



**Municipal Separate Storm Sewer System (MS4)
NDEQ Permit No: NE0134015
January 1, 2010 – December 31, 2010**

March 22, 2011

Nebraska Department of Environmental Quality
Wastewater Section
1200 N Street, Ste. 400
PO Box 98922
Lincoln, NE 68509-8922

ATTN: Blayne Renner, Stormwater Program Coordinator

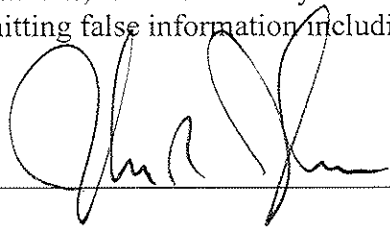
RE: Nebraska Department of Roads Municipal Stormwater Permit [NE0134015]

Dear Blayne:

Per Part IV.A of the Nebraska Department of Roads (NDOR) Municipal Stormwater Permit [NPDES Permit NE0134015], NDOR is submitting the attached, signed and certified Annual Report for Permit Year *Four (January 1, 2010 – December 31, 2010)*.

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

Signed:



Date:

3-29-11

Printed Name: John Jacobsen

Title:

Deputy Director

TABLE OF CONTENTS

	<u>Page</u>
EXECUTIVE SUMMARY OF PROGRAM ACTIVITY	2
1.0 PUBLIC EDUCATION AND OUTREACH.....	6
2.0 PUBLIC PARTICIPATION AND INVOLVEMENT.....	21
3.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION.....	22
4.0 CONSTRUCTION SITE RUNOFF CONTROL	28
5.0 POST-CONSTRUCTION SITE RUNOFF CONTROL	35
6.0 POLLUTION PREVENTION AND GOOD HOUSEKEEPING	40
7.0 ADDITIONAL REQUIREMENTS	44

List of Tables

TABLE 1 NUMBER AND NATURE OF EDUCATION ACTIVITIES.....	10
TABLE 2 SUMMARY OF ILLICIT DISCHARGE DETECTION AND ELIMINATION INSPECTIONS AND ENFORCEMENT ACTIONS	26
TABLE 3-1 NPDES PERMITTED CONSTRUCTION PROJECTS WITHIN MS4 BOUNDARY.....	29
TABLE 3-2 SUMMARY OF CONSTRUCTION SITE RUNOFF CONTROL INSPECTIONS AND ENFORCEMENT ACTIONS.....	33
TABLE 4 SUMMARY OF POST-CONSTRUCTION SITE RUNOFF CONTROL INSPECTIONS AND ENFORCEMENT ACTIONS.....	38
TABLE 5 SUMMARY OF POLLUTION PREVENTION/GOOD HOUSEKEEPING INSPECTIONS AND ENFORCEMENT ACTIONS	42
TABLE 6 CURRENT RESEARCH PROJECTS.....	45

List of Figures

FIGURE 1-1 NDOR STATE-WIDE MS4 AREAS.....	4
FIGURE 1-2 NDOR COMPLIANCE TECHNICAL ADVISORY GROUP.....	5

Executive Summary of Program Activity

- ▶ The State-wide Storm Water Management Program (SWMP) was developed by the Nebraska Department of Roads (NDOR) in 2006 to comply with Municipal Separate Storm Sewer System (MS4) Permit application requirements.
- ▶ This Annual Report documents MS4 Permit compliance efforts made during year four, 2010 (January 1, 2010 through December 31, 2010).
- ▶ The following highlights the major accomplishments made throughout the year:

Education and Outreach

- ✓ A total of 14 on site Facility Runoff Control Plan (FRCP) audits provided a “hands-on” training approach to directly reduce stormwater impacts to water bodies via facility inspections and interviews.
- ✓ The FRCP training CD was distributed through the New Supervisor/Superintendent Training course developed by the Field Maintenance and Activities Team (FMAT) team. The video is also available on NDOR’s intranet site.
- ✓ NDOR trained and certified approximately 270 people in the NDOR Erosion and Sediment Control for Inspectors Course. More than 1000 people across the state have been certified in NDOR’s program.
- ✓ The Erosion and Sediment Control Pocket Guides were distributed at all NDOR Erosion and Sediment Control Inspector classes. Trainers reference the pocket guide throughout the training to familiarize attendees with the information included in it. To date approximately 400 guides are remaining out of the 3000 printed in 2009. The pocket guides were a successful outreach effort and the Department is considering developing and printing an updated version to incorporate permit changes and highlight new BMPs.
- ✓ Environmental Awards were presented to contractors and project managers for implementing best management practices on both construction sites and at maintenance facilities.

Public Involvement

- ✓ NDOR held quarterly meetings with the Compliance Technical Advisory Group (CTAG) and conducted monthly CTAG Workgroup meetings throughout the year to work on project specific items.
- ✓ NDOR also meets with the District Environmental Coordinators (DEC) on a regular basis. This group is having a positive impact on the MS4 Program by providing the NDOR Central Office with a direct environmental contact in each District and by assisting with construction site and maintenance facility site stormwater inspections.

Illicit Discharge Detection and Elimination

- ✓ The initial outfall mapping/monitoring has been completed for North Platte, Lexington, Kearney and Lincoln and South Sioux City
- ✓ Outfall mapping/monitoring efforts have continued in the Omaha area and are projected to be completed in 2011.
- ✓ NDOR maintains a GIS database where outfalls are mapped and tracked.

Construction

- ✓ District Environmental Coordinators and Roadside Stabilization staff began utilizing the new environmental inspection program (ECO-Database) in 2010 and recorded more than 180 inspections statewide throughout the year. This program provides NDOR with a valuable tool to conduct and track environmental compliance inspections electronically utilizing a web based computer program.
- ✓ The Roadside Stabilization Unit completed a revision of all Section 800 Specifications (Seeding/Erosion Control). Several good housekeeping specifications will also be added to the list.
- ✓ The SWPPP template that is used by NDOR for construction storm water permitted projects was also revised over the past year to make the document more user friendly and to address permit compliance more efficiently.

Post Construction

- ✓ NDOR completed the Lynn Creek Bank Stabilization Project. Included in this project are several BMPs designed to treat stormwater runoff from the NDOR District 1 Construction Office.
- ✓ Chapter 3 (Post Construction Stormwater Management) continues to be the priority for the post construction program. A draft copy was distributed to all CTAG members in December for review. The CTAG Post Construction Workgroup will meet regularly in 2011 to address comments and move forward.
- ✓ Projects scheduled to let in 2013 or later were informally reviewed for Post Construction Treatment BMPs during the Environmental Coordination Meetings.

Good Housekeeping/Pollution Prevention

- ✓ A total of 17 audits were performed across NDOR District 2 and Operations Headquarters. Seven of nine total areas on the Operations campus had satisfactory grades under the FRCP program, while two had grades of needs improvement due to lack of documentation. District 2 audits resulted in grades of Needs improvement for two facilities, Satisfactory at four facilities, and one Outstanding grade was received in that district.
- ✓ Another key environmental program that works in tandem with the stormwater program is the Spill Prevention Control and Countermeasure Program (SPCC) (40 CFR part 112). The SPCC program is in place at a majority of NDOR maintenance facilities and requires NDOR staff with oil handling responsibilities to obtain annual training. NDOR Operations Division worked with Human Resources and Information Technology in 2010 to update the training narrative, slides, and test to make it specific to NDOR maintenance facilities. The training and test are administered online through Talent Edge Learning Management and PureSafety.

Figure 1-1 NDOR State-wide MS4 Areas

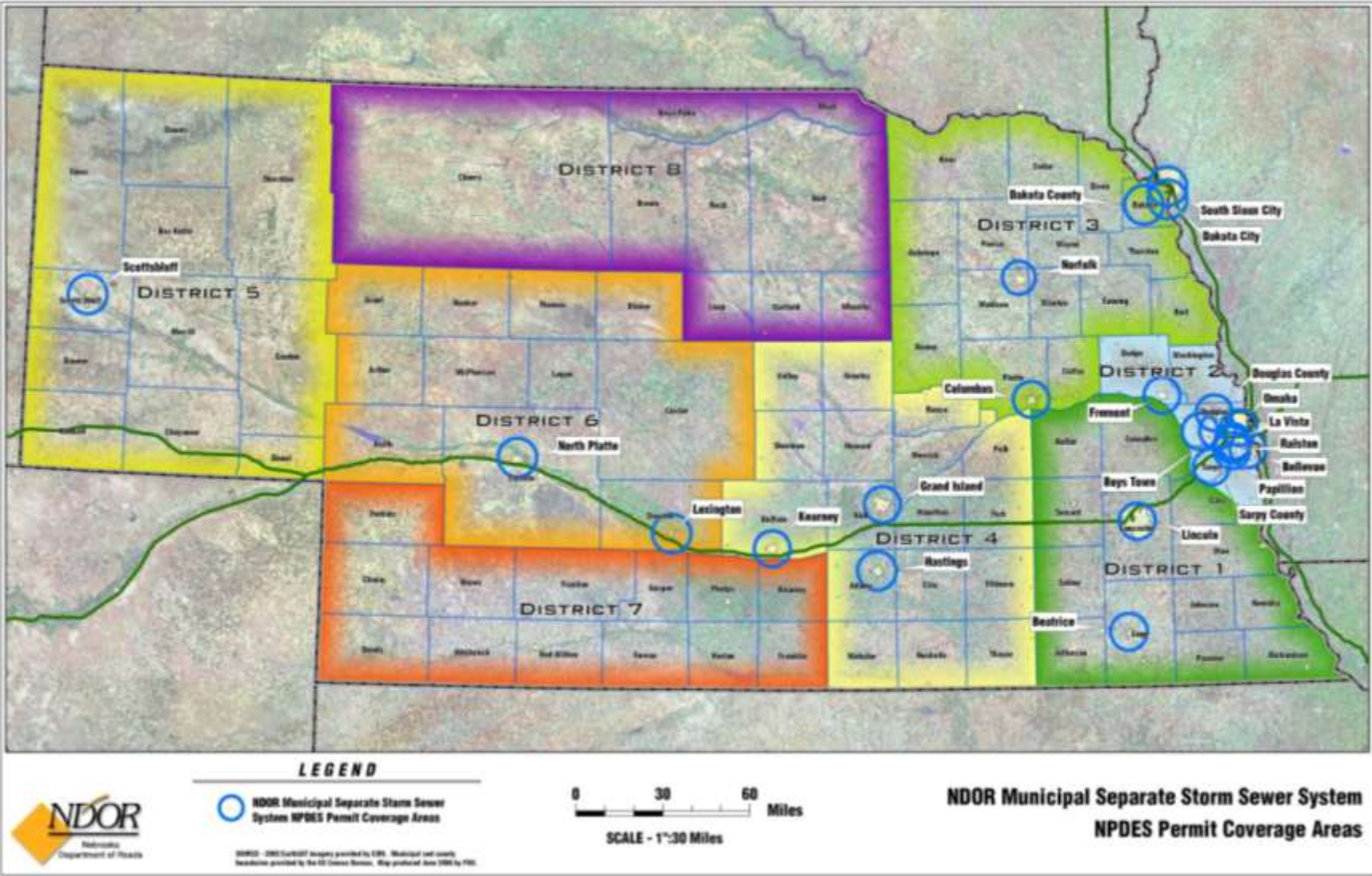
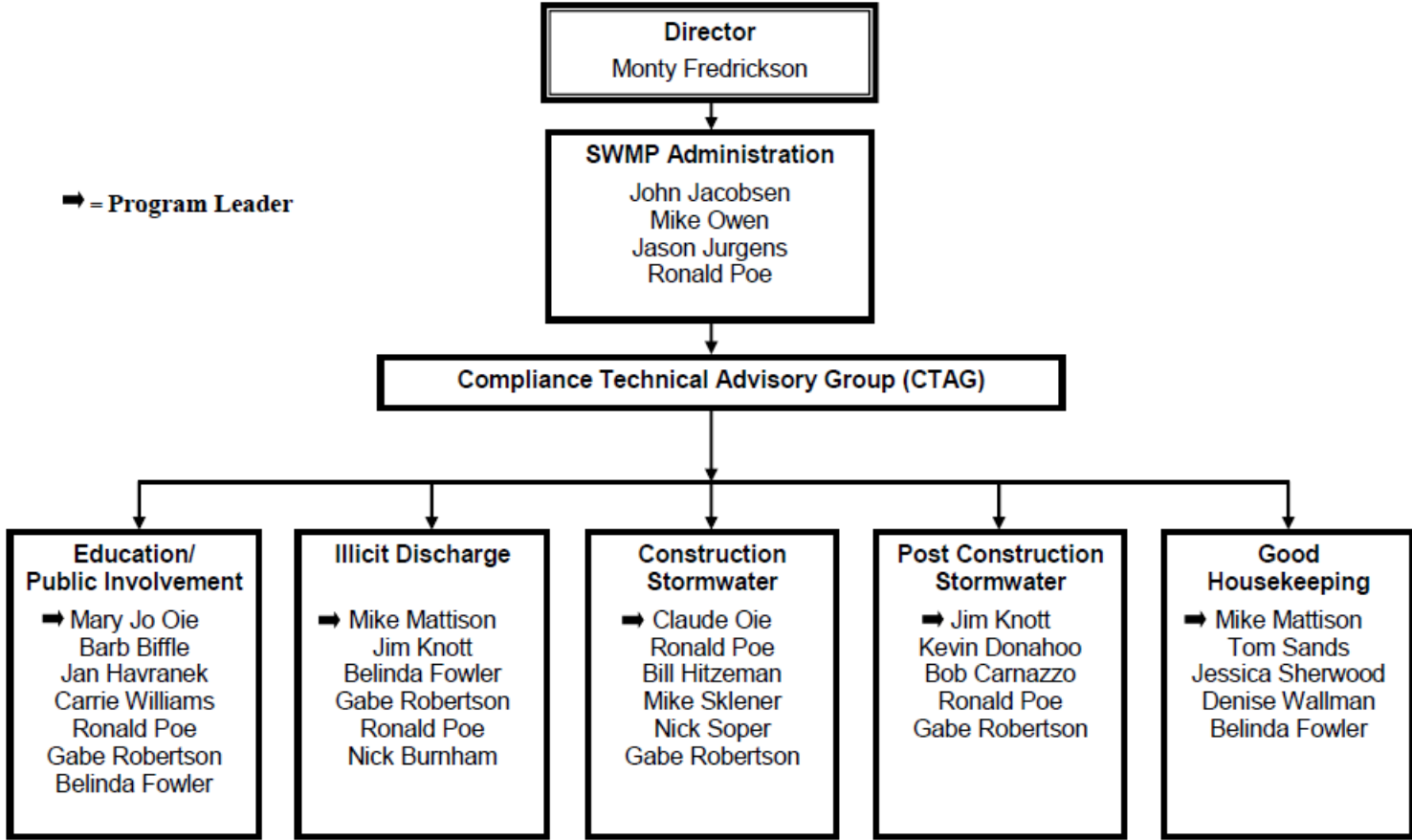


Figure 1-2 NDOR Compliance Technical Advisory Group

State-Wide Stormwater Management Program



1.0 PUBLIC EDUCATION AND OUTREACH

NDOR trained and certified approximately 270 people in the NDOR Erosion and Sediment Control for Inspectors Course. Since the inception of this program, over 1000 people across the state have been certified in this course. In addition all attendees received a copy of the NDOR Erosion and Sediment Control Pocket Guide, which provides a quick reference to construction site BMPs. The next step for the NDOR inspector training program is to develop and offer a re-certification class. NDOR inspectors are required to be re-certification every three years. Re-certification classes are scheduled to begin in early 2011 and will be held on a regular basis throughout the year.

Information technology staff in NDOR District 7 coordinated with the Field Maintenance and Activities Team to develop a Maintenance Library web site with specific resources related to maintenance personnel and activities across the agency. The maintenance library is a web-based application located internally to NDOR employees at: <http://maintenance/>. Focus areas for this resource include pertinent manuals, environmental information, an on-line MSDS application, safety, NDOR forms, contacts, and links to outside resources. Periodic updates are provided to the districts via the website.

NDOR continues to provide stormwater education to employees through the implementation of the Facility Runoff Control Plan (FRCP) program. In 2010, seven facilities located in District 2 received FRCP audits and one newly built facility finalized their FRCP. The Operations campus in Lincoln has nine monthly inspections under the FRCP program and all areas of this campus were audited in 2010. While some facilities required improvements, the majority of the audits indicated a satisfactory grade. Awareness levels have increased and daily work practices have changed since the start of the program. Additional outreach efforts were also increased in 2010 through the implementation of a New Highway Maintenance Supervisor 3-day training course. Thirty-five Supervisors, Superintendents, and Crew Chiefs received stormwater/environmental training. Additional outreach efforts were also increased in 2010 through the implementation of a New Highway Maintenance Supervisor 3-day training course.

NDOR partnered with math and science focused students from the University of Nebraska at Lincoln (UNL)-Trio Programs through an environmentally based Professional Career Presentation Series. The presentations began in November 2010 and will go through July of 2011, with one presentation a month scheduled. During each session, environmental professionals from NDOR provide information about their backgrounds, goals, education, and professional responsibilities. The UNL Trio Program has partnered with the *Environmentors Program* and gained hands on experience through volunteer water quality sampling/reporting at the NDOR District 1 headquarters, Lynn Creek channel abutting the facility.

The 2010 measurable goals for Public Education and Outreach are summarized below.

Measurable Goal 1.1 (a) - Develop guidance materials on reducing storm water impacts to water bodies.
(Percent Complete = 80)

- ▶ **Continue to develop Chapter 3: Post Construction Stormwater Control, for the Drainage Design and Erosion Control Manual.**
 - ✓ The Compliance Technical Advisory Group (CTAG) Post Construction Workgroup met at least monthly throughout 2010 to work on Chapter 3 (Post Construction Stormwater Management). A draft was submitted to CTAG in December 2010 for review and Comments are expected toward the end of January 2011. When completed, Chapter 3 will provide Roadway Designers with a design guide to incorporate Post Construction Stormwater Treatment BMPs into appropriate projects.

- ▶ **Coordinate with Operations Division to update the Maintenance Manual with Treatment BMP maintenance requirements as Chapter 3 is developed.**
 - ✓ Detailed design guides are being developed that will outline each Post Construction Treatment BMP NDOR may utilize. When the design guides are reviewed in 2011, NDOR Operations Division will begin making the appropriate updates to the Maintenance manual to address maintenance requirements.

- ▶ **Update the stormwater information available on the internet as it becomes available.**
 - ✓ NDOR maintains an updated stormwater webpage on the Department's website. The stormwater webpage is scheduled to be enhanced in 2011 to better summarize the MS4 program, highlight compliance efforts, provide training dates and locations and to make documents available for download. In addition to enhancing the webpage the Department has also recently implemented a new notification system for subscribers to NDOR webpages. An email is automatically sent to subscribers to notify them of recent changes.
 - ✓ Information technology staff in NDOR District 7 collaborated with the Field Maintenance and Activities Team to develop a Maintenance Library web site with specific resources related to maintenance personnel and activities across the agency. The maintenance library is a web-based application located at: <http://maintenance/services.aspx>. Focus areas for this resource include pertinent manuals, environmental areas, MSDS application, safety, NDOR forms, contacts, and links to outside resources. Periodic updates are provided to the districts via the website.

- ▶ **Develop outfall mapping/monitoring field guidance document for Illicit Discharge Detection and Elimination Program.**
 - ✓ A field guidance document pertaining to the Illicit Discharge Detection and Elimination (IDDE) Program has been developed through implementation of the Environmental Chapter of the maintenance manual. The maintenance manual provides essential information to maintenance forces across the state through print and web-based access. The manual provides standard procedures, guidelines, and best practices that assist all in daily work efforts of managers and practitioners in the field. It will be updated to reflect changes with regard to the IDDE Program in 2011.
 - ✓ Program administrators have been tasked with initially mapping and monitoring outfalls related to NDOR's MS4 permit. The future responsibility to incorporate new outfalls to the map will not be the responsibility of field personnel; therefore a field guidance document related to mapping is not needed. The Field Monitoring Data and Collection Sheet in the IDDE Plan, currently serves as

monitoring field guidance. NDOR effectively eliminates non-storm water discharges into the MS4 via the District Incident Reporting Knowledgebase (DIRK) system and the Illicit Discharge Notification and Tracking Form (Drform176) developed as part of the IDDE Program. Training and support for this reporting mechanism will continue and is an integral part of current training. Adequate enforceable authority is obtained via state statutes, outside agency involvement, and through the office of the Attorney General.

▶ **Complete and distribute FRCP Training CD**

- ✓ The FRCP training CD was distributed through the New Supervisor/Superintendent Training course developed by the FMAT team. The video is also available via the agency's intranet site. Training support documents and an online ordering form are available for field personnel requesting distribution of the training CD. Email notifications were sent statewide with directions to access the site and the support forms. The site was accessed 136 times in 2010.

▶ **Continue to distribute Erosion and Sediment Control BMP Field Guide at training and other outreach events.**

- ✓ The Erosion and Sediment Control Pocket Guides were distributed at all NDOR Erosion and Sediment Control Inspector classes held in 2010. A typical class consists of 45-50 attendees and NDOR administered a total of six classes in 2010. The pocket guide is referenced several times during the training class. To date approximately 400 guides are remaining out of the 3000 printed in 2009. The pocket guides have been a successful outreach effort and the Department is considering producing an updated version of the guide that will incorporate permit changes and highlight new BMPs.

▶ **Other**

- ✓ NDOR distributes a quarterly environmental news bulletin to Project Managers, Environmental Coordinators and other field staff with information on permit conditions, training opportunities and other environmental news. Downloadable copies are available on the NDOR website.
- ✓ NDOR partnered with the City of Hastings and several other agencies to produce a trash/litter poster illustrating the impacts of litter to the state of Nebraska and its resources. Also included on the poster is a picture of a turtle entangled in a plastic 6-pack holder. NDOR distributed these posters to display across the state at all District Offices and facilities.

Measurable Goal 1.1 (b) - Provide training on reducing storm water impacts to water bodies.

(Percent Complete = 80)

▶ **Training provided in 2010 is summarized in Table 1.**

▶ **Offer the NDOR Erosion and Sediment Control Inspector training course as needed throughout the year.**

- ✓ NDOR held the Erosion and Sediment Control for Inspectors Course 6 times throughout 2010. The course was offered at different locations across the state to accommodate for travel. At the end of the year approximately 270 people were certified as erosion and sediment control inspectors for NDOR projects. The total number of people certified in the NDOR inspector class has grown to over 1020. In addition to the inspector course, the Erosion and Sediment Control for Designers Course was also offered once during the year with approximately 25 attendees. This amounts to a total of 280 people who have attended the Erosion and Sediment Control for Designers Course.

- ▶ **Coordinate with any additional non-regulated maintenance facilities to voluntarily implement the FRCP (upon request).**
 - ✓ A total of 5 non-regulated maintenance facilities (Melia Hill-Gretna, Wayne, Gering, David City, and Blair) have voluntarily implemented the FRCP program. Although no additional facilities chose to voluntarily implement the program in 2010, a number of facilities are reducing environmental impacts by implementing best management practices (e.g, covering stockpiles) recommended by the program.

- ▶ **Conduct FRCP Audits of MS4 facilities in District 2 and Operation Headquarters.**
 - ✓ A total of 14 on site FRCP audits in 2010 provided a “hands-on” training approach to directly reduce stormwater impacts to water bodies through facility inspections and interviews.
 - ✓ FRCP audits were conducted for MS4 facilities in District 2 as well Operations Headquarters. During the audits, inspection reports are reviewed from the previous year, interviews with facility staff are conducted, and the facility receives a thorough inspection. Appropriate personnel are required to accompany the inspectors during the audit to discuss improvements, additional BMPs, and accomplishments. Upon completion of the audit the facility receives a grade based upon the evaluation. If corrective actions are needed, follow up is necessary to ensure compliance with the FRCP.

Measurable Goal 1.1 (c) - Participate in local and regional outreach efforts.

(Percent Complete = 80)

- ▶ **Collaborate with LTAP to administer Erosion and Sediment Control courses.**
 - ✓ All of the Erosion and Sediment Control Inspector/Design courses are coordinated in cooperation with LTAP. Since the beginning of the NDOR certification program, LTAP has been an important partner to NDOR. LTAP assists the program by promoting and scheduling events, coordinating registration, providing financial assistance and tracking and notifying attendees.

- ▶ **Continue to participate in local and regional outreach efforts with organizations such as Papillion Creek Watershed Partnership and Nebraska Stormwater Cooperative to promote stormwater education.**
 - ✓ NDOR attended meetings of both the Papillion Creek Watershed Partnership as well at the Nebraska Stormwater Cooperative. NDOR recognizes the value of partnering with these and other groups and will continue to collaborate on MS4 issues.

- ▶ **Present environmental awards to acknowledge the good work being done across the state.**
 - ✓ Environmental Awards are presented to contractors and project managers who go the extra mile to implement best management practices on both construction sites and maintenance facility sites.

Table 1 Number and Nature of Education Activities

Education Provided or Information Distributed	Target Audience	Attendance/ Number Distributed	Description	MS4 Program Addressed				
				Water Quality	IDDE	CSW	PCSW	PP/GH
April/May Edition: Roadrunner Article	NDOR Employees, State Agencies, and Citizens	Published on NDOR Website (1032 views)	1 Article - Construction Project Receives Environmental Award (Yankton Bridge)	X		X	X	
June/July Edition: Roadrunner Article	NDOR Employees, State Agencies, and Citizens	Published on NDOR Website (1114 views)	1 article – Great NE Trash Off Event (3,000 volunteers)	X	X			X
Oct/Nov Edition: Roadrunner Article	NDOR Employees, State Agencies, and Citizens	Published on NDOR Website (2053 views)	1 Article – Roadside ditch native vegetation assists with soil stabilization, looks good, too	X		X		
Winter 2009/2010 Edition: NDOR Environmental Bulletin	NDOR Employees, State Agencies, and Citizens	Emailed to approx 250 NDOR Employees and available on Stormwater Website (62 views)	Information on Stormwater, Vegetation, Threatened/Endangered Species, and Upcoming Training	X		X		
Spring Edition: NDOR Environmental Bulletin	District Offices, Project Managers and Field Staff, Environmental Coordinators	Emailed to approx 250 NDOR Employees and available on Stormwater Website (62 views)	Information on Stormwater, Vegetation, Threatened/Endangered Species and Training	X		X		

*SWMP Annual Report
(January 1 to December 31, 2010)*

Education Provided or Information Distributed	Target Audience	Attendance/ Number Distributed	Description	MS4 Program Addressed				
				Water Quality	IDDE	CSW	PCSW	PP/GH
Summer Edition: NDOR Environmental Bulletin	District Offices, Project Managers and Field Staff, Environmental Coordinators	Emailed to approx 250 NDOR Employees and available on Stormwater Website (62 views)	Information on Stormwater Permit, Wetlands, Threatened/Endangered Species and Training	X	X	X	X	X
Fall Edition: NDOR Environmental Bulletin	District Offices, Project Managers and Field Staff, Environmental Coordinators	Emailed to approx 250 NDOR Employees and available on Stormwater Website (62 views)	Information on Stormwater Permit, Wetlands, Threatened/Endangered Species and Upcoming Training and Meetings	X	X	X		X
January-September: IECA Great Rivers Chapter Conference Planning	IECA Members, Conference Attendees	1 NDOR Employee	Participated in planning the IECA meeting	X		X		
January 1-December 31: Roadside Litter Campaign with City of Hastings	Businesses, Residents, Municipalities, NDOR Employees, Roadway Users	300 Posters	Poster was distributed to all Districts, Rest Areas, Central, Hill	X				X
January 6: Kearney, NDOR Erosion Control Inspector Training	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	30 Attendees	Certification Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	
January 7: Ashland, NDOR Erosion Control Inspector Training	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	30 Attendees	Certification Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	

*SWMP Annual Report
(January 1 to December 31, 2010)*

Education Provided or Information Distributed	Target Audience	Attendance/ Number Distributed	Description	MS4 Program Addressed				
				Water Quality	IDDE	CSW	PCSW	PP/GH
January 12: Environmental Commitment Tracking Software	Engineering Consultants, NDOR Employees, Roadway Design Engineers	12 Attendees	FHU gave a presentation on how the Construction Inspection Software could be modified to track NEPA process etc.	X		X		
February 3: Erosion Control Seminar, city of Omaha followed by Bio-Infiltration Workshop at Extension Office	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	15 NDOR Attendees	Seminar sponsored by City of Omaha to discuss erosion control BMPs and bio-infiltration.	X		X	X	X
February 8: FRCP follow-up training Omaha, South 108 th	NDOR Employees	3 Attendees	Emphasized importance of documentation	X				X
February 11: AGC/NDOR Partnership Meeting	Contractors, NDOR Employees, Vendors	20 Attendees	Seeding/Erosion Control and Grading Committee Meetings	X		X	X	
February 11: NDOR Quarterly Interagency Meeting	NDOR Employees, Regulatory Agencies	40 Attendees	Agency environmental collaboration meeting	X		X		
February 15-19: International Erosion Control Association Meeting	Project Managers, Design Engineers, Contractors, Consultants	2 NDOR Employees Attended	Attended seminars on RUSLE II, effluent limitation guidelines, and research associated with erosion control.	X		X	X	
February 23: District Environmental Coordinators Meeting	NDOR Staff	15 NDOR Attendees	NDOR Environmental Programs Coordination Meeting	X	X	X	X	X
February-April: LPA Environmental Checklist Meetings	Businesses, Contractors, Consultants, Municipalities, NDOR Employees	8 NDOR Employees	Developed checklists for DEC and RCs to use on local projects to provide oversight of environmental commitments.	X		X		

*SWMP Annual Report
(January 1 to December 31, 2010)*

Education Provided or Information Distributed	Target Audience	Attendance/ Number Distributed	Description	MS4 Program Addressed				
				Water Quality	IDDE	CSW	PCSW	PP/GH
March 3: CTAG Stormwater Meeting	NDOR Employees	10 Attendees	Quarterly stormwater meeting	X	X	X	X	X
March 9 and 11: Lecture at UNL	UNL Landscape Architecture Students	30 Students	Discuss with students the role of Landscape Architects within NDOR. Stormwater/Erosion control topics.	X			X	
March 16 D5 HQ: NDOR Erosion Control Inspector Training	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	20 Attendees	Certification Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	
March 18 Ashland: NDOR Erosion Control Inspector Training	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	50 Attendees	Certification Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	
March 23-25: NDOR Project Managers Conference	NDOR Employees and Contractors	Approximately 300 NDOR Employees	Environmental award given to Contractor and Project Manager for Erosion Control Project of the Year. Presentation discussing erosion/stormwater BMPs.	X		X		
March 25: Webcast – NPDES and other water quality issues	NDOR Employees	8 Attendees	NPDES Webcast	X		X		
March 31: MS4 Annual Report	Regulatory Agencies, NDOR Administration	25 Copies	Annual report to NDEQ	X	X	X	X	X
March 31: Erosion control presentation to pipeline installers	Contractors, Municipalities, Utilities	90 Attendees	Sediment and Erosion Control BMPs along with Good Housekeeping info presented to natural gas pipeline installers.	X		X	X	
April 2: NDOR District 2 Stand-Down Presentation	NDOR Employees	150 Attendees	Power Point presentation made to District 2 employees – upcoming stormwater regulations and changes.	X		X	X	

*SWMP Annual Report
(January 1 to December 31, 2010)*

Education Provided or Information Distributed	Target Audience	Attendance/ Number Distributed	Description	MS4 Program Addressed				
				Water Quality	IDDE	CSW	PCSW	PP/GH
April 14: SWAN Erosion Control Workshop	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	50 Attendees	SWAN and City of Lincoln Erosion control Training.	X		X	X	
April 15: MS4 Annual Review Presentation	NDOR, NDEQ, FHWA, NDOR Employees	20 Attendees	Presented an update for upper management and agencies on the MS4 program.	X	X	X	X	X
April 17-24: Great Nebraska Trash-off	NDOR Employees, Community Groups, Citizens	208 Groups and Nearly 3,000 Volunteers State-wide	Education through participation in cleaning up trash along the State Highway System and stream crossings.	X	X			X
April 21: CWP webcast on bioretention	NDOR Employees	50 Attendees	NDOR designers learn about bio-retention design and maintenance from experts	X		X	X	
April 27-29: AASHTO Stormwater Conference, Denver	State DOTs	60 Attendees	National DOT Stormwater Conference	X		X	X	X
May 5: NDOR Operations and Maintenance Conference	NDOR Employees	Approx. 200 NDOR employees	Discussed Vegetation Management, Stormwater Compliance, FRCPs, IDDE, Environmental Liability and Documentation. Good Housekeeping Award and Erosion and Runoff Control Award presented.	X	X	X	X	X
May 10: Training CD	Distribution of FRCP video/training CD		Video Links sent to website and ongoing distribution of CD on request	X				X
May 6: CTAG Stormwater Meeting	NDOR Employees	10 Attendees	Quarterly stormwater meeting	X	X	X	X	X

*SWMP Annual Report
(January 1 to December 31, 2010)*

Education Provided or Information Distributed	Target Audience	Attendance/ Number Distributed	Description	MS4 Program Addressed				
				Water Quality	IDDE	CSW	PCSW	PP/GH
May 18: New Supervisor/Superintendent Training Course Review (FMAT)	NDOR Maintenance Supervisors and Superintendents	10 Attendees	Training provided bi-annually or quarterly on all environmental areas related to Supervisors/Supt's job duties	X	X	X	X	X
May 20: AGC/NDOR Construction Industry Days	Contractors and NDOR Staff	Approx. 20 Attendees	Regular meeting of AGC and NDOR. Includes Seeding/Erosion Control Committee Meeting.	X		X	X	
May 21: Memo regarding link to training video	NDOR DOMMs, Superintendants, and Supervisors	Approx. 100 NDOR Employees	video link message described location of stormwater page link in addition to support training materials/activities	X		X		
May 25: Neb. Water Laws and Regulation Course	Design Engineers, consultants,	3 NDOR Attendees	Neb. Water Laws and Regulation Course	X				
May 27: Papillion Creek Watershed Partnership Meeting	Adjacent MS4s	30 Attendees	NDOR met with group to discuss IDDE partnership.	X	X			
June 15: Maintenance Supervisor/Superintendent Training Course	NDOR Maintenance Supervisors and Superintendents	15 Attendees	Training provided bi-annually or quarterly on all environmental areas related to Supervisors/Supt's job duties	X	X			X
June 22: Erosion Control Inspector Course	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	45 Attendees	Certification Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	
June 23-24: Erosion Control Design Course	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	25 Attendees	SWPPP Design Course (2 Days)	X		X	X	
July 1: Maintenance Manual Distribution	NDOR Maintenance Staff	~150 manuals	Environmental Chapter to Maintenance Manual Added	X	X		X	X

*SWMP Annual Report
(January 1 to December 31, 2010)*

Education Provided or Information Distributed	Target Audience	Attendance/ Number Distributed	Description	MS4 Program Addressed				
				Water Quality	IDDE	CSW	PCSW	PP/GH
July 13: Nebraska Stormwater Cooperative Meeting	Adjacent MS4s	10 Attendees	Meeting with Phase II MS4s to discuss IDDE partnership.	X	X			
July 30: NeFSMA Floodplain and Stormwater Mgmt Conference	Consultants, Cities, Counties, NDOR Employees, Regulatory Agencies	2 NDOR Attendees	NeFSMA Stormwater Conference	X		X	X	
August 2-5: North American Prairie Conference, Cedar Falls, IA	Prairie conference attendees	85 Attendees	Presented NDOR's roadside stabilization program at a roadway symposium	X			X	
August 10: CTAG Meeting	NDOR Employees	12 Attendees	Quarterly MS4 Meeting	X	X	X	X	X
August 17-18: District Environmental Coordinator Meeting	NDOR Employees (District Offices, Construction Office, Environmental Office)	12 Attendees	NDOR Environmental Programs Coordination Meeting	X	X	X	X	X
August 19: AGC/NDOR Seeding/Erosion Control Committee Meeting	Contractors and NDOR Staff	20 Attendees	Association of General Contractors Meeting with NDOR. Seeding and Erosion Control discussed during committee meetings.	X		X	X	
August 25: Maintenance Supervisor/Superintendent Training Course	NDOR Maintenance Supervisors and Superintendents	15 Attendees	Training provided bi-annually or quarterly on all environmental areas related to Supervisors/Supt's job duties	X	X			X
October 14: Research meeting – discharge structures	NDOR Employees, Roadway Design Engineers, UNL Researchers	10 Attendees	Meeting to discuss Post Construction BMP research project.	X			X	

*SWMP Annual Report
(January 1 to December 31, 2010)*

Education Provided or Information Distributed	Target Audience	Attendance/ Number Distributed	Description	MS4 Program Addressed				
				Water Quality	IDDE	CSW	PCSW	PP/GH
October 26: Erosion Control Inspector Training	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	45 Attendees	Certification Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	
October 26-28: Stormwater Conference – City of Omaha, IECA, NDOR	Adjacent MS4s, Engineering Consultants, Municipalities, NDOR Employees, Regulatory Agencies	100 Attendees	Presentation of NDOR’s Post Construction Program	X		X	X	
November 8: MS4 meeting with South Sioux City	NDOR, Adjacent MS4	2 Attendees	Discussed partnership for IDDE Program	X	X			
November 15-December 15: FRCP Program Audits Operations Campus	District Operation and Maintenance Facility Staff	35 Attendees	Educate facility staff on the FRCP, Good Housekeeping, and Stormwater Pollution Prevention	X				X
November 23: NDOR Quarterly Interagency Meeting	NDOR Employees, Regulatory Agencies	20 Attendees	Agency environmental collaboration meeting	X		X	X	
December 15: CTAG Quarterly Meeting	NDOR Employees,	12 Attendees	Quarterly MS4 Meeting	X	X	X	X	X
December 16: AGC/NDOR Partnering Meeting	Contractors, NDOR Employees	20 Attendees	Seeding/Erosion Control Committee Meeting	X		X	X	
Ongoing: Environmental Awareness Training Courses Added to online system (June 2010)	NDOR Employees, Regulatory Agencies	4 Attendees	Courses available to promote environmental responsibility & compliance while working and also addresses OSHA regulations	X	X			X

*SWMP Annual Report
(January 1 to December 31, 2010)*

Education Provided or Information Distributed	Target Audience	Attendance/ Number Distributed	Description	MS4 Program Addressed				
				Water Quality	IDDE	CSW	PCSW	PP/GH
Ongoing: Environmental Compliance Oversight Inspections	NDOR Staff / Contractors	Approximately 180 Site Visits	These inspections review environmental compliance on projects.	X		X		
Ongoing: Spill Prevention Control and Countermeasures Plan Training (40 CFR part 112) (SPCC)	NDOR Employees responsible for handling oils and fuels	353 NDOR O&M Employees completed the on-line course. Course was updated in 2010.	Course is provided to comply with SPCC education requirements for employees that handle oil and fuels	X				X
Ongoing: Additional Good Housekeeping Web-based training courses	NDOR Employees	31 individuals completed one of the 4 on-line courses	"Cleaning up Small Chemical Spills", "Flammable and Combustible Liquids", "Housekeeping on the Job", and "Materials Handling and Storage"	X	X			X
Ongoing: Local Public Agencies (LPA) Training	NDOR Employees, Cities, Counties, Consultants	155 individuals	New environmental training required by FHWA and sponsored by NDOR/LTAP for LPAs. Includes Stormwater Permit Module.	X		X	X	
Ongoing: Bi-Weekly Post Construction CTAG Workgroup Meetings	NDOR Post Construction Program Work Group	3-6 NDOR Employees	Bi-Weekly Meetings to develop Chapter III of Erosion Control and Drainage Design Manual	X			X	
Ongoing: NDOR Website	NDOR employees and the general public	3,642 visits to the Stormwater Site	MS4 Permit, SWMP Work Plan, and Educational Slide Shows added in 2007	X	X	X	X	X
Ongoing: "No Dumping" inlets	The General Public	Specified on new urban projects	Concrete Stamp	X	X			X
Ongoing: Maintenance Library web page	NDOR O&M Employees	NDOR staff (numbers unavailable)	Updates to Environmental news, questions, links, regulations etc.	X	X	X	X	X

Public Education and Outreach Activities Scheduled for 2011

Measurable Goal 1.1 (a) - Develop guidance materials on reducing storm water impacts to water bodies.

- ▶ NDOR will consider producing an updated version of the erosion and sediment control pocket guide. In 2009, 3000 copies were printed and distributed. To date the supply is reduced to about 400 copies with an estimated 200 to be distributed in 2011.
- ▶ Distribute Quarterly Environmental Bulletin to Project Managers, District Environmental Coordinators and other field staff.
- ▶ Enhance NDOR Stormwater Webpage. This will include re-organizing the site to highlight program activities and compliance efforts, to promote training and educational links and to make stormwater documents available for download.
- ▶ Complete the first edition of Chapter 3: Post Construction Stormwater Control, for the Drainage Design and Erosion Control Manual. NDOR plans to have the majority of edits completed for Chapter 3 so the program can be introduced to Designers by the end of 2011. This would include an initial training class to introduce designers to Chapter 3 and the referenced Treatment BMP Design Guides. The Post Construction Program is very complex and NDOR envisions that Chapter 3 will be updated as the program evolves and regulations change.
- ▶ Develop Treatment BMP Design Guides for Chapter 3 (Post Construction Stormwater).

Measurable Goal 1.1 (b) - Provide training on reducing storm water impacts to water bodies.

- ▶ The NDOR Erosion and Sediment Control for Inspectors course will be held as needed to certify project inspectors across the state. These courses will still feature Leo Holm (Retired MNDOT Engineer) as the main instructor throughout the day.
- ▶ NDOR Erosion and Sediment Control for Inspectors "Re-Certification" Course will be offered starting in 2011 for those individuals who have been certified for 3 years. This half day course will be coordinated in cooperation with Nebraska LTAP much like the full day certification course but will be taught entirely by NDOR environmental staff. This course will be offered more frequently across the state to accommodate construction schedules and travel requirements.
- ▶ Hold initial training class for NDOR Roadway Designers to introduce them to Chapter 3 Post Construction Stormwater Management and Treatment BMP Design Guides. This would be the first in a series of trainings for Designers to familiarize them with Chapter 3 requirements.
- ▶ NDOR will hold a Question and Answer breakout session at the Annual Maintenance Conference in May of 2011 to address Environmental and storm water related topics specific to Maintenance and Operations activities within the department.
- ▶ Updates to the Maintenance Library and Operations websites will be provided throughout the year.
- ▶ NDOR will update the Environmental Chapter of the Maintenance Manual in 2011.
- ▶ FRCP audits and the associated training will occur in NDOR Districts 4 and 6 during 2011.
- ▶ Two New Highway Supervisor/Superintendent Training Courses will be conducted during 2011. Training will be modified to include pertinent MS4 permit information as developed by the department (PCSW).
- ▶ Ongoing district site visits for SPCC will continue to provide training on reducing impacts to waterways near NDOR facilities subject to SPCC updates.

Measurable Goal 1.1 (c) - Participate in local and regional outreach efforts.

- ▶ Continue partnering with LTAP for training events.
- ▶ Stay involved with Nebraska Stormwater Cooperative and Papillion Creek Watershed Partnership.
- ▶ Present environmental awards for good environmental stewardship on NDOR construction projects and in maintenance facilities.

2.0 PUBLIC PARTICIPATION AND INVOLVEMENT

NDOR held quarterly meetings with the Compliance Technical Advisory Group (CTAG) in 2010. This group is made up of key leadership within the Department and is an important part of the Public Participation and Involvement MCM. As MS4 programs reach the implementation stage this group will continue to make the necessary changes within the Department to remain in compliance with the permit.

In addition to the quarterly CTAG meetings, NDOR also holds regular meetings with the District Environmental Coordinators (DEC). This group is also having a positive impact on the MS4 Program by providing the NDOR Central Office with a direct environmental contact in each District and by conducting construction site and maintenance facility site stormwater inspections.

The 2010 measurable goals for Public Participation and Involvement are summarized below.

Measurable Goal 2.1 (a) - Continue to follow established public participation policies and procedures for NDOR projects.

(Percent Complete = 80)

- ▶ Continue to administer public participation policies and procedures for NDOR.
 - ✓ Each project let in 2010 achieved the NDOR Public Participation Policy standards.
- ▶ Hold at least 3 Compliance Technical Advisory Group (CTAG) meetings to discuss compliance with the MS4 permit and implementation of the Stormwater Management Plan (SWMP).
 - ✓ The Compliance Technical Advisory Group (CTAG) held quarterly meetings in 2010 to discuss permit compliance efforts.
 - ✓ CTAG Workgroups also met numerous times throughout the year to work on specific items within the SWMP.

Measurable Goal 2.1 (b)(c) - Engage public and track participation in environmental stewardship programs such as Adopt-A-Highway and Wetlands Bank Education.

(Percent Complete = 80)

- ▶ Administer and track participation in stormwater education programs.
 - ✓ Environmental stewardship programs are summarized in Table 1. Participation in education programs and other MS4 activities is tracked in an Microsoft Access Database.
 - ✓ NDOR had 988 agreements with local groups and organizations for the Adopt-A-Highway Program covering approximately 1907 miles of state highway. Participating groups are required to remove roadside litter twice per year for an agreement period of two years.
- ▶ Maintain the Stormwater Webmaster contact link on the NDOR Website Stormwater Page to allow the public to report stormwater problems such as illicit discharges or construction stormwater problems.
 - ✓ Stormwater webmaster contact link is maintained on the NDOR stormwater webpage.

Measurable Goal 2.1 (d) - Amend standard language for Engineering Statements to reference erosion control plans for distribution at public hearings.

(Percent Complete = 80)

- ▶ Continue to update language used in Engineering Statements to include the benefits and purpose of Erosion and Sediment Control BMPs included in project designs.
 - ✓ Standard language is included in Engineering Statements stating sediment and erosion control measures will be implemented to minimize impacts on the surrounding environment and that exposed soil areas will be permanently seeded and stabilized.

Public Participation and Involvement Activities Scheduled for 2011

Measurable Goal 2.1 (a) - Continue to follow established public participation policies and procedures for NDOR projects.

- ▶ Continue to administer public participation policies and procedures for NDOR.
- ▶ Hold quarterly CTAG meetings to review MS4 permit compliance efforts.
- ▶ Meet with District Environmental Coordinators at least twice a year to discuss implementation of the Departments Environmental Compliance Oversight Program.

Measurable Goal 2.1 (b)(c) - Engage public and track participation in environmental stewardship programs such as Adopt-A-Highway and Wetlands Bank Education.

- ▶ Administer and track participation in stormwater education programs.
- ▶ Continue to track miles cleaned, number of agreements, and entities participating in the Adopt-A-Highway Program.
- ▶ Quantify the amount of litter removed from Nebraska Roadsides through the Nebraska Trash-Off Program.

Measurable Goal 2.1 (d) - Amend standard language for Engineering Statements to reference erosion control plans for distribution at public hearings.

- ▶ Standard language is included in Engineering Statements stating sediment and erosion control measures will be implemented to minimize impacts on the surrounding environment and that exposed soil areas will be permanently seeded and stabilized.

3.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

The Illicit Discharge Detection and Elimination (IDDE) Plan for NDOR was finalized in 2009. The initial outfall mapping/monitoring has been completed for North Platte, Lexington, Kearney, Lincoln and South Sioux City. Outfall mapping/monitoring efforts have continued in the Omaha area and are projected to be complete in 2011.

NDOR effectively eliminates non-storm water discharges into the MS4 via the District Incident Reporting Knowledgebase (DIRK) system and the Illicit Discharge Notification and Tracking Form developed as part of the IDDE plan (finalized 2009). Training and support for the IDDE reporting mechanism has been achieved through the training venues listed under Education above. Adequate enforceable authority is obtained via state statutes, outside agency involvement, and through the office of the Attorney General.

The 2010 measurable goals for Illicit Discharge Detection and Elimination are summarized below.

Measurable Goal 3.1 (a) - Develop map showing the location of all outfalls and the names and location of all waters of the state that receive discharges from those outfalls.

(Percent Complete = 80)

- ▶ The remainder of Lincoln, the Omaha Metro Area, and South Sioux City Metro Area will be evaluated and inspected between 2010 and 2012.
 - ✓ Outfall mapping has been completed in Lincoln and the South Sioux City Metro Area. Mapping efforts in the Omaha Urbanized Area are underway with plans for completion in 2011.
 - ✓ NDOR maintains an ArcMap (GIS) map of all outfalls currently mapped along with the names and locations of waters of the state that receive discharges from those outfalls.
- ▶ As adjacent MS4s complete outfall mapping, NDOR will request geographically referenced outfall information.
 - ✓ NDOR is continuing to partner with adjacent MS4s on managing the IDDE program. This includes sharing of GIS outfall data between entities.
- ▶ Train NDOR Staff in District 2 to assist with outfall mapping in Omaha Urbanized Area.
 - ✓ The Roadside Stabilization Unit trained District Environmental Coordinators in Districts 1, 2 and 3 to assist with outfall mapping and monitoring efforts.

Measurable Goal 3.2 (a) - Develop specification to prohibit non-stormwater discharges to NDOR MS4.

(Percent Complete = 95)

- ▶ Adequate statutes, policy, guidance and permits are in place and communicated in the IDDE Plan. NDOR will continue to review guidance necessary to improve the program.
 - ✓ All new drainage connections to the Department right-of-way are restricted without obtaining the proper access permits
 - ✓ The Department has the authority to regulate, and if necessary prohibit, any responsible party from the use of highway drainage facilities for private purposes without first obtaining written consent (§39-1360). Any connection discharging pollutants to the State Highway System is considered an encroachment for a private purpose that can be prohibited. The Department has the authority to issue a permit with an agreement from the permittee to comply with such “reasonable regulations” the Department feels necessary for such encroachments (§39-1361). When no encroachment permit exists, the encroachment is deemed to be illicit and may be removed. As such, the Department maintains adequate legal authority to control any stormwater connections and associated discharges of pollutants to the State Highway System.
 - ✓ The Department maintains authority to prohibit the use of the State Highway System for littering on any part of a roadway, in drainage ditches, or on the banks of drainage ditches (§39-310). Further, the person responsible for depositing any destructive or injurious material is responsible for having it removed (§39-311(2)). The Department makes no distinction between materials that are knowingly dumped and materials that are accidentally spilled. As such, the Department maintains adequate legal authority to prohibit illegal dumping and spills of pollutants to the State Highway System.

Measurable Goal 3.2 (b) - Develop a process to coordinate with adjacent MS4 communities to remove illicit discharges that flow through an NDOR outfall, but are not the result of an NDOR activity.

(Percent Complete = 80)

- ▶ Continue to establish MOUs with MS4 Communities through partnership meetings. These meetings provide an opportunity to discuss the program with adjacent MS4s.
 - ✓ NDOR has entered into IDDE MOUs with Scottsbluff, Lincoln, Kearney, Papillion, Grand Island, and South Sioux City. Additional MOUs are being considered by other MS4s.

Measurable Goal 3.3 (a) - Develop Illicit Discharge Detection and Elimination Plan.

(Percent Complete = 95)

- ▶ Finalize supporting documents that are referenced in the NDOR IDDE Plan.
 - ✓ A field guidance document pertaining to the IDDE Program has been developed through implementation of the Environmental Chapter of the maintenance manual. The maintenance manual provides essential information to maintenance forces across the state through print and web-based access. The manual provides standard procedures, guidelines, and best practices that assist all in daily work

efforts of managers and practitioners in the field. It is a dynamic document requiring periodic updates to remain current. It will be updated to reflect changes with regard to the IDDE Program in 2011.

- ▶ Review approved IDDE plan for any needed updates.
 - ✓ IDDE Plan will be updated as needed. No changes were made to the document in 2010.
- ▶ Provide training to NDOR District Permit Officers on environmental requirements that should be considered when authorizing connections or access to NDOR property.
 - ✓ NDOR will hold one-on-one meetings with District Permit Officers as construction site environmental compliance inspections are conducted across the state.

Measurable Goal 3.4 (a) - Evaluate need to update and implement adequate NDOR internal policy, guidance, and manuals.

(Percent Complete = 80)

- ▶ Finalize supporting documents that are referenced in the NDOR IDDE Plan. This includes a field guidance document for NDOR District personnel who will be monitoring outfalls.
 - ✓ Program administrators have been tasked with initially mapping and monitoring outfalls related to NDOR's MS4 permit. A field mapping guidance document has been determined to be unnecessary. The future responsibility of incorporating new locations on the map will not be the responsibility of field personnel; therefore a field guidance document related to mapping is not needed. A monitoring guidance document will be developed for the field if program administrators are not tasked with monitoring responsibilities into the future. The Field Monitoring Data and Collection sheet in the IDDE plan currently serves this purpose for MS4 program administrators.
- ▶ Continue to train District Personnel to monitor outfalls and detect illicit discharges.
 - ✓ NDOR has utilized District personnel as needed to comply with outfall mapping and monitoring requirements. The majority of NDOR's MS4 outfalls fall within Lincoln and Omaha. District Environmental Coordinators from Districts 1, 2 and 3 have assisted with outfall mapping requirements. District personnel from across the state are involved in monitoring and detecting illicit discharges occurring along state highways. Their regular activities involve monitoring roadways for trash, safety hazards, spills and roadway maintenance requirements on a regular basis. NDOR will focus on educating field staff to identify and report illicit discharges.
- ▶ Distribute educational materials regarding the IDDE program through training opportunities and environmental bulletins (newsletters).
 - ✓ Information regarding illicit discharges along state highways is discussed during the New Highway Maintenance Supervisor Training Class.
- ▶ Present information about the IDDE Program at the Annual Maintenance Conference.
 - ✓ During the conference NDOR staff discussed vegetation management, stormwater compliance, FRCPs, IDDE, environmental liability and documentation with attendees. The Good Housekeeping Award and Erosion and Runoff Control Award were also presented.

IDDE Inspections and Enforcement Actions

Table 2 Summary of Illicit Discharge Detection and Elimination Inspections and Enforcement Actions

Activity	Summary of Activity
Dry Weather Inspections	<ul style="list-style-type: none"> ▶ Outfall mapping and dry weather monitoring was completed in Lincoln and the South Sioux City Metro Area. ▶ Field investigations resulted in 0 potential illicit discharges from conducting a physical characteristic evaluation at 66 newly mapped outfalls. No sampling was required to investigate potential illicit discharges.
Illicit Discharges Identified	<ul style="list-style-type: none"> ▶ 2 instances of spills or dumping were recorded within the MS4 ▶ 0 instances of illicit connections were recorded within the MS4 ▶ 0 instances of illegal discharges were recorded within the MS4
Illicit Discharge Enforcement Actions	<ul style="list-style-type: none"> ▶ 0 enforcement actions were required to eliminate illicit discharges within the MS4.

IDDE Activities Scheduled for 2011

Measurable Goal 3.1 (a) - Develop map showing the location of all outfalls and the names and location of all waters of the state that receive discharges from those outfalls.

- ▶ NDOR will continue to update the Outfall Map and attributes as new outfalls are included.

Measurable Goal 3.2 (a) - Develop specification to prohibit non-stormwater discharges to NDOR MS4.

- ▶ Adequate statutes, policy, guidance and permits are in place and communicated in the IDDE Plan. NDOR will continue to review the program and make any necessary changes.

Measurable Goal 3.2 (b) - Develop a process to coordinate with adjacent MS4 communities to remove illicit discharges that flow through a NDOR outfall, but are not the result of a NDOR activity.

- ▶ NDOR will attempt to enter into MOUs with the remaining applicable MS4s.

Measurable Goal 3.3 (a) - Develop Illicit Discharge Detection and Elimination Plan.

- ▶ IDDE plan is completed. NDOR will continue to review and update as needed.

Measurable Goal 3.4 (a) - Evaluate need to update and implement adequate NDOR internal policy, guidance, and manuals.

- ▶ As the IDDE program moves forward, NDOR will review the existing policy and make any necessary changes.
- ▶ NDOR will provide continued IDDE guidance through the Maintenance Manual Environmental Chapter in 2011. The updated manual will be cross-referenced on the Maintenance Library web site.

4.0 CONSTRUCTION SITE RUNOFF CONTROL

The NDOR Erosion and Sediment Control for Inspectors Course was held six times in 2010 and trained approximately 270 individuals. In addition, the Erosion and Sediment Control for Designers Course was also held one time during the year and trained approximately 25 individuals on the necessary components of developing a SWPPP. To date, over 1000 people have been certified in NDOR's inspector training program. The next step is to begin implementing the Inspector re-certification course. Persons desiring to maintain their certification in this program need re-certification every 3 years. This consists of completing a half day refresher course on inspecting and maintaining construction site BMPs and implementing the site SWPPP.

In 2009 the Department developed the Environmental Compliance and Oversight Database (ECO-Database). This program allows NDOR to conduct and track environmental compliance inspections electronically through a web based computer program. District Environmental Coordinators and Roadside Stabilization staff began utilizing the new inspection program in 2010 and recorded more than 180 inspections statewide throughout the year. From those inspections the ECO-Database allows NDOR to query data and generate reports. For example, the most common "field BMP corrective action" noted on 2010 inspection reports was related to silt fence. This is not surprising as silt fence is probably the most widely used field BMP on NDOR construction projects. The most commonly noted "documentation corrective action" was related to the temporary erosion and sediment control plan. With the ability to generate specialized reports, NDOR can tailor education to specific areas of the program.

The ECO-Database will undergo a series of changes in 2011 to enhance the functionality of the software. Noted changes will include adding inspection templates so the program can be utilized for other environmental inspections such as Facility Runoff Control Plan (FRCP) inspections and/or outfall monitoring. In addition, another major change will allow NDOR to set up project specific questions for projects that have multiple environmental commitments. This allows NDOR to develop project specific inspection reports.

Table 3-1 is a current list of NPDES permitted projects within NDOR's MS4 boundary. Each project was managed in a manner to comply with the General Construction Stormwater Permit issued by NDEQ.

The 2010 measurable goals for Construction Site Runoff Controls are summarized below.

Table 3-1 NPDES Permitted Construction Projects within MS4 Boundary

District¹	Project Number – Name	Discharge Authorization Number²	Status
District 1	<ul style="list-style-type: none"> ▶ 34-6(133) – Lincoln West ▶ 80-9(851) – 40th St. Bridge Lincoln ▶ 80-9(856) - I-180 - 56th Street, Lincoln ▶ 2-6(1027) – 148th St./N-2, Lincoln ▶ 77-2(1060) – Lincoln South ▶ 2-6(1030) - US77 – 9th Street, Lincoln ▶ 34-6(138) – US34/148th St. E of Lincoln ▶ 77-2(1072) – Fremont South 	<ul style="list-style-type: none"> ▶ NER110320 ▶ NER111679 ▶ NER110123 ▶ NER111496 ▶ NER111335 ▶ NER111332 ▶ NER111485 ▶ NER111562 	<ul style="list-style-type: none"> ▶ Vegetation Establishment Phase ▶ Construction Phase ▶ Vegetation Establishment Phase ▶ Vegetation Establishment Phase ▶ Scheduled to Let in March 2011 ▶ Completed ▶ Vegetation Establishment Phase ▶ Completed
District 2	<ul style="list-style-type: none"> ▶ 480-9(778) – I-480 WB/US75 SB Interchange ▶ 275-6(1029) – Fremont E Bypass ▶ 275-7(184) - S. Omaha Veterans Bridge ▶ 80-9(889) – Missouri River – 13th St, Omaha ▶ 80-9(892) – Expand I-80 ▶ 080-1(318)-11– I-80 over Missouri River 	<ul style="list-style-type: none"> ▶ NER111563 ▶ NER110319 ▶ NER110314 ▶ NER111484 ▶ NER110128 ▶ NER110002 	<ul style="list-style-type: none"> ▶ Construction Phase ▶ Completed ▶ Vegetation Establishment Phase ▶ Construction Phase ▶ Completed ▶ Construction Phase
District 3	<ul style="list-style-type: none"> ▶ 30-5(125) - Columbus Viaduct ▶ 35-3(107) – In Norfolk ▶ 275-5(137) – Norfolk West ▶ 35-3(105) – Norfolk Southeast ▶ 81-3(1035) – Monroe Ave, Norfolk 	<ul style="list-style-type: none"> ▶ NER111117 ▶ NER111489 ▶ NER110146 ▶ NER111490 ▶ NER111355 	<ul style="list-style-type: none"> ▶ Completed ▶ Scheduled to Let in November 2011 ▶ Vegetation Establishment Phase ▶ Scheduled to Let in November 2011 ▶ Vegetation Establishment Phase
District 4	<ul style="list-style-type: none"> ▶ 30-4(148) – In Kearney ▶ 6-4(125) – Hastings West ▶ 34-4(131) – Grand Island South ▶ 34-4(132) – 7th to 9th St., Hastings 	<ul style="list-style-type: none"> ▶ NER111430 ▶ NER111362 ▶ NER110152 ▶ NER110141 	<ul style="list-style-type: none"> ▶ Completed ▶ Completed ▶ Vegetation Establishment Phase ▶ Completed
District 5	<ul style="list-style-type: none"> ▶ 92-1(122) – Scottsbluff NW Viaduct 	<ul style="list-style-type: none"> ▶ NER111561 	<ul style="list-style-type: none"> ▶ Construction Phase
District 6	<ul style="list-style-type: none"> ▶ 83-2(1029) – State Farm Rd N., North Platte 	<ul style="list-style-type: none"> ▶ NER111274 	<ul style="list-style-type: none"> ▶ Completed
District 7	None		
District 8	None		

Measurable Goal 4.1 (a) - Update existing specifications and manuals to include erosion and sediment control sanctions to ensure compliance.

(Percent Complete = 90)

- ▶ Implement the Disincentive Assessment when corrective actions are not completed as required in the NPDES Construction Stormwater General Permit.
 - ✓ The Disincentive Assessment Special Provision is included in all newly let projects.

- ▶ Review and update specifications as needed
 - ✓ The Roadside Stabilization Unit completed a revision of all Section 800 Specifications (Seeding/Erosion Control). Many updates and changes were made to existing specifications and good housekeeping specifications were added to the section as well. Changes will be reviewed by NDOR administration in cooperation with the Nebraska Association of General Contractors. The new edition of the NDOR Specification Book is currently scheduled within the next couple of years. NDOR can also implement changes to specifications through the issuance of Special Provisions.

Measurable Goal 4.2 (a) - Require construction site operators to implement erosion and sediment control practices.

(Percent Complete = 90)

- ▶ Continue to offer the Erosion and Sediment Control Training and Certification Program as needed throughout the year.
 - ✓ The NDOR Erosion and Sediment Control for Inspectors Course was held six times in 2010 and trained approximately 270 individuals

- ▶ Distribute copies of the Construction BMP pocket guide to Erosion and Sediment Control course participants and upon request.
 - ✓ Pocket guides are distributed to every participant in the Sediment and Erosion Control Inspector Training Course. Guides were also sent out upon request. At the end of 2010, approximately 400 guides were still available out of the 3000 printed in 2009.

- ▶ Implement current SWPPP on stormwater permitted projects.
 - ✓ SWPPPs are required to be implemented on all NPDES permitted projects.
 - ✓ The SWPPP template that is used by NDOR for Construction Storm Water permitted projects has undergone a complete revision over the past year. Many changes were incorporated into the template that should make the document much easier to navigate and update on a regular basis. These changes include the following:
 - A new structure and numbering system has been employed to make navigation throughout the document much more efficient.
 - The topography, soil conditions, and water resources sections now have much more information included about the background conditions in a project area. GIS resources have been utilized to provide accurate, up-to-date information regarding the topography, soils, and water resources on and around the project location.

- The Best Management Practices section of the SWPPP has had significant changes made in the new template. Each BMP is now arranged in a table to synthesize the information for each BMP into a consistent format. This makes getting the specific information for each BMP much easier and should help to get more consistent results in the field installation and maintenance of these items.
- EPA guidance regarding Spill Prevention Plans has been added to the SWPPP to provide spill prevention recommendations for contractors.
- A new form for cataloging all of the certified erosion and sediment control inspectors on the jobsite has been included in the new SWPPP template. This should help to prove that the workers installing erosion and sediment controls are either certified themselves, or are directly supervised by certified personnel.
- A condensed listing of amendments required of the contractor has been included at the rear of the SWPPP document along with a form for recording those amendments. By condensing these items it should create a more consistent culture of SWPPP amendments through the efficiency of having one place to go to find the listing of needed items.

Measurable Goal 4.3 (a) - Develop procedures for site plan review to include consideration of water quality impacts.

(Percent Complete = 90)

- ▶ Implement the Temporary ESC Plan template and checklist of requirements that each Plan must have considered before being submitted to NDOR engineer for approval.
 - ✓ Contractors are required to submit a Temporary Erosion and Sediment Control Plan plan prior to starting construction. NDOR SWPPPs include a plan checklist to guide the contractor through this process. To receive approval, the temporary plan must effectively demonstrate how the contractor will manage stormwater on day one of construction. The plan must then be updated on a regular basis as construction progresses.
- ▶ Coordinate a meeting with NDOR District Permit Officers.
 - ✓ See Illicit Discharge Detection and Elimination Section.
- ▶ Other
 - ✓ NDOR utilizes a project management program entitled Clarity. Clarity tracks project tasks and was recently expanded to include environmental activities. Specifically, the Roadside Stabilization Unit is tracking stormwater related activities throughout the design process.

Measurable Goal 4.4 (a) - Develop and implement site inspection process.

(Percent Complete = 90)

- ▶ Require project managers to complete and submit the site inspection and corrective actions report.
 - ