination. The goal of this program is to reduce or eliminate behaviors and practices that cause or contribute to adverse

stormwater quality impacts.

III.F.2. NDOT shall implement an Employee Stormwater Training Program and shall outline the program in the SWMP. The program shall provide for NDOT's employees identified in this permit to receive initial training within twelve (12) months of the effective date of this permit and refresher training at least once every three (3) years thereafter. NDOT shall also provide training to new staff within the first year of hire, and to existing staff when job responsibilities change to newly incorporate stormwater duties.

III.F.3. NDOT shall keep records of all employees who receive stormwater training.

III.F.4. NDOT shall provide stormwater awareness training to educate personnel at all levels of responsibility who are involved in activities that may impact stormwater quality and those staff who may come into contact with, or otherwise observe, an illicit discharge or illicit connection to the storm sewer system.

III.F.5. NDOT shall provide specific stormwater training to educate personnel who are directly involved in activities that may impact stormwater quality or that may generate or manage non-stormwater discharges. For each topic, the number of trainings offered, the number of employees trained, and other appropriate measurable goals shall be presented in the Annual Report. The employee training program shall address:

III.F.5.a NDOT shall train all staff whose responsibilities may include responding to illicit discharges or illicit connections to the storm sewer system. Training shall include:

III.F.5.a.i The procedures for detection, investigation, (i.e. field screening procedures, sampling methods, field measurements) identification, clean-up, and reporting of illicit discharges and connections, and improper disposal/dumping; and

III.F.5.a.ii The procedures for outfall screening and investigation;

III.F.5.b NDOT shall train all staff directly involved in managing non-stormwater discharges. The training shall include:

III.F.5.b.i The types of discharges allowed under this permit and those that are prohibited;

III.F.5.b.ii The distinction between non-stormwater discharges and potential pollutant sources;

III.F.5.b.iii The pollutants of concern that may be in non-stormwater discharges;

and

III.F.5.b.iv The BMPs that shall be employed to minimize the discharge of pollutants;

III.F.5.c NDOT shall train all staff directly involved in performing construction site inspections. Training shall include:

III.F.5.c.i The requirements of this permit and the NDEP's General Permit NVR100000 for Construction Activities for structural and non-structural BMPs on construction sites, such as erosion and sediment control, waste control and Stormwater Pollution Prevention Plans ("SWPPPs");

III.F.5.c.ii The NDOT Contractors' requirements to obtain coverage under and comply with the NDEP's General Permit NVR100000 for Construction Activities and the requirements of that permit; and

III.F.5.c.iii NDOT's compliance, enforcement, and contractual processes to minimize stormwater discharges.

III.F.5.d NDOT shall train all staff directly involved in controlling stormwater runoff from new development or redevelopment, including those with responsibilities for preliminary design, design, and design review. Training shall include:

III.F.5.d.i Post-construction stormwater BMPs to prevent or minimize water quality impacts; and

III.F.5.d.ii Design standards, maintenance requirements and planning as related to stormwater;

III.F.5.e NDOT shall train all staff directly involved in storm sewer system maintenance, street repair, and road improvement. Training shall include:

III.F.5.e.i Potential sources of contaminants related to repair and maintenance activities; and

III.F.5.e.ii Proper maintenance, housekeeping, and repair BMPs to prevent discharges to the storm sewer system and waters of the U.S.

III.F.5.f NDOT shall train all staff who may be involved in waste disposal, spill prevention and response. Training shall include:

III.F.5.f.i Procedures to prevent, contain, and respond to spills; and

III.F.5.f.ii Proper handling, storage, transportation, and disposal of toxic and hazardous materials, including used oil and batteries, to prevent or minimize spills or discharges to the storm sewer system.

III.F.5.g NDOT shall train all staff directly involved in the application of pesticides, herbicides, and fertilizers. Training shall include:

III.F.5.g.i The potential for stormwater contamination resulting from misapplication or over-application of chemicals; and

III.F.5.g.ii Proper application procedures and BMPs;

III.F.5.h NDOT shall train all staff working at industrial sites (excluding material source sites). Training shall include:

III.F.5.h.i The requirements of BMPs, SWPPPs, and the conditions of this permit that relate to on-site activities; and

III.F.5.h.ii As applicable, used oil and spent solvent management; fueling procedures; general good housekeeping practices; proper painting procedures; and used battery management.

III.F.5.i NDOT shall provide information in the revised SWMP that discusses how NDOT will ensure that NDOT construction contractors have been adequately trained in BMP installation and maintenance, the ability to recognize activities that may impact stormwater quality, and the procedures in place to prevent or report an illicit discharge or illicit connection to the MS4.

III.F.5.j NDOT shall continue to implement a Public Education/Outreach Program to provide information to the general public about actions individuals can take to reduce transportation related pollutants and improve water quality. NDOT shall implement or participate in a stormwater education program that uses different types of media and targets a wide range of audiences. The program shall include a description of:

III.F.5.j.i The methods for disseminating information;

III.F.5.j.ii The target audiences and how they were selected; and

III.F.5.j.iii The target pollutants and sources and how they were selected.

III.F.5.k NDOT shall continue to implement educational and public information activities to distribute education materials on stormwater quality;

III.F.5.l NDOT shall implement a Public Involvement/Participation Program to

encourage public involvement and participation and to promote, publicize, and facilitate public reporting of illicit discharges and illegal dumping to or from NDOT's storm sewer system.

III.F.5.m NDOT shall implement a reporting system to facilitate and track public reports of spills, discharges, and dumping to its storm sewer system or receiving waters. NDOT shall develop procedures for receiving and investigating public complaints. NDOT shall post or advertise telephone numbers or other information to direct the public in reporting illicit discharges and illegal dumping. NDOT shall evaluate and where appropriate, NDOT shall post these numbers in places where illicit discharges and illegal dumping are found to be a recurring problem;

III.F.5.n NDOT shall record and report the number of reports received from the public and investigated in the Annual Report;

III.F.5.o NDOT shall continue to implement the Adopt-a-Highway program;

III.F.5.p NDOT shall report the number of volunteer groups participating in the Adopt-a-Highway program, number of miles cleaned, and the amount of trash collected in the Annual Report; and

III.F.5.q NDOT shall implement a program that includes coordination mechanisms and program enforcement procedures among divisions, groups, sections, and districts within NDOT to ensure compliance with the terms of this permit. NDOT shall also have mechanisms to coordinate with other government agencies and MS4 communities when necessary to address issues of common concern related to implementation of this permit. The revised SWMP shall include the following BMPs:

III.F.5.q.i NDOT shall continue implementation of intra-governmental (internal) coordination procedures to ensure compliance with the terms of this permit and to ensure implementation of SWMP activities. NDOT shall describe these procedures in the SWMP; and

III.F.5.q.ii NDOT shall develop partnerships and cooperative outreach programs, where feasible, with other regulated MS4s and jurisdictions and shall describe these partnerships and programs in the SWMP.

III.G. Construction Site BMP Program

III.G.1. The revised SWMP shall include a description of NDOT's program to implement and maintain structural and non-structural BMPs to reduce pollutants to the MEP in stormwater runoff from construction sites to the MS4. The program shall include:

III.G.1.a A plan to control all construction in the rights-of-way. This includes both construction by NDOT, construction done under contract for NDOT, and construction done by local government agencies or other third parties on NDOT or non-NDOT projects. The plan shall include:

III.G.1.a.i Review of construction site plans;

III.G.1.a.ii Implementation and maintenance of structural and non-structural BMPs;

III.G.1.a.iii Site inspections and enforcement;

III.G.1.a.iv A description of non-structural and structural BMPs for construction sites;

III.G.1.a.v A description of procedures for identifying priorities for inspecting sites and enforcing control measures which consider the nature of the construction activity, topography, and the characteristics of soils and receiving water quality; and

III.G.1.a.vi A description of the BMPs that NDOT or its contractors selected, implemented, maintained and updated on NDOT's construction projects to minimize the discharge of pollutants to the MEP;

III.G.1.b The program shall be implemented year-round on all construction projects in all parts of Nevada that discharge to waters of the U.S. The SWMP shall be revised to address these requirements and have a program and a schedule for inspections; and

III.G.1.c The program shall be in compliance with requirements of the NDEP's General Permit NVR100000 for Construction Activities.

III.H. NDOT Contractors Performing Construction Activities

III.H.1. NDOT shall, at a minimum, require its contractors to comply with NDEP's General Permit NVR100000 for Construction Activities for regulated construction projects, including the contractor's requirement to file a Notice of Intent ("NOI") and obtain authorization under NDEP's General Permit NVR100000 for Construction Activities for each construction project or site that disturbs more than one (1) acre, or less than one (1) if it is part of a larger project. The contractor shall also file a Notice of Termination ("NOT") for each construction project or site, either terminating their responsibility if final stabilization has been achieved, or transferring it to NDOT for completion.

III.H.2. NDOT shall ensure that the contractor's NOI references the construction site

as an NDOT project and shall keep a copy of the NDEP authorization certificate in the SWPPP.

III.H.3. NDOT shall ensure that all applicable provisions of NDEP's General Permit NVR100000 for Construction Activities and this permit are implemented for NDOT projects and shall implement a system to enforce these provisions. NDOT is responsible for inspection oversight.

III.H.4. When contractors complete their work at a site and interim stabilization is in place, they may file an NOT to terminate their responsibility for site activities. In this instance, NDOT shall assume responsibility for the site until final stabilization has been achieved for the entire project. NDOT is responsible for removing all temporary sediment control BMPs that may impede stormwater flow as soon as practicable after final stabilization.

III.H.5. NDOT shall include a list of all construction projects in the Annual Report, including the name of the project and its associated NDEP construction stormwater permit number(s) (e.g. CSW-xxxx), that have achieved final stabilization and that NDOT considers to be complete.

III.H.6. NDOT shall provide in the Annual Report, a list and description of all violations and their resolution, including any enforcement actions taken against its contractors.

III.I. Discharges from New Development and Redevelopment

III.I.1. NDOT shall develop and implement comprehensive planning procedures and BMPs to prevent or minimize water quality impacts from areas of new highway development and redevelopment within the MS4 permitted areas. This applies to projects that result in land disturbance of greater than or equal to one (1) acre including projects less than one (1) acre that are part of a larger common plan of development or sale. The revised SWMP shall include a post-construction stormwater pollution control program including maintenance of post-construction stormwater pollution control BMPs. For the purposes of this permit, post-construction stormwater pollution control BMPs include, but are not limited to: stormwater retention/detention basins; constructed wetlands for water quality purposes; media filtration systems; oil/water separators; check dams, grassy swales or other similar BMPs. NDOT shall describe the program in the revised SWMP;

III.I.2. NDOT shall promote source reduction approaches such as Low Impact Development ("LID") techniques, where applicable, in its discussion of the program;

III.I.3. NDOT shall describe the BMPs that will protect water quality and reduce the discharge of pollutants to the MEP;

III.I.4. NDOT shall install controls for all newly developed or redeveloped roadways that discharge stormwater runoff to impaired or unique waters. For other areas within the MS4 Compliance Areas, NDOT shall evaluate the need for permanent post-construction stormwater pollution control BMPs;

III.I.5. NDOT shall also install post-construction controls for all newly developed or redeveloped roadways within the MS4 compliance areas where appropriate. Runoff from these roadways and the storm sewer system shall be treated by a post-construction stormwater pollution control BMP(s) prior to the runoff leaving NDOT's MS4 and/or entering waters of the U.S.;

III.I.6. All stormwater shall be discharged in a manner that does not cause nuisance conditions, erosion in receiving channels or on down-slope properties; and

III.I.7. NDOT shall inventory, inspect, and maintain all post-construction stormwater pollution control BMPs. A program summary shall be included in the Annual Report.

