STORMWATER PROGRAM

AWMA
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Water is a precious resource in Nevada

Stormwater runoff, generated from rain and snowmelt, flows over land and impervious surfaces, such as streets and parking lots, and can pick up pollutants that flow into Nevada’s water bodies. These pollutants, such as sediment and chemicals, can harm our rivers, streams and lakes.

The Nevada Department of Transportation developed a Stormwater Division to:

• Protect Nevada’s water resources
• Prevent contamination by controlling sources of pollutants
• Preserve clarity and reduce pollution in stormwater runoff from NDOT roads and projects
MISSION

Promote stormwater stewardship as an essential element of all NDOT operations.
In 2011, NDOT was audited by EPA and was found to be deficient in the following areas:

- Implementation of the 2005 Stormwater Management Plan
- Mapping of all outfalls
- Developing Facility Pollution Prevention Plans
- Implementing a comprehensive stormwater training program
- Maintenance facility and construction site Best Management Practices
- Illicit Discharge and Detection Elimination program
- Stormwater public education and outreach program

Nevada Division of Environmental Protection and the Governor’s Office worked with NDOT to address the deficiencies.

In late 2014, EPA produced a 60-page draft consent decree (CD) aimed at creating a compliant and sustainable NDOT Stormwater program, with very short timeframes for completion.
CONSENT DECREE

• NDEP, the Governor’s Office and NDOT prepared a large budget amendment and a legislative bill to provide NDOT with the resources and authority to respond to the draft CD

• The approved budget amendment at more than $13 million included 59 new positions for Stormwater and major equipment

• Senate Bill 324 provided NDOT with enforcement authority to prevent unauthorized discharges onto state highways, rights-of-way and conveyance systems. The bill also established a new deputy director position and created the Advisory Committee on Transportational Storm Water Management to oversee implementation of the program

• After lengthy negotiations with EPA, the CD was finalized and became effective September 14, 2016
Stormwater Management Program Plan (SWMP)

- Modify the 2013 SWMP to integrate changes
- Post the modified SWMP on NDOT's website and include verification of most recent SWMP post in the Annual Report

Annual Report

- Quantitative and qualitative assessments
  - Activities, measurable goals
  - Meeting timelines, effectiveness in measuring activities, effectiveness of activities in reducing discharge of pollutants
  - Water quality monitoring data and need for monitoring data
- Budget breakdown
Public Stormwater Education Program

Enhance and update Stormwater Management Website

- Link to NPDES permit
- Reports and manuals
- Illicit Discharge Reporting contacts to NDOT, NDEP EPA
- Easy access by public
Employee Training

Implement a Stormwater certification program to provide specialized training for employees

- Illicit Discharge Detection and Elimination Program
- Construction Site Runoff Program
- Post-Construction Stormwater Management Program
- Operation and Maintenance of the MS4

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

Construction Site Runoff Control

- Procedures for reviewing and inspecting construction plans and requirements
- Track location of all active NDOT construction contracts
CONSENT DECREE
REQUIREMENTS

Post-Construction Stormwater Management Program
- Decision making process for impaired waters
- Robust evaluation for all other waters
- Post-construction control measures and technical specifications
- Long-term operations and maintenance
- Tracking database

Illicit Discharge Detection and Elimination
- Implement current IDDE Guide
- Field Screening
  - Outfall inspection plan
  - Database for location size and type
  - Prioritization plan
- Inspections, forms and records
- Promote IDDE reporting through NDOT's website
Operation and Maintenance Program
• Develop a comprehensive storm system map that identifies all NDOT assets in GIS format
• Storm Sewer System Inspections and Maintenance
  ❖ conduct periodic physical inspections and cleanings
  ❖ prioritize, inspect and clean storm sewer system

Maintenance Facilities (100+)
• Facility Pollution Prevention Plans
• Maintenance Facility BMP Manual
• Periodic inspections of all maintenance facilities
CONSENT DECREE
REQUIREMENTS

Civil Penalty
• $120,000 total; half to EPA and half to NDEP

Quarterly Reporting
• NDOT, NDEP and EPA shall have quarterly meetings to discuss compliance with CD schedule

Stipulated Penalties
• $1,000 / each day late failure to pay civil penalty
• $7,500 failure to complete one task
• $25,000 failure to complete two to three tasks
• $40,000 failure to complete more than three tasks
• Incomplete task: amounts double quarterly until the task is completed
NDOT pledges $13 million to improve stormwater treatment across Nevada

Stormwater is automated and integrated into all elements of NDOT operations.
Planning and Design

Improves water quality associated with transportation projects by providing effective, efficient, innovative, and maintainable solutions

- Evaluate new BMPs, maintenance strategies and impacts of roadway runoff to surface waters
- Implement stormwater monitoring program
- Design, review and implement cost effective stormwater improvements and solutions for NDOT projects
- Update the Department’s Stormwater Planning and Design Guide
PROGRAM UPDATE

Construction, Operations, Maintenance
Compliance and Enforcement
Ensures that NDOT and their contractors maintain compliance with the regulatory requirements

- The Standard Specification for Road and Bridge Construction, Temporary Pollution Control
- NDOT Stormwater Inspection Prioritization Plan (For Construction and Encroachment Projects)
- NDOT Illicit Discharge Field Investigation Guide and Procedures
- NDOT Dry Weather Outfall Monitoring Plan
Assess, Report, Evaluate and Improve

- Quarterly Reporting
  - EPA
  - Interim Finance Committee
  - ACTSWM
  - Transportation Board
PROGRAM UPDATE

Stormwater Asset Map
Google Earth

Las Vegas Blvd

EAMS, GIS

I-580
PROGRAM UPDATE

Geographical Information System (GIS)

Field Data Collection with Mobile Devices

EAMS, GIS

Stormwater Asset Map Data

Outfall Inspection
Enterprise Asset Management System (EAMS)

EAMS will consist of the following four initial components:

- Stormwater Management System
- Maintenance Management System
- Pavement Management System
- Bridge Management System
TRAINING

- Employee and contractor training
  - Stormwater Awareness class
  - 16 Hour Stormwater Construction Training (AGC)
  - Maintenance Yard Training in development
PROGRAM UPDATE

OUTREACH

• Coverage of current events (flood)
• Drawing contest for K-5 students
• NDOT Stormwater 2017 Calendar
• Newsletters
• Educational videos (PSA)
• Community meetings
• Public events
• Industry events
• Social media

TRAINING, OUTREACH, PROGRAM DEVELOPMENT

loveNVwaters.com
PROGRAM UPDATE

PROGRAM DEVELOPMENT

• Oversee implementation for training, public outreach and education, budget management, and compliance reporting

• Ensuring NDOT projects are compliant with Section 401 and 404 of the Clean Water Act
VISION

Be a leader in stormwater management and preserve Nevada’s water quality for future generations.