III.J. Illicit Discharge Detection and Elimination Program

III.J.1. The revised SWMP shall include a description of NDOT's Illicit Discharge Detection and Elimination ("IDDE") Program, including a schedule, to detect and remove illicit discharges and improper disposal into the MS4. The proposed program shall include:

III.J.1.a A description of a program, including inspections, to implement and enforce statutes, regulations, ordinances, orders or similar means to prevent illicit discharges to the MS4. This program description shall address all types of illicit discharges; however, non-stormwater discharges or flows listed in Part I.B.2 of this permit shall only be addressed where such discharges are identified by NDOT as sources of pollutants to waters of the United States;

III.J.1.b A description of procedures to conduct on-going field screening activities during the life of the permit, including areas or locations that will be evaluated by such field screens;

III.J.1.c A description of procedures to be followed to investigate portions of the MS4 that, based on the results of the field screen, or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of non-stormwater;

III.J.1.d A description of procedures to prevent, contain, and respond to spills that may discharge into the MS4;

III.J.1.e A description of a program to facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from MS4s;

III.J.1.f A description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials; and

III.J.1.g An assessment of whether the procedures otherwise implemented in response to this paragraph are sufficient to identify instances of exfiltration from the sanitary sewer to the storm sewers, and if not a description of additional activities to be undertaken to control exfiltration.

III.K. Industrial Facility Monitoring and Control

III.K.1. The revised SWMP shall describe NDOT's program to monitor and control pollutants in stormwater discharges to municipal systems from municipal landfills, hazardous waste treatment, disposal and recovery facilities, industrial facilities that are subject to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and industrial facilities that NDOT determines are contributing a substantial pollutant loading to the MS4. The program shall:

III.K.1.a Identify priorities and procedures for inspections and establishing and implementing control measures for such discharges; and,

III.K.1.b Describe a monitoring program for stormwater discharges associated with the industrial facilities identified in this section, to be implemented during the term of the permit in accordance with the monitoring programs defined in Part IV.A of this permit.

III.L. Stormwater Discharges from NDOT Maintenance Facilities

III.L.1. The revised SWMP shall describe the measures NDOT uses to control discharges from NDOT Maintenance Facilities. The following measures shall apply to NDOT maintenance facilities statewide:

III.L.1.a NDOT shall continue to implement its maintenance facility program to reduce pollutants in discharges to the MEP;

III.L.1.b NDOT shall describe its statewide maintenance facility program in the revised SWMP. The program shall include policies and procedures to prevent or reduce stormwater impacts from any maintenance facility that may discharge to waters of the U.S. or to the storm sewer system;

III.L.1.c NDOT shall properly select, install, and maintain all BMPs in accordance with any relevant manufacturer specifications and good engineering

practices; and

III.L.1.d NDOT shall implement BMPs to reduce or eliminate the discharge of pollutants from maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt and sand storage locations and snow disposal areas.

III.L.2. NDOT shall implement the following BMPs at its maintenance facilities:

III.L.2.a NDOT shall prevent litter, debris, and chemicals that could be exposed to stormwater from becoming a pollutant source in stormwater discharges; and

III.L.2.b NDOT shall implement good housekeeping and material management BMPs for operating and maintaining all NDOT maintenance facilities and each of the following maintenance facility areas:

III.L.2.c NDOT shall describe and implement BMPs that prevent or minimize contamination of stormwater runoff from all areas used for vehicle or equipment storage. NDOT shall implement the following BMPs, or alternatives that will provide equivalent protection:

III.L.2.c.i Confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to designated areas;

III.L.2.c.ii Use drip pans under vehicles and equipment;

III.L.2.c.iii Store vehicles and equipment indoors whenever practicable;

III.L.2.c.iv Install berms or dikes around the areas;

III.L.2.c.v Use absorbents to clean spilled materials;

III.L.2.c.vi Roof or cover storage areas whenever practicable; and

III.L.2.c.vii Clean pavement surfaces to remove oil and grease. Use dry cleanup methods, or, if water is used, capture and properly dispose of the cleaning water.

III.L.2.d NDOT shall describe and implement BMPs that prevent or minimize contamination of stormwater runoff from all areas used for vehicle or equipment maintenance. NDOT shall implement the following BMPs, or alternatives that will provide equivalent protection:

III.L.2.d.i Perform maintenance activities indoors whenever practicable;

III.L.2.d.ii Use drip pans under vehicles and equipment;

III.L.2.d.iii Keep an organized inventory of materials used in the shop;

III.L.2.d.iv Drain all parts of fluid prior to disposal;

III.L.2.d.v Use dry cleanup methods. Prohibit wet clean up practices if these practices would result in the discharge of pollutants to stormwater drainage systems; and

III.L.2.d.vi Treat, recycle, or properly dispose of collected stormwater runoff and minimize run-on/runoff of stormwater to and from maintenance areas.

III.L.2.e NDOT shall describe and implement BMPs that prevent or minimize contamination of stormwater runoff from all areas used for material storage. NDOT shall implement the following BMPs, or alternatives that will provide equivalent protection:

III.L.2.e.i Maintain all material storage vessels that are kept outdoors (e.g., for used oil/oil filters, spent solvents, paint wastes, hydraulic fluids) to prevent contamination of stormwater and plainly label them (e.g., "Used Oil," "Spent Solvents," etc.);

III.L.2.e.ii Move storage indoors whenever practical;

III.L.2.e.iii Install berms/dikes around the areas;

III.L.2.e.iv Minimize run-on of stormwater to the areas;

III.L.2.e.v Use dry cleanup methods; and

III.L.2.e.vi Treat, recycle, or properly dispose of collected stormwater runoff. ***Note:*** *The discharge of vehicle and equipment washwater, including tank washing operations, is not authorized by this permit and shall be covered under a separate NPDES permit; discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements; or otherwise appropriately managed or recycled on-site. NDOT shall not discharge any washwater from washing vehicles, tanks, containers, and/or equipment under this permit.*

III.L.2.f NDOT shall implement practices and procedures to prevent, contain, and respond to spills from maintenance facilities using the following practices:

III.L.2.f.i NDOT shall implement management practices and procedures for handling toxic and hazardous materials by NDOT staff at NDOT maintenance facilities to prevent spills;

III.L.2.f.ii NDOT shall implement practices and procedures for handling spills of toxic materials by NDOT staff at NDOT maintenance facilities to prevent or minimize discharges to the storm sewer system or receiving waters;

III.L.2.f.iii NDOT shall immediately respond to spills by NDOT staff at NDOT maintenance facilities to prevent toxic materials or pollutants from entering the storm sewer system and receiving waters;

III.L.2.f.iv NDOT shall continue to track and record spills and other releases by NDOT staff at NDOT maintenance facilities, including information on the number, type, and amount of materials released, the location and extent of the spill, the circumstances of the release (e.g. spilled to storm sewer), and the name of the parties involved; and

III.L.2.f.v NDOT shall maintain records of spills to the storm sewer system or receiving waters and include the records in the Annual Report.

III.M. Comprehensive Maintenance Facility Inspection

III.M.1. NDOT shall conduct a Comprehensive Maintenance Facility Inspection at least once each year. NDOT shall also conduct routine visual inspections to ensure that the SWPPP addresses any significant changes to the facility's operations or BMP implementation procedures.

III.M.2. NDOT shall complete an inspection report for all maintenance facility inspections. At a minimum the report shall include:

III.M.2.a The inspection date;

III.M.2.b The name(s), title(s) and qualifications of the person(s) making the inspection. The list of qualified personnel shall either be on or attached to the report or alternatively, if the SWPPP documents the qualifications of the inspectors by name, that portion of the SWPPP may be referenced;

III.M.2.c Weather information and a description of any discharges occurring at the time of the inspection;

III.M.2.d The location(s) of discharges of sediment or other pollutants from the site, if any;

III.M.2.e The location(s) of BMPs that need to be maintained, that failed to operate as designed, or proved inadequate for a particular location;

III.M.2.f The location(s) where additional BMPs are needed that did not exist at the time of inspection;

III.M.2.g The corrective action(s) required, including any changes to the SWPPP and implementation dates;

III.M.2.h The identification of all sources of non-stormwater discharges, if any, and the associated BMPs;

III.M.2.i Where applicable, the identification of material storage areas, and evidence of or potential for pollutant discharges from these areas;

III.M.3. Inspection reports shall identify any incidents of non-compliance with the permit conditions. Where a report does not identify any incidents of non-compliance, the report shall contain a certification that the activities are in compliance with the SWPPP and this permit; and

III.M.4. The report shall be signed and certified in accordance with Part V.G of this permit and copies included in the SWPPP and the Annual Report.

III.N. Scope of Inspections

III.N.1. NDOT shall inspect all areas of the site exposed to precipitation, as well as areas where spills and leaks have occurred. Inspectors shall look for evidence of, or the potential for, pollutants entering the drainage system;

III.N.2. Inspections of the maintenance yard shall include all the following areas/activities:

III.N.2.a Storage areas for vehicles and equipment awaiting maintenance;

III.N.2.b Fueling areas (including mobile fueling);

III.N.2.c Indoor and outdoor vehicle/equipment maintenance areas;

III.N.2.d Material storage areas;

III.N.2.e Material source stockpile(s) to determine if piles are protected from run-on, run-off, if materials are contributing to off-site discharges;

III.N.2.f Vehicle/equipment cleaning areas and loading/unloading areas; and

III.N.2.g Onsite waste storage or disposal;

III.N.3. NDOT shall inspect and document all BMPs identified in the SWPPP along with areas inspected and the conditions found;

III.N.4. NDOT shall inspect discharge locations to determine whether BMPs are

effective in preventing significant impacts to waters of the U.S., where accessible;

III.N.5. Where discharge locations are inaccessible, NDOT shall inspect nearby downstream locations to the extent that the inspections are practicable; and

III.N.6. NDOT shall inspect locations where vehicles enter or exit the site for evidence of off-site sediment tracking.

III.N.7. Based on the results of the inspection, NDOT shall modify the SWPPP as necessary to include additional or modified BMPs designed to correct problems identified. NDOT shall complete revisions to the SWPPP and modify or add BMPs as necessary within thirty (30) calendar days following the inspection. NDOT shall implement tracking and follow-up procedures to ensure that appropriate action is taken in response to issues noted during inspections.

III.N.8. If sediment or other materials escape the site, NDOT shall remove the off-site accumulations of sediment or other materials at a frequency sufficient to minimize off-site impacts. The removal shall take place within seven (7) days of discovery unless precluded by legal, regulatory, or physical access constraints. NDOT shall use all reasonable efforts to obtain access, and in such instances, removal and stabilization shall take place within seven (7) days of obtaining access.

III.N.9. Inspections shall be performed by qualified personnel as defined in Part VI of this permit; and

III.N.10. NDOT shall retain a record of each inspection and of any actions taken as part of the SWPPP for at least five (5) years from the expiration date of this permit;

III.N.11. For existing BMPs that need to be modified or, if additional BMPs are necessary for any reason, implementation shall be completed within thirty (30) days, and before the next storm event;

III.N.12. All BMPs including erosion and sediment control BMPs identified in the SWPPP shall be maintained in effective operating condition. If site inspections identify BMPs that are not operating effectively, maintenance shall be performed within seven (7) days of discovery and before the next anticipated storm event to maintain the continued effectiveness of stormwater BMPs. If implementation before the next storm event is impracticable, the reason(s) for delay must be documented in the SWPPP and alternative BMPs must be implemented as soon as possible;

III.N.13. Facilities as requiring monitoring shall follow the requirements therein; and

III.N.14. NDOT shall develop or update its list of industrial facilities and maintenance yards subject to stormwater permitting requirements within their control. The list shall be included in the Annual Report.

III.O. Public Street Maintenance Program in Urbanized Areas

III.O.1. The revised SWMP shall discuss how NDOT intends to operate and maintain public streets and roads in urbanized areas that are under NDOT's jurisdiction in a manner so as to reduce the discharge of pollutants to the MEP (including those related to road repair, street sweeping, snow removal, sanding activities and herbicide application), in accordance with their present program. The program shall include the following information and measurable goals:

III.O.1.a Snow and ice management practices on streets, roads, and highways in urbanized areas shall be implemented in a manner consistent with NDOT's policies and guidelines. These guidelines shall include prescriptions for sand application rate, maximum salt concentrations, calibration of sand spreaders, and sweeping of sanded streets;

III.O.1.b Salt and sand storage practices shall be implemented as necessary to minimize, to the extent practicable, run-on, run-off and salt migration off-site;

III.O.1.c Leaf litter and debris on all streets in urbanized areas shall be swept a minimum of two times per year, once in the spring and once in the fall;

III.O.1.d Sweeping of sanded streets in urbanized areas shall be performed as soon as weather, logistics and site conditions permit after snow storms, but no later than four (4) days after the last snowfall;

III.O.1.e Sweeper wastes shall be disposed of properly. Recycling of sweeper wastes shall be considered. The amount of sweeper waste accumulated, recycled and/or disposed of shall be documented and included in the Annual Report.

III.O.1.f If magnesium chloride is used for snow management, application practices shall be used to minimize any negative effects to waters of the U.S. to the MEP. Results of any studies on magnesium chloride shall be considered when relevant.

III.O.1.g A narrative summary of the program will be included in the Annual Report.

III.P. Measures to Control Discharges from Roadways

III.P.1. NDOT shall continue to implement its programs of roadway and storm sewer system repair, maintenance and cleaning, vegetation management, and winter storm policies to reduce the release of pollutants to, and discharges of pollutants from, the storm sewer system. The revised SWMP shall include policies and procedures to prevent or reduce stormwater impacts to waters of the U.S. or the MS4 system while conducting operation and maintenance activities. The revised SWMP shall address the following programs:

III.P.1.a **Highway Maintenance Activities**

III.P.1.a.i Develop and implement runoff management programs and systems for existing roads, highways, and bridges to reduce runoff pollutant concentrations and volumes entering surface waters;

III.P.1.a.ii Identify priority and watershed pollutant reduction opportunities (e.g., improvements to existing urban runoff control structures);

III.P.1.a.iii Establish schedules for implementing appropriate controls; and

III.P.1.a.iv NDOT shall develop a system to identify, track, and prioritize timely stabilization and repairs to road segments where slopes are 3:1 or greater and actively eroding and sediment is leaving NDOT's right-of-way or discharging to a water of the U.S. This system shall be described in the revised SWMP, and each Annual Report thereafter shall summarize erosion abatement projects conducted during the year. NDOT shall identify road segments with slopes that are prone to erosion and discharge of sediment and stabilize these slopes to the MEP.

III.P.1.b **Snow and Ice Control**

III.P.1.b.i Where abrasives and/or de-icing agents are used on highways, the following shall be recorded:

III.P.1.b.i.1 Location of the source of abrasives materials;

III.P.1.b.i.2 Types and chemistry of de-icing agents;

III.P.1.b.i.3 Deicing salt shall be analyzed for: total phosphorus, total nitrogen, iron, and percent sodium chloride (NaCl);

III.P.1.b.i.4 Alternative deicers shall be analyzed for total nitrogen and total phosphorus;

III.P.1.b.i.5 Type and chemistry of abrasives with the gradation and percent organic matter. Gradation and percent organic matter shall be

determined from composite samples. The composite samples shall be taken from one stockpile that represents all deliveries from the originating source. Composite samples shall be taken from every new delivery from a new originating source;

III.P.1.b.i.6 Abrasives shall be analyzed for volatile solids, iron, total nitrogen, total phosphorus, and total reactive phosphorus; and

III.P.1.b.i.7 Volume of abrasives and deicing agents used on individual highway segments shall be documented in the Annual Report.

III.P.1.c **Storm Water Drainage System Facilities Maintenance**

III.P.1.c.i NDOT shall remove all debris and sediment from those inlets that pose a significant threat to water quality on an annual basis prior to the winter season each year. All debris and sediment removed from drain inlets shall be managed in accordance with all applicable laws and regulations. The amount of material removed shall be documented and included in the Annual Report; and

III.P.1.c.ii Drain inlets which contain significant materials must be considered for an IDDE investigation and considered for an enhanced BMP program focused on reducing the sources of the material found in the inlet.

III.Q. Storm Sewer System and Highway Maintenance

III.Q.1. NDOT shall implement the following BMPs for operating and maintaining roadways and drainage ways to minimize discharges to and from the storm sewer system in all the MS4 Permitted areas:

III.Q.1.a **Inventory Post-Construction Stormwater Pollution Control BMPs**

III.Q.1.a.i NDOT shall develop and maintain an inventory of its post-construction stormwater pollution control BMPs;

III.Q.1.a.ii The inventory shall categorize the post-construction stormwater pollution control BMPs by type and location; and

III.Q.1.a.iii NDOT shall include the inventory of stormwater retention/detention basins, constructed wetlands for water quality purposes, media filtration systems, oil/water separators, and other major post-construction stormwater pollution control BMPs statewide as part of the revised SWMP.

III.Q.1.b **Inspect Storm Sewer System**

III.Q.1.b.i The revised SWMP shall outline a program, including measurable goals, to inspect and record conditions of its storm sewer system including roadways used for stormwater conveyance, catch basins, storm drain inlets, open channels, washes, culverts, and retention/detention basins to identify potential sources of pollutants and determine maintenance needs; and

III.Q.1.b.ii NDOT shall maintain records of inspections and conditions found and shall present the number of inspections in each Annual Report.

III.Q.1.c **Develop Maintenance Schedules and Priorities**

III.Q.1.c.i NDOT shall identify routine maintenance schedules and maintenance priorities for its storm sewer system, including roadways to minimize pollutant discharges from the storm sewer system; and

III.Q.1.c.ii NDOT shall evaluate priorities and update the maintenance schedule annually.

III.Q.1.d **Perform Repair, Maintenance, and Cleaning**

III.Q.1.d.i NDOT shall continue to repair, maintain, and clean its roadways used for stormwater conveyance and its storm sewer system to minimize the discharge of pollutants to the MEP (including floatable debris) from the storm sewer system; and

III.Q.1.d.ii During repair, maintenance or cleaning activities, NDOT shall ensure that all storm drain inlets are assessed for evidence of illicit discharges or illegal dumping, such as significant loads of a specific pollutant(s) or material(s). Upon discovery, NDOT shall initiate an investigation to target likely sources and implement a BMP program to reduce the sources of the pollutant or material to the MEP.

III.Q.1.e **Implement BMPs for Repair, Maintenance, and Cleaning**

III.Q.1.e.i NDOT shall implement appropriate BMPs to reduce the potential for releases of pollutants to the storm sewer system or to waters of the U.S. when performing repair, maintenance, or cleaning of its storm sewer system, including roadways;

III.Q.1.e.ii NDOT shall implement BMPs to minimize the discharge of pollutants from unpaved roads, shoulders, and parking lots, such as permanent stabilization / erosion control BMPs and paving unpaved roads, and parking lots;

III.Q.1.e.iii NDOT shall properly dispose of waste removed from its storm sewer system and NDOT facilities, including dredge spoil, accumulated

sediments, and floatable or other debris. The amount removed and disposed of shall be documented and included in the Annual Report.

III.Q.1.f **Roadside Management Program**

III.Q.1.f.i NDOT shall continue to implement the BMPs described in its *Construction Site BMP Field Manual.*

III.R. Herbicide, Pesticide and Fertilizer Program

III.R.1. NDOT shall develop a program to reduce the discharge of pollutants related to the application of herbicides, pesticides and fertilizers to the MEP. This program shall include:

III.R.1.a **Implement Pesticide and Fertilizer Application Procedures**

III.R.1.a.i NDOT shall continue to implement practices and procedures for NDOT staff and commercial applicators to only use Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA")-approved pesticides/herbicides and fertilizers at NDOT facilities and roadside right-of-ways. NDOT shall design these practices to avoid chemical application when feasible and to minimize the amount of chemicals applied;

III.R.1.a.ii As part of the revised SWMP, NDOT shall develop BMPs to address the timing of applications in relation to expected precipitation events, proximity to water bodies, and other practices to minimize the runoff of pollutants. Applications of herbicides shall be performed during dry-weather periods to the extent possible, using methods to limit overspray;

III.R.1.a.iii If NDOT must apply pesticides in any area that is within, or directly adjacent to a water of the U.S., only pesticides approved for aquatic use shall be used;

III.R.1.a.iv NDOT shall review application practices annually and update procedures as needed to minimize runoff of pollutants;

III.R.1.a.v NDOT shall continue to require certification/licensing of staff and commercial applicators that apply pesticides at NDOT facilities, public areas, and right-of ways; and

III.R.1.a.vi A narrative summary of the program will be included in the Annual Report.

III.R.1.b **Vegetation Control**

III.R.1.b.i NDOT shall develop a Vegetative Control Program to reflect the following elements:

III.R.1.b.i.1 Enhancement of the use of appropriate native and adapted vegetation throughout all NDOT's rights-of way for the purpose of preventing erosion and removing pollutants in stormwater and non-stormwater runoff;

III.R.1.b.i.2 Application of herbicides in a manner that minimizes or eliminates the discharge of herbicides to receiving waters. Factors to be considered include timing in relation to expected precipitation events, proximity to water bodies, and the effects of using combinations of chemicals;

III.R.1.b.i.3 If application of nutrients is required, the application shall be at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface water; and

III.R.1.b.i.4 In places where NDOT has already developed vegetation control management plans, NDOT shall continue to implement these plans and integrate them into their overall statewide plan. In instances where elements of these plans are to be changed or dropped, NDOT shall discuss any changes in the Annual Report.

III.S. NDOT Maintenance Yards Management Program

III.S.1. NDOT shall prepare SWPPPs for all its maintenance facilities. Because these facilities are considered municipal activities rather than industrial activities, these SWPPPs shall have BMP programs that reduce pollutants to the MEP;

III.S.2. Generic SWPPP elements can be used for activities that are performed at more than one maintenance facility; however, each site must be evaluated separately and provided with appropriate site specific BMPs.

III.S.3. NDEP staff has the authority to require the submittal of a SWPPP at any time, to require changes to a SWPPP, and to require the implementation of the provisions of a SWPPP. SWPPPs shall include the following elements:

III.S.3.a NDOT shall develop and implement runoff control plans for the following NDOT-owned and/or operated facilities that do not have independent NPDES Stormwater permits:

III.S.3.a.i Vehicle maintenance facilities (maintenance includes equipment rehabilitation, mechanical repairs, painting, fueling and lubrication);

III.S.3.a.ii Asphalt and concrete batch plants which are not already individually permitted;

III.S.3.a.iii Solid-waste transfer stations;

III.S.3.a.iv Exposed stockpiles of materials, including stockpiles of road deicing salt, salt and sand, sand, roto-mill material; and

III.S.3.a.v Sites used for snow dumps, and/or for temporary storage of sweeper tailings or other waste piles.

III.S.3.b NDOT shall provide a complete list of these facilities (including the address of the facility, type of operation, size of the facility, and receiving water drainage basin) as part of the revised SWMP. This list shall indicate which sites are considered "major" and which are considered "minor", and set out the reasons for the designations.

III.S.3.c Runoff control plans for "major" facilities shall contain the following:

III.S.3.c.i Activity description;

III.S.3.c.ii Facility site map; and

III.S.3.c.iii A description of potential pollutant sources, including an evaluation of that potential.

III.S.3.d Stormwater Management Controls

III.S.3.d.i The description of stormwater management controls shall address the following minimum components, including a schedule for implementing such controls:

III.S.3.d.i.1 Runoff control plan administrator;

III.S.3.d.i.2 Preventive maintenance;

III.S.3.d.i.3 Good housekeeping;

III.S.3.d.i.4 Spill prevention and response procedures;

III.S.3.d.i.5 BMPs for pollutant sources;

III.S.3.d.i.6 Evaluation for non-stormwater discharges;

III.S.3.d.i.7 Employee training;

III.S.3.d.i.8 Inspection procedures; and

III.S.3.d.i.9 A summary of compliance with the SWPPPs shall be submitted by each plan administrator to the NDOT's Carson City Office by September 1 of each year. Summaries of the separate SWPPPs shall be included in the Annual Report.

III.S.3.d.ii "Minor" facilities shall be grouped together by type, and one runoff control plan shall be developed for each group. Grouped runoff control plans shall contain:

III.S.3.d.iii A map showing the location of each facility in the group on a map of the city or state;

III.S.3.d.iv For each facility in the group include the address, type of operation, size of the facility, and receiving water drainage basin;

III.S.3.d.v A description of potential pollutant sources, including an evaluation of that potential;

III.S.3.d.vi A description of the standard operating procedures or stormwater management controls shall address the following components if appropriate:

III.S.3.d.vi.1 Preventive maintenance measures;

III.S.3.d.vi.2 Good housekeeping;

III.S.3.d.vi.3 Spill prevention and response procedures;

III.S.3.d.vi.4 BMPs;

III.S.3.d.vi.5 Evaluation for non-stormwater discharges; and

III.S.3.d.vi.6 Inspection Procedures.

III.S.3.e Copies of the "major" facility runoff control plans shall be kept on the facility site and on file with NDOT's main office. They shall be submitted to NDEP upon request.

III.S.3.f Copies of the "minor" facility group runoff control plans shall be kept on file with the Regional District Office. They shall be submitted to NDEP upon request;

III.S.3.g Both major and minor facilities shall be inspected by the Permittee at least one (1) time each year, after the SWPPP has been completed;

III.S.3.h NDOT shall implement the provisions of the runoff control plans required under this part as a condition of this MS4 permit. NDEP reserves the right

to review those plans, and to require additional measures to prevent and control pollution as needed;

III.S.3.i SWPPPs may be amended at any time and any amendments shall be described in the Annual Report; and

III.S.3.j The SWPPPs shall be completed and implemented according to the following schedule: 10 percent of the facilities within twelve (12) months of the effective date of this permit, another 40 percent within twenty-four (24) months of the effective date of this permit, and the remaining 50 percent within thirty-six (36) months of the effective date of this permit. A list of these facilities shall be submitted to NDEP at these times.

III.T. Sharing Responsibility

III.T.1. NDOT may either share responsibility or assign responsibility with one or more regulated MS4s, and may implement BMPs individually, as a group, or through consultants. The SWMP shall include a description of the BMP and how responsibility is being shared or assigned.

III.U. Annual Review and Updating the SWMP

III.U.1. NDOT must complete an annual review of the SWMP in conjunction with preparation of the Annual Report required under Part IV.C of this permit.

III.U.2. NDOT may change the SWMP during the life of the permit in accordance with the following procedures:

III.U.2.a Changes adding (but not subtracting or replacing) components, controls, or requirements to the SWMP may be made at any time upon written notification to NDEP.

III.U.2.b Requests for changes replacing an ineffective, unfeasible, or inappropriate BMP specifically identified in the SWMP with an alternate BMP may be submitted to NDEP for approval at any time. If request is denied, NDEP will send NDOT a written response giving a reason for the decision. NDOT's modification requests must include the following:

III.U.2.b.i An analysis of why the BMP is ineffective, infeasible (including cost prohibitive), or otherwise should be revised or replaced, and

III.U.2.b.ii An analysis of why the replacement BMP is expected to be more effective, feasible, or appropriate than the BMP to be replaced.

III.V. Updating NDOT's Manuals

III.V.1. NDOT shall annually review its *2006 Planning and Design Guide Manual* and its *2006 Construction Site BMP Manual* and update as needed. Erosion and sediment control BMP detail drawings shall also be updated as needed. NDOT shall describe all updates to these manuals in the Annual Report.

III.W. Characterization Data

III.W.1. The revised SWMP shall evaluate whether existing data collection programs should be modified to improve characterization of stormwater discharges, effects of different BMPs on water quality, or ambient water quality. This information shall be submitted for approval as part of the annual monitoring plan required in Part IV.A of this permit.

Part IV. Monitoring, Recordkeeping, and Reporting

IV.A. Stormwater Monitoring

IV.A.1. NDOT shall submit a stormwater monitoring plan to NDEP for the following year on or before October 1 each year. In developing the plan, NDOT shall evaluate and update as necessary how monitoring may assist in making decisions about program compliance, the appropriateness of identified best management practices, and progress toward achieving identified measurable goals. Pending submittal of the annual monitoring plan, NDOT shall continue to implement the existing monitoring plan.

IV.A.2. When NDOT conducts monitoring at NDOT's permitted MS4, NDOT is required to comply with the following:

IV.A.2.a Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. This requirement does not prevent NDOT from analyzing or reporting samples that are representative of a limited situation (e.g. concentration at peak flow);

IV.A.2.b Test procedures for the analysis of pollutants shall conform to regulations (40 CFR, Part 136) published pursuant to Section 304(h) of the CWA, unless other procedures are approved by NDEP.

IV.A.3. Records of monitoring information shall include:

IV.A.3.a The date, exact place, and time of sampling or measurements;

IV.A.3.b The names(s) of the individual(s) who performed the sampling or measurements;

IV.A.3.c The date(s) analyses were performed;

IV.A.3.d The names of the individuals who performed the analyses;

IV.A.3.e The analytical techniques or methods used; and,

IV.A.3.f The results of such analyses.

IV.A.4. Analyses shall be performed by a State of Nevada-certified laboratory. Laboratory reports shall be provided if requested by NDEP.

IV.A.5. If NDOT performs stormwater monitoring more frequently than required by the stormwater monitoring plan the results of such monitoring shall be reported. The monitoring results and analyses shall be submitted as part of the Annual Report.

IV.B. Record Keeping

IV.B.1. NDOT shall retain records of all monitoring information, including, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, a copy of the NPDES permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the termination date of this permit. This period may be extended at the direction of NDEP at any time.

IV.B.2. NDOT shall submit the records to NDEP upon request. NDOT shall retain a copy of the SWMP required by this permit (including a copy of the permit language) at a location accessible to NDEP. NDOT shall make the records, including a copy of the SWMP, available to the public if requested to do so in writing.

IV.B.3. For public requests of records, NDOT may impose a reasonable fee for personnel time and copying expenses.

IV.C. Annual Reports

IV.C.1. NDOT shall continue to submit Annual Reports to NDEP by October 1 of each year of the permit term. Each Annual Report shall cover the period beginning July 1st of the previous year through June 30th of the current year.

IV.C.2. Each year, NDOT shall review its SWMP and report to NDEP on the status of the program, whether NDOT has identified any modifications, and the plans for implementing those modifications.

IV.C.3. At a minimum the Annual Report shall include:

IV.C.3.a Status of NDOT's compliance with permit conditions;

IV.C.3.b An assessment of the appropriateness of the identified BMPs, and revisions to previous assessments, if appropriate;

IV.C.3.c Progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP;

IV.C.3.d Status of the achievement of measurable goals;

IV.C.3.e Results of information collected and analyzed, if any, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP, a description of any identified improvements to or degradation in water quality attributable to the program, and a description of any identified effects on attainment of water quality standards attributable to the program;

IV.C.3.f A summary of the stormwater activities NDOT plans to undertake during the next reporting cycle (including an implementation schedule and a fiscal analysis);

IV.C.3.g Changes to the SWMP, including changes to any BMPs or any identified measurable goals that apply to the program elements;

IV.C.3.h Notice that NDOT is relying on another government entity to satisfy some of the permit obligations, as applicable; and

IV.C.3.i Estimated reductions in loadings of pollutants from discharges of municipal storm sewer constituents from municipal storm sewer systems expected as the result of the municipal stormwater quality management program. The assessment shall also identify known impacts of stormwater controls on ground water.

IV.C.3.j A summary of inspections performed and enforcement activity taken during the report cycle.

IV.C.3.k A summary of public education and outreach activity performed during the report cycle.

IV.C.3.l 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.

IV.C.3.m An original signed copy of all reports and plans required herein shall be submitted to the NDEP at the following address:

Stormwater Coordinator
Bureau of Water Pollution Control
Nevada Division of Environmental Protection
901 S. Stewart St., Suite 4001
Carson City, NV 89701

IV.D. Annual Fee

IV.D.1. NDOT shall remit an annual review and services fee by July 1 of every year in accordance with Nevada Administrative Code ("NAC") 445A.232 until this permit is terminated.

IV.E. Continued Permit Coverage

IV.E.1. NDOT shall submit written correspondence to NDEP requesting continued permit coverage under the new NDOT MS4 Permit and signed in accordance with the signatory requirements of Part V.G of this permit, no later than 180 days before this permit expires.

IV.F. Changes by NDEP

IV.F.1. Formal changes requested by NDEP must be made in writing, set forth the time schedule for NDOT to develop the changes, and offer NDOT the opportunity to propose alternative program changes to meet the objective of the requested modification. If NDOT does not agree to the requested changes, changes required by NDEP will be made in accordance with 40CFR§124.5, 40CFR§122.62, or as appropriate 40CFR§122.63.

IV.F.2. NDEP may request formal changes to the SWMP as needed to:

IV.F.2.a Address impacts on receiving water quality caused, or contributed to, by discharges from the MS4;

IV.F.2.b Include more stringent requirements necessary to comply with new Federal statutory or regulatory requirements; and,

IV.F.2.c Include such other conditions deemed necessary by NDEP to comply with the requirements of the CWA.

IV.G. Responsibility for Stormwater Management Program Implementation

IV.G.1. NDOT must implement the SWMP on all new areas added to NDOT's portion of the MS4 (or for which NDOT become responsible for implementation of stormwater quality controls) no later than one (1) year from addition of the new areas; and

IV.G.2. Information on all new annexed areas and any resulting updates required to the SWMP must be included in the Annual Report.

Part V. Standard Permit Conditions

V.A. Duty to Comply

V.A.1. NDOT must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of CWA and is grounds for an enforcement action; permit termination; revocation and re-issuance; modification; or for denial of a permit renewal application.

V.B. Continuation of the Expired Permit

V.B.1. If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedures Act and remain in force and effect. NDOT will automatically remain covered by the continued permit until the earlier of:

V.B.1.a Re-issuance or replacement of this permit; or

V.B.1.b Issuance of another individual permit for NDOT discharges.

V.C. Need to Halt or Reduce Activity Not a Defense

V.C.1. It shall not be a defense for NDOT in an enforcement action that it would have been necessary to halt or reduce the permitted activity under NDOT's control in order to maintain compliance with the conditions of this permit.

V.D. Duty to Mitigate

V.D.1. NDOT must take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

V.E. Duty to Provide Information

V.E.1. NDOT must furnish to NDEP any information that is requested by NDEP and needed to determine compliance with this permit or other information.

V.F. Other Information

V.F.1. If NDOT becomes aware that it has failed to submit any relevant facts in its revised SWMP, Annual Report or in any other report to NDEP, NDOT must promptly submit such facts or information to NDEP.

V.G. Signatory Requirements

V.G.1. All applications, reports, certifications, or information submitted to NDEP, or that this permit requires be maintained by NDOT shall be signed and certified as follows:

V.G.1.a ***Applications.*** All applications shall be signed by a duly authorized representative of NDOT.

V.G.1.b ***Reports and Other Information.*** All reports required by the permit and other information requested by NDEP or the authorized representative of NDEP shall be signed by a person described above from NDOT or by a duly authorized representative of that person. A person is a duly authorized representative only if:

V.G.1.b.i ***Signed Authorization.*** The person described above submits the authorization in writing to NDEP.

V.G.1.b.ii ***Authorization with Specified Responsibility.*** The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility for environmental matter for the regulated entity.

V.G.1.c ***Changes to Authorization.*** If an authorization is no longer accurate because a different person has the responsibility for the overall operation of the MS4, a new authorization satisfying the requirement above must be submitted to NDEP prior to or together with any reports, information, or applications to be signed by an authorized representative.

V.H. Property Rights

V.H.1. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

V.I. Proper Operation and Maintenance

V.I.1. NDOT shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by NDOT to achieve compliance with the conditions of this permit.

V.J. Inspection and Entry

V.J.1. NDOT shall allow NDEP or an authorized representative (including an authorized contractor acting as a representative of the Administrator) upon the presentation of credentials and other documents as may be required by law, to do any of the following:

V.J.1.a Enter NDOT's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

V.J.1.b Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit;

V.J.1.c Inspect at reasonable times any facilities or equipment (including monitoring and control equipment) practices, or operations regulated or required under this permit; and

V.J.1.d Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.

V.K. Permit Actions

V.K.1. This permit may be modified, revoked and reissued, or terminated for cause. NDOT's filing of a request for a permit modification, revocation and re-issuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

V.L. Permit Transfers

V.L.1. This permit is not transferable to any person. NDEP may require modification or revocation and re-issuance of the permit to incorporate such other requirements as may be necessary under the CWA.

V.M. Anticipated Noncompliance

V.M.1. NDOT shall give advance notice to NDEP of any planned changes in the permitted MS4 or activity which may result in noncompliance with this permit.

V.N. State Environmental Laws

V.N.1. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve NDOT from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the CWA.

V.N.2. No condition of this permit releases NDOT from any responsibility or requirements under other environmental statutes or regulations.

V.O. Severability

V.O.1. The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit under any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

V.P. Procedures for Modification or Revocation

V.P.1. Permit modification or revocation will be conducted according to 40CFR§122.62, 122.63, 122.64 and 124.5.

V.Q. Availability of Reports

V.Q.1. Except for data determined to be confidential under Nevada Revised Statutes ("NRS") 445A.665, all reports and plans submitted in accordance with the terms of this permit shall be available for public inspection at NDEP's office. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in NRS 445A.710.

V.R. Furnishing False Information and Tampering with Monitoring Devices

V.R.1. Any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document submitted or required to be maintained by the provisions of NRS 445A.300 to 445A.730, inclusive, or by any permit, rule, regulation or order issued pursuant thereto, or who falsifies, tampers with or knowingly renders inaccurate any monitoring device or method required to be maintained under the provisions of NRS 445A.300 to 445A.730, inclusive, or by any permit, rule, regulation or order issued pursuant thereto, is guilty of a gross misdemeanor and shall be punished by a fine of not more than $10,000 or by imprisonment. This penalty is in addition to any other penalties, civil or criminal, pursuant to NRS 445A.300 to 445A.730, inclusive.

V.S. Penalty for Violation of Permit Conditions

V.S.1. NRS 445A.675 provides that any person who violates a permit condition is subject to administrative and judicial sanctions as outlined in NRS 445A.690 through 445A.710.

V.T. Permit Modification, Suspension or Revocation

V.T.1. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

V.T.1.a Violation of any terms or conditions of this permit;

V.T.1.b Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;

V.T.1.c A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; or

V.T.1.d To impose specific requirements for BMPs or annual reporting requirements in accordance with 40CFR§122.62 or §122.63.

V.T.2. NDOT may request that NDEP reopen and modify this permit.

Part VI. Definitions

VI.A. All definitions contained in Section 502 of the CWA and 40CFR§122 shall apply to this permit and are incorporated herein by reference. For convenience, simplified explanations of some regulatory/statutory definitions have been provided, but in the even of a conflict, the definition found in the Statute or Regulation takes precedence.

VI.B. ***Best Management Practices (BMPs)*** means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

VI.C. ***Control Measure*** as used in this Permit, refers to any BMP or other method used to prevent or reduce the discharge of pollutants to waters of the United States.

VI.D. ***CWA or The Act*** means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.

VI.E. ***Discharge***, when used without a qualifier, refers to "discharge of a pollutant" as defined at 40CFR§122.2.

VI.F. ***Illicit Connection*** means any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

VI.G. ***Illicit Discharge*** is defined at 40CFR§122.26(b)(2) and refers to any discharge to

a municipal separate storm sewer that is not entirely composed of stormwater, except discharges authorized under an NPDES permit (other than the NPDES permit for discharges from the MS4) and discharges resulting from fire fighting activities.

VI.H. ***MEP*** is an acronym for "Maximum Extent Practicable," the technology-based discharge standard for Municipal Separate Storm Sewer Systems to reduce pollutants in stormwater discharges that was established by CWA§402(p).

VI.I. ***MS4*** is an acronym for "Municipal Separate Storm Sewer System" and is used to refer to either a Large, Medium, or Small Municipal Separate Storm Sewer System (e.g. "the Las Vegas Valley MS4"). The term is used to refer to either the system operated by a single entity or a group of systems within an area that are operated by multiple entities (e.g., the Las Vegas Valley MS4 includes MS4s operated by the City of Las Vegas, the City of North Las Vegas, the City of Henderson, the Clark County Regional Flood Control District, and Clark County).

VI.J. ***Municipal Separate Storm Sewer*** is defined at 40CFR§122.26(b)(8) and means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) Designed or used for collecting or conveying stormwater; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40CFR§122.2.

VI.K. ***Outfall*** is defined at 40CFR§122.26 as: Major municipal separate storm sewer outfall (or "major outfall") means a municipal separate storm sewer ("MS4") outfall that discharges from a single pipe with an inside diameter of 36 inches or more or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive stormwater from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 2 acres or more). Outfalls do not include cross-drain structures or culverts installed under a road that function only to maintain the natural flow of surface waters and drainage. However, a structure that collects or diverts drainage that has contacted the road surfaces for discharge into a water body is considered an outfall under this permit.

VI.L. ***Permitting Authority*** means the Nevada Division of Environmental Protection.

VI.M. ***Qualified Person*** means a person knowledgeable in the principles and practice of erosion and sediment controls and who possesses the skills to assess conditions at the site that could impact stormwater quality and the effectiveness of the BMPs selected to control the quality of the stormwater discharges.

VI.N. ***Small Municipal Separate Storm Sewer System*** is defined at 40CFR§122.26(b)(16) and refers to all separate storm sewers that are owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States, but is not defined as "large"' or "medium" MS4. This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

VI.O. ***Stormwater*** is defined at 40CFR§122.26(b)(13) and means stormwater runoff, snowmelt runoff, and surface runoff and drainage.

VI.P. ***Stormwater Management Program (SWMP)*** refers to a comprehensive program to manage the quality of stormwater discharged from the MS4.

ACRONYMS

BMP	Best Management Practice
CFR	Code of Federal Regulations
CWA	Clean Water Act
LA	Load Allocation
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
NAC	Nevada Administrative Code
NDEP	Nevada Division of Environmental Protection
NDOT	Nevada Department of Transportation
NPDES	National Pollutant Discharge Elimination System
NRS	Nevada Revised Statute
Permittee	Nevada Department of Transportation
SARA	Superfund Amendments and Reauthorization Act
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
USC	United States Code
WLA	Wasteload Allocation

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Appendix B Sanitary Sewer Discharge Authorizations

9/9/9

STOREY COUNTY PUBLIC WORKS

Richard Bacus
Public Works Director

P.O. Box 435 • Virginia City, Nevada 89440

September 7, 2004

Daryl N. James
Nevada Department of Transportation
Environmental Services Division
1263 South Stewart Street
Carson City, Nevada 89712

RE: Storm Water Discharge into the Virginia City Wastewater Treatment Facility.

Dear Mr. James:

Storey County Public Works acknowledges that the Nevada Division of Environmental protection has issued a statewide National Pollutant Discharge Elimination System Permit to NDOT, for Discharges from NDOT Municipal Separate Storm Sewer System (MS4) (Permit No. NV0023329). To comply with Section 3.3 of the Statewide Permit NDOT is required to identify discharges from NDOT's MS4s into facilities treating domestic sewage not owned by NDOT. If any exist, NDOT is to secure written authorization from the respective utility company receiving the discharge. The following is an excerpt from your permit.

Permit No. NV0023329 Section 3.3
3.3 Discharges to Sanitary Sewer System
[3.3.1 For discharges into facilities treating domestic sewage, used in storage, treatment, recycling, and reclamation, of municipal or domestic sewage, that are not owned or operated by NDOT, the following shall be provided.
[3.3.1.1 Written and signed confirmation from each facility authorizing the discharge of pollutants into the facility system; and,
[3.3.1.2 A report of all authorizations is submitted to NDEP, no later than one (1) year after the effective date of this permit.

This letter expresses the written and signed confirmation from the Storey County Public Works to authorize the discharge of storm water runoff from NDOT's drop inlets along SR 341 into the Virginia City Wastewater Treatment Facility.

Storey County Public Works
Richard Bacus
Richard Bacus, Director

Storey County Commission
Greg Hess
Greg Hess, Commissioner

INCLINE VILLAGE PUBLIC WORKS

April 23, 2009

Steve M. Cooke, P.E.
Nevada Department of Transportation
Environmental Services Chief
1263 S. Stewart Street
Carson City NV 89701

RE: **Discharge to IVGID Sewer from the NDOT Incline Maintenance Yard Decant Facility**

Dear Mr. Cooke,

The Nevada Department of Transportation (NDOT) has constructed a decant facility at the NDOT Maintenance Yard on Mt Rose Highway. The purpose of the decant facility is to dewater materials collected from maintenance activities such cleaning out drainage structures, performing vacuum excavation, etc. and then disposing of the decant water to the Incline Village General Improvement District (IVGID) sewer. The decant facility has been built for the mutual benefit of NDOT, IVGID and Washoe County whom all perform similar maintenance operations and must meet the stringent discharge requirements in the Lake Tahoe Basin.

This letters serves as approval for the NDOT Decant Facility to discharge the decant water to the IVGID sewer located at the NDOT Maintenance Yard. Plans for construction of the facility had previously been prepared by NDOT and have been reviewed and accepted by IVGID. Thank you for providing this joint use facility to serve all of the agencies needs in Incline Village and Crystal Bay.

Sincerely,

Joseph J. Pomroy
Director of Public Works

c. T Buxton
Reading

INCLINE VILLAGE GENERAL IMPROVEMENT DISTRICT
CHAMPIONSHIP COURSE LAKE TAHOE
MOUNTAIN COURSE LAKE TAHOE
DIAMOND PEAK
INCLINE VILLAGE PARKS & RECREATION

CLARK COUNTY BOARD OF COMMISSIONERS
AGENDA ITEM

Petitioner: Denis Cederburg, Director of Public Works

Recommendation:

That the Board of County Commissioners approve and authorize the Chairman to sign Interlocal Agreement No. P051-17-179 between Clark County and the Nevada Department of Transportation ("NDOT") creating a partnership between the County and NDOT for storm sewer system material disposal. ***(For possible action)***

FISCAL IMPACT:

Fund #: 2020.000
Fund Center: 1260210000
Description: Storm Sewer Disposal

Fund Name: Road Fund
Funded Pgm/Grant: N/A
Amount: $2,500.00

Added Comments: N/A

BACKGROUND:

Clark County and the Nevada Department of Transportation desire to form a partnership for storm sewer system material disposal whereby the County would allow NDOT to use the County's West Sweeper Separator Facility located on Cameron Street and Oquendo Road for purposes of disposal of storm sewer material waste from NDOT's storm water sewer system.

In exchange for use of the County's facility, NDOT will be responsible for half of the annual estimated cost ($2,500.00) associated with the pre-treatment measures of the facility. The annual estimated cost is $5,000.00 and the County will also be responsible for half of this cost ($2,500.00). Additionally, NDOT will provide, on a monthly basis, for the transport of storm sewer waste material from the facility to disposal sites, and assist with maintenance of the facility. The attached Interlocal Agreement No. P051-17-179 identifies the responsibilities of both the County and NDOT and formalizes the partnership as it relates to storm sewer system material disposal.

The District Attorney's Office has reviewed and approved the interlocal agreement as to form.

APPROVED AS RECOMMENDED

Respectfully submitted,

DENIS CEDERBURG
Director of Public Works
DC:AS/LR/GMS/3-7-17
Attachment (Initial Interlocal Agreement P051-17-179)

Cleared for Agenda
3/7/17 MD

Agenda Item #
43

TRUCKEE MEADOWS
WATER RECLAMATION FACILITY
8500 Cleanwater Way
Reno, NV 89502
775.861.4100
www.tmwrf.com

April 27, 2017

James Murphy
Nevada Department of Transportation
District II Headquarters
310 Galletti Way
Sparks NV 89431

RE: Stormwater Vactor Truck Discharge to the Sanitary Sewer

Mr. Murphy

This letter is to acknowledge my conversation with your staff regarding the discharge of Vactor truck waste to the Truckee Meadows Water Reclamation Facility from your existing facility on Galletti Way, Sparks Nevada. You are approved to discharge up to 50,000 gallons per day to the sanitary sewer. All vactor truck waste must pass through your existing sand/oil separator prior to reaching the collection system.

If you have any questions regarding this letter you may contact me by electronic mail at mdrinkwater@cityofsparks.us or by telephone at 775-861-4100.

Sincerely,

Michael A. Drinkwater, P.E.
Treatment Plant Manger

C: Andrew Hummel, P.E., Utility Manager
Toby Ebens, Environmental Control Supervisor

CARSON CITY NEVADA
Consolidated Municipality and State Capital
PUBLIC WORKS

June 27, 2017

James Murphy
Nevada Department of Transportation
Stormwater Division
1263 S. Stewart Street
Carson City, NV 89712

RE: Approval Letter Allowing Dumping of Vactor Truck Waste from Storm Vaults into Sanitary Sewer.

Dear Mr. Murphy:

I am sending you this letter to approve the discharging of your Vactor Truck waste into the Carson City Sanitary Sewer System. You are approved to discharge 75,000 gallons per day of the combined waste streams from your truck wash and the vactor truck waste. Please make sure vactor truck operators use discretion when dumping Stormwater vault waste into this sand oil interceptor. All waste streams entering the Carson City Sanitary Sewer System will need to meet all Federal, State, and local discharge limits. If you have any concerns, comments, or questions please feel free to contact me at any time.

Sincerely,

Mark Irwin
Senior Environmental Control Officer
Carson City Public Works

CC: Kelly Hale
Environmental Control Foreman

3505 Butti Way, Carson City, NV 89701 (775) 887-2355 FAX (775) 887-2112
Operations: Water, Sewer, Streets, Wastewater, Landfill, Environmental
Engineering, Transportation, Capital Projects

Ken Tedford, Jr.
MAYOR

THE OASIS OF NEVADA
FALLON
Incorporated 1908

Robert H. Erickson
Councilman

James D. Richardson
Councilman

Kelly Frost
Councilwoman

August 7, 2017

James Murphy
Nevada Department of Transportation
Stormwater Division
1263 South Stewart Street
Carson City, NV 89712

RE: Approval Letter Allowing Dumping of Vacuum Truck Waste from Storm Vaults into Sanitary Sewer at 888 Harrigan Road, Fallon

Dear Mr. Murphy:

I am sending you this letter to approve the discharging of NDOT vacuum truck waste into the City of Fallon sanitary sewer system at the NDOT Maintenance Station facility located at 888 Harrigan Road in Fallon. You are approved to discharge a maximum of 5,000 gallons per month of vacuum truck waste. Please make sure vacuum truck operators use the truck wash station, on site, when dumping stormwater vault waste into the sand and grease interceptors. All waste streams entering the City of Fallon sanitary sewer system will need to meet all Federal, State and local discharge limits. If you have any concerns, comments, or questions please feel free to contact me at any time.

Sincerely,

Michael Miller, P.E.
City Engineer/Public Works Director

CC: Ryan Swirczek, Deputy Public Works Director
Robert Erquiaga, Administrative and Legal Director
Address File

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Appendix C Lake Tahoe TMDL Interlocal Agreement

INTERLOCAL AGREEMENT

TO IMPLEMENT THE

LAKE TAHOE TOTAL MAXIMUM DAILY LOAD

WHEREAS, Lake Tahoe is one of the rare large alpine deepwater lakes in the world with unique transparency, color and clarity, and is designated a Water of Extraordinary Aesthetic or Ecologic Value by the State of Nevada;

WHEREAS, degradation of Lake Tahoe's water quality threatens its ecological functions and its value as an outdoor recreational resource, international tourism attraction, and economic asset;

WHEREAS, stormwater runoff from urban land uses is the largest source of pollutant loads that impairs Lake Tahoe water quality and the management and control of storm water runoff provides the principal opportunity to control these pollutants;

WHEREAS, to restore Lake Tahoe's water quality and clarity to acceptable levels, the United States Environmental Protection Agency (USEPA) approved the Lake Tahoe Total Maximum Daily Load (TMDL) in August 2011. Pursuant to NRS 445A.580, the Lake Tahoe TMDL is a component of the planning process established for restoring impaired water bodies in Nevada, which the Parties believe may be more effectively achieved through the cooperative implementation of water quality improvement actions as opposed to a regulatory permit;

WHEREAS, the Parties are public agencies as defined in NRS 277.100(1)(a);

WHEREAS, NRS 277.110(2) provides that any two or more public agencies may enter into agreements with one another for joint or cooperative action under the provisions of NRS 277.080 to 277.170, inclusive;

WHEREAS, the Parties agree to work together in good faith using a collaborative approach to implement the Lake Tahoe TMDL on a feasible schedule;

NOW, THEREFORE, the Parties hereby execute and abide by the terms and conditions contained within this Interlocal Agreement (Agreement).

I. PARTIES & ROLES

A. The *Parties* to this Agreement are the Nevada Department of Transportation (NDOT) and the Nevada Division of Environmental Protection (NDEP). Herein, these entities in sum shall be collectively referred to as the *Parties*. Any singular entity may be referred to as *Party*. The term *Urban Implementing Partners* refers collectively to the implementing entities: Washoe County, Douglas County and the Nevada Department of Transportation (NDOT).

B. NDOT will serve as the lead entity for all undertakings related to the planning, execution, financing and coordination of implementation, tracking and reporting of urban load reduction actions within its jurisdiction. NDOT will communicate, coordinate and cooperate with public and private entities, including other Urban Implementing Partners, in cases where joint management actions are desirable or beneficial. It may be necessary to establish formal agreements with applicable participatory public and private entities to achieve the Purpose (Section III) of this Agreement. At NDOT's request, NDEP will actively participate in the coordination and establishment of such agreements.

C. NDEP will oversee implementation of the Lake Tahoe TMDL within the State of Nevada via this Agreement while it remains in effect. NDEP will continue to develop and adaptively manage in a transparent and inclusive manner, programs, policies and protocols necessary to track, report, evaluate and demonstrate incremental progress towards achieving the goals established by the TMDL.

II. BACKGROUND

A. The Federal Clean Water Act requires states to adopt standards to protect beneficial uses designated for waterbodies and to monitor and assess these waters for impairment. Assessment of Lake Tahoe monitoring data prompted its listing on Nevada's List of Impaired Waterbodies for non-attainment of the clarity standard and impairment of the Water of Extraordinary Aesthetic or Ecologic Value beneficial use designation.

B. Non-attainment of water quality standards requires the development of restoration plans called Total Maximum Daily Loads under the federal Clean Water Act. The Nevada Division of Environmental Protection (NDEP) collaborated with the California Lahontan Regional Water Quality Control Board (Lahontan Water Board) for more than a decade to develop the Lake Tahoe TMDL to address Lake Tahoe's degraded clarity. The USEPA approved NDEP's TMDL on August 16, 2011.

C. The overarching goal of the TMDL is to return Lake Tahoe to its historic annual average deepwater clarity of 97.4 feet (Numeric Target). The TMDL also established an interim goal termed the "Clarity Challenge" that, if achieved, would indicate reversal of the historic declining clarity trend. It is anticipated

that achieving the 15 year pollutant load reduction milestone in 2026, will result in an annual average clarity of 78 feet as measured over the period from 2026-2031.

D. The TMDL identifies fine sediment particles (FSP), total phosphorus (TP) and total nitrogen (TN) as the pollutants of concern for deepwater clarity. Each controls the distance that light is able to penetrate into the water column. However, the light scattering effect of FSP less than sixteen micrometers in diameter (<16 µm) was determined to exhibit a greater influence on clarity.

E. The TMDL analysis indicates that achieving the TMDL goal is possible with substantial pollutant load reductions from the urban stormwater source category. Stormwater runoff from urban land uses is the largest loading source of FSP and phosphorus to the Lake and also the greatest opportunity to reduce loadings of these pollutants. Broader application of conventional urban stormwater treatment will be beneficial; however, implementation of innovative and advanced controls may be necessary to meet TMDL goals. Examples include: alternatives to roadway abrasives applications, advanced roadway sweeping practices and equipment, and enhanced stormwater treatment using biological or chemical processes.

F. The TMDL establishes five-year pollutant load reduction milestones for the urban stormwater source category as indicated in Table 1, assuming that global climate change, catastrophic events, economic factors, and/or other unavoidable constraints do not adversely affect progress.

Table 1. Urban stormwater pollutant load reduction milestone schedule established by the Lake Tahoe TMDL. MS = milestone; Year = water year in which milestone ends (September 30 of indicated year); FSP = Fine Sediment Particles; TP = Total Phosphorous; TN = Total Nitrogen. Percent reductions are from jurisdiction baseline values. Shading represents the timeframe under this agreement.

Five-year Pollutant Load Reduction Milestone Schedule													
MS	5 yr	10 yr	15 yr	20 yr	25 yr	30 yr	35 yr	40 yr	45 yr	50 yr	55 yr	60 yr	65 yr
Year	2016	2021	2026	2031	2036	2041	2046	2051	2056	2061	2066	2071	2076
FSP	10%	21%	34%	38%	41%	45%	48%	52%	55%	59%	62%	66%	71%
TP	7%	14%	21%	23%	26%	28%	31%	33%	36%	38%	41%	44%	46%
TN	8%	14%	19%	22%	25%	28%	31%	34%	37%	40%	43%	46%	50%

G. The Lake Clarity Crediting Program (Crediting Program) was developed jointly by NDEP and the Lahontan Water Board to define standardized protocols for the comprehensive and consistent quantification, tracking and reporting of load reduction actions taken by local governments and state transportation agencies. The program incentivizes Urban Implementing Partners to implement priority controls to meet load reduction targets and provides accountability for the expenditures of public funds on such actions.

III. PURPOSE

The purpose of this Agreement is to formally establish a commitment by each signatory Party to make a collective effort to restore and protect Lake Tahoe's clarity. This Agreement outlines goals, commitments and actions which the Parties agree to pursue in good faith. In identifying the actions and responsibilities of each Party, this Agreement provides the framework for the successful implementation of the Lake Tahoe TMDL, and the attainment of the goals set forth therein, on a feasible schedule. Inherent in the use of this agreement-based approach is the acknowledgement that implementation success is, in part, dependent upon the establishment of a process that cultivates collaboration and cooperation between NDOT and NDEP.

IV. COMMITMENTS & ACTIONS

The Parties hereby commit to implement the following actions, and abide by the following conditions:

A. Pollutant Controls

1. NDOT will prepare and maintain a Stormwater Load Reduction Plan (SLRP) that specifies the priority list of pollutant control actions and projects NDOT has registered and anticipates registering through the Lake Clarity Crediting Program (Crediting Program; Section IV.B) to meet the credit milestones and targets contained in Table 2. The Parties acknowledge that planning beyond the term of the agreement is needed to ensure future load reduction targets will be met. The SLRP shall be maintained as a five year schedule that is updated and reported as a component of the Annual Stormwater Program Report (Section IV.D).

2. NDOT will implement, operate, inspect and maintain the pollutant controls identified in the SLRP according to the schedule indicated. NDOT will oversee and coordinate financing for all aspects of pollutant control implementation including planning and design, construction, and activities related to Crediting Program participation. NDOT, as an implementing entity, will pursue self-funded and external funding sources to implement the SLRP. NDOT acknowledges and accepts the responsibility to fund operations and maintenance of the pollutant controls implemented.

B. Lake Clarity Crediting Program

1. NDOT will participate in the Lake Clarity Crediting Program (Crediting Program). NDOT will register and verify pollutant controls in accordance with the protocols specified in the Crediting Program Handbook and associated stormwater tools. Improvements to Crediting Program protocols or tools will not require adjustments to load reduction estimates or credit schedules of registrations in effect at the time such programmatic changes are made.

2. NDEP will administer the Crediting Program in accordance with the Program Handbook. NDOT implementation progress will be measured, tracked and assessed in accordance with the protocols contained in the Program Handbook. Credits will be awarded to NDOT for the continued implementation and registration of ongoing, effective pollutant controls that reduce pollutant loads to Lake Tahoe.

3. NDOT will strive to achieve the five-year credit milestones ("Milestones") and intermediate annual credit targets ("Targets") established in Table 2. Attainment of the five-year credit milestones will demonstrate accomplishment of the FSP load reduction milestones established by the TMDL.

   a. Annual credit targets established for intermediate years are guidelines used for the purpose of demonstrating incremental progress toward attaining five-year milestones and will not be used to determine compliance with this agreement on an annual basis.

   b. NDOT may propose an alternate schedule of intermediate credit targets that are better aligned with planned implementation activities and include updates to the intervening goals in the Annual Stormwater Program Report.

Table 2. Five-year FSP load reduction and associated credit milestones (bold) and intermediate FSP load reduction and associated credit targets established for NDOT. The water year begins on October 1 and ends September 30 of the year indicated. Credit declarations are reported in the Annual Stormwater Program Report, due on March 15 of the following year.

Water Year	**2016**	2017	2018	2019	2020	**2021**	2022	2023	2024	2025	**2026**
FSP Load Reduction	**10%**	12%	15%	17%	19%	**21%**	23%	25%	28%	31%	**34%**
Credit Target/ Milestone[1]	**79**	123	154	174	195	**215**	236	256	287	318	**349**

[1] Credit Targets/Milestones for 2016 are based on a Jurisdiction Baseline Load estimate conducted in 2013, while Credit Targets/Milestones for years 2017-2026 are based on revised Jurisdiction Baseline Load estimates produced in 2016.

4. NDOT will implement an inspection program to assess the condition of registered pollutant controls in accordance with the Crediting Program Handbook. NDOT, or a qualified third party conducting the condition assessment observations on its behalf, will coordinate with NDEP for their participation during field inspections. During joint inspections, NDOT, and/or the third party representative thereof, and NDEP will attempt to agree on the measurements to be recorded. The Parties retain the option to record different results if agreement on observations cannot be reached.

5. NDEP, jointly with Lahontan Water Board, will manage the Crediting Program adaptively through the TMDL Management System, a transparent and inclusive program improvement process. Any modifications or alterations to Crediting Program tools and/or protocols will be accomplished in accordance with the procedures described in the TMDL Management System Handbook, the current version of which is available on the TMDL Online Interface.

C. Stormwater Monitoring

1. NDOT will implement, either individually or collaboratively, a stormwater monitoring program. At the time of execution of this agreement, Nevada and California Urban Implementing Partners are involved in a collaborative effort to carry out the Implementers Monitoring Program (IMP). Continued implementation of the approved IMP over the term of this agreement (Section V) shall fulfill NDOT's commitment.

2. NDOT or its authorized representative will develop and submit an annual electronic report to NDEP for approval that presents, summarizes and interprets the results of the data collected during the previous water year (October 1 – September 30). The monitoring report is due on March 15 each year.

3. Within 30 days of receipt, NDEP will provide written notification of acceptance or refusal of the monitoring report. If refused, NDEP will provide a list of items to be resolved for the monitoring report to gain acceptance. NDOT or its authorized representative will address comments within 30 days and resubmit the monitoring report for NDEP acceptance. NDEP will work with NDOT and/or its authorized representative to resolve any comments remaining unsatisfactorily addressed within a timeframe agreed upon by the Parties.

4. NDOT or its authorized representative may submit proposed adjustments to the approved IMP. NDEP will consider and, within 30 days of receipt, provide written notification of acceptance or refusal of the proposal. NDEP will work with NDOT toward a mutually agreeable resolution of the issue prompting the proposed adjustment.

5. The Parties acknowledge the scale of the stormwater monitoring program is contingent upon available funding and budget allocations as determined by the governing boards of the respective Urban Jurisdictions. Should funding allocations become insufficient to implement the approved monitoring plan, an evaluation will be performed to identify where efficiencies may be gained and how the monitoring plan may be scaled to better align with the available level of funding while retaining a minimum level of scientific creditability.

D. Annual Stormwater Program Report

1. Each year by March 15, NDOT will submit to NDEP for acceptance an annual report summarizing NDOT's stormwater program progress, activities and accomplishments during the previous water year (October 1-September 30). The report shall also document upcoming and planned actions and projects

NDOT anticipates registering over a five-year planning horizon to meet the annual credit targets and five-year credit milestones identified in Table 2. The report will include a fiscal analysis that demonstrates how pollutant controls are proposed to be implemented, operated and maintained.

2. The report will include the following information:

   a. Accomplishments Summary – the report shall summarize annual progress towards meeting Table 2 credit milestones, including registered catchments and associated credit declarations. If progress is insufficient to meet any credit milestone, an explanation of causes or conditions for the shortfall shall be provided, as well as any modifications to the approach that will ensure the next five-year milestone is met.

   b. Stormwater Load Reduction Plan (SLRP) – the report will specify the priority list of pollutant controls NDOT anticipates registering through the Crediting Program over a five year planning horizon to meet the Table 2 credit milestone schedule. Specific content shall include, but is not necessarily limited to the following information:

      i. A description, geographic location information and timeline of the pollutant controls to be implemented;

      ii. The estimated load reduction/credit potential associated with implementation of the pollutant controls;

      iii. Any proposal to update the intermediate credit target schedule that better aligns with planned implementation activities.

   c. Fiscal Analysis – the report will provide an estimate of the costs to administer NDOT's Tahoe stormwater program.

      i. Budget – estimate the total and annualized expenditures necessary to operate and maintain implemented and registered pollutant controls, as well as to design, construct, implement, operate, register, inspect and maintain pollutant controls contained in the five year SLRP.

      ii. Finance Plan – identify and describe anticipated and/or targeted funding sources and/or finance mechanisms to cover the costs associated with the budget estimates. The plan shall identify where financing is insufficient to cover the estimated budget, as well as a discussion of future financing mechanisms being explored to allay any identified finance gap.

   d. Barriers – the report will identify constraints to implementing the pollutant controls identified in the five year SLRP, and/or to meeting established credit milestones, as well as any plans or potential mechanisms to overcome them.

e. Baseline discrepancies – the report will provide a tabular summary of registered catchments that tracks and reports the differences in fine sediment particle loading results between the catchment-specific baseline loading estimate performed for the jurisdictional baseline load analysis and baseline scenario conducted for the purposes of registration. This information will be used to update the schedule of annual credit targets and five-year milestones contained in the 2021-2026 Interlocal Agreement.

3. Within 30 days of receipt, NDEP will provide written notification of acceptance or refusal of the Annual Stormwater Program Report. If refused, NDEP will provide a list of items to be resolved for the report to gain acceptance. NDOT will address comments and resubmit the report within 30 days. NDEP will work with NDOT to resolve any comments that remain unsatisfactorily addressed within a timeframe agreed upon by the Parties.

V. TERM & UPDATE

The term of this Agreement shall terminate on September 30, 2021. As the anticipated timeframe to achieve the TMDL numeric target is the year 2076, if the Parties fail to approve and execute a renewal of this Agreement, with or without any amendments prior to the termination date, then the Parties agree to use best efforts to comply with the terms and conditions of this Agreement until a subsequent agreement is approved and executed by the Parties. If the Parties fail to approve and execute a subsequent agreement within six (6) months of the termination date, NDEP may pursue a more regulatory approach.

VI. MODIFICATION

At any point during this term, the Agreement may be modified with the consent in writing of both signatory Parties. Modifications to the Agreement will not result in a change to or extension of the term (Section V) of this Agreement.

VII. EVALUATION & CONTINGENCY

1. NDEP will evaluate the performance of NDOT and make a determination of whether the commitments set forth in this Agreement are in good faith being met, or whether there exist other causes preventing their performance. Factors that will be considered in the evaluation of performance and/or the need to act on a contingency include but are not limited to: attainment of five-year credit milestones; the degree to which a milestone is not met; NDOT's good faith attempt to perform any commitments; changes or modifications to the Crediting Program Handbook and process that significantly affect NDOT's planning or implementation ability; economic, budget allocations, feasibility or availability of funding sources or other impediments; and past performance.

2. If NDEP determines NDOT has failed to perform its commitments under this Agreement and such failed performance has not been caused by the regulatory action of NDEP itself or by the actions or inactions of another party, NDEP will consider and evaluate the need to implement a more regulatory approach.

3. If lack of available funding or insufficient budget allocations are identified as a primary factor limiting NDOT's performance or causing the failure of performance and the attainment of credit targets or any other commitment under this Agreement, NDEP may consider extending the implementation timeframe through modification to the load reduction milestone schedule.

4. NDEP will annually evaluate the effectiveness of this Agreement. If the Agreement is determined to be ineffective at achieving its intended purpose, NDEP will consult with NDOT to determine the reasons for its ineffectiveness and develop recommendations for subsequent revisions to this Agreement.

VIII. TERMINATION

If any Party fails without adequate cause, excuse or justification to abide by any material term of this Agreement, the non-violating Party may give the violating Party a 30 day written notice to cure such failure. Failure to cure shall constitute a breach of this Agreement. If NDOT is the breaching party, NDEP may then give notice of termination of this Agreement and pursue a more regulatory approach.

IX. DISPUTE RESOLUTION

1. The Parties agree to work together in good faith to address and resolve any issues or dispute.

2. The Crediting Program Handbook contains the communication protocols to resolve disputes that may arise between NDEP and NDOT.

3. If an issue arises that is not related to the processes described in the Crediting Program Handbook, it will be handled by progressive elevation within each respective Party's management structure.

4. The NDEP Administrator is the final decision making authority for any dispute that is elevated to that level.

X. SEVERABILITY

If any provision of this Agreement or any provision of any document incorporated by reference shall be held invalid, such invalidity shall not affect the other provisions of this Agreement which can be given effect without the invalid provision, if such

remainder conforms to the requirements of applicable law and the fundamental purpose of the Agreement, and to that end the provisions of this Agreement are declared to be severable.

XI. RESERVATION OF RIGHTS

1. Nothing in this Agreement is intended to restrict the authority of any Party to act as provided by statute or regulation.

2. This Agreement is not intended to, and does not create any right, benefit or trust responsibility by any party against the Parties to this Agreement, their respective agencies, officers, or any person.

3. This Agreement is an internal agreement between the Parties and does not confer any right or benefit on any third person or party, private or public.

XII. LIMITATIONS

Nothing in this Agreement shall be construed to require actions by the Parties which are inconsistent with local, State, or Federal laws and regulations or any court order.

XIII. EXECUTION IN COUNTERPARTS

The Parties may execute this Agreement in counterparts, each of which is deemed an original and all of which constitute only one agreement.

XIV. ALL WRITINGS CONTAINED HEREIN

This Agreement contains all the terms and conditions agreed upon by the Parties. No other understandings, oral or otherwise, regarding the subject matter of the Agreement shall be deemed to exist or to bind the Parties hereto.

XV. SIGNATORIES

Each undersigned representative to this Agreement certifies that he or she is fully authorized by the Party whom he or she represents to enter into the terms and conditions of this Agreement and to execute and legally bind such Party to this document.

NEVADA DEPARTMENT OF TRANSPORTATION REPRESENTATIVE

X Rudy Malfabon, P.E., Director
Name and Title

X _____
Signature

X 11-7-16
Date

Approved as to Legality and Form:

X _____
Louis F. Holland, Deputy Attorney General

X 10-27-2016
Date

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION REPRESENTATIVE

X David Emme, Administrator, NDEP
Name and Title

X _____
Signature

X 11/22/16
Date

Approved as to Legality and Form:

X _____
Frederick J. Perdomo, Senior Deputy Attorney General

X 11-17-16
Date

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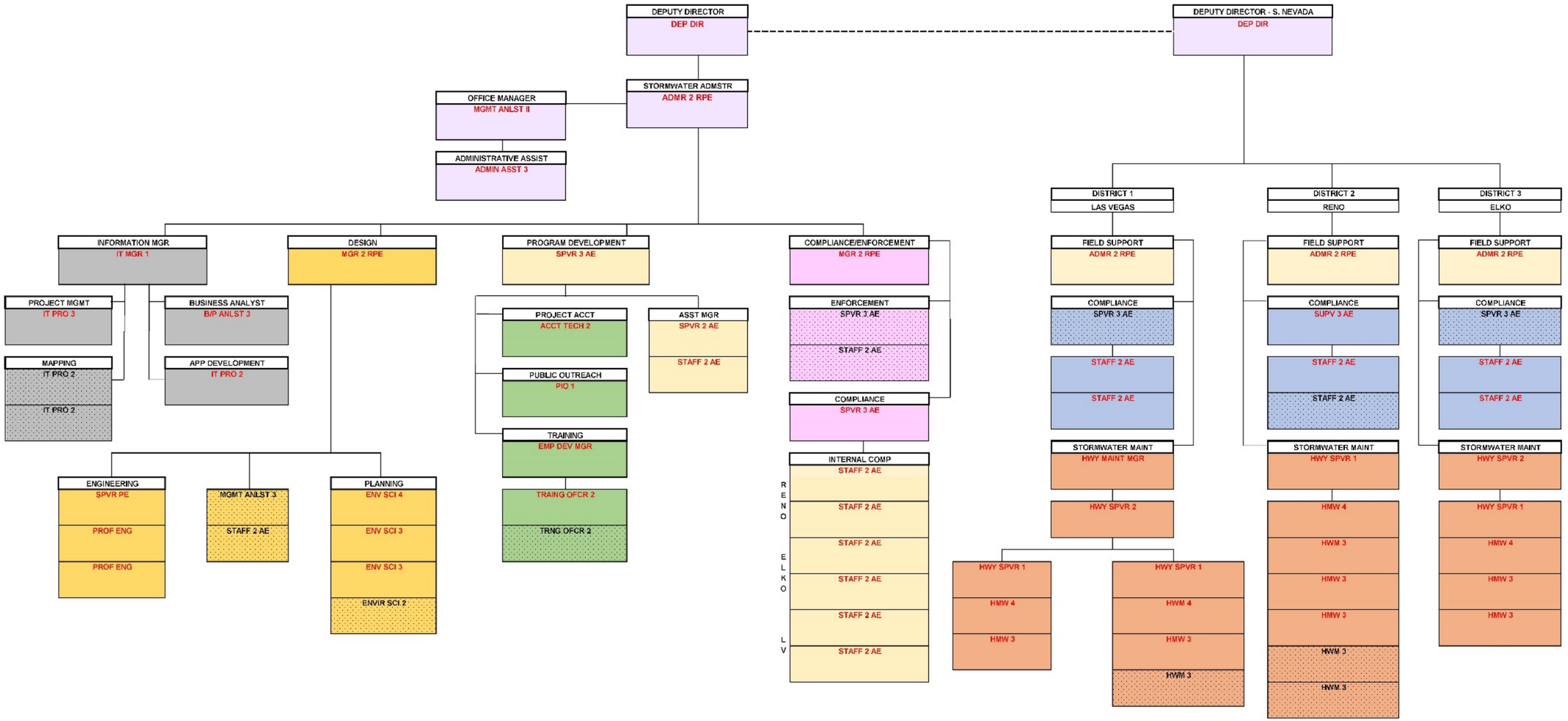
Appendix D Stormwater Division Organizational Chart

NDOT STORMWATER PROGRAM

Division Organization, as of December 1, 2017



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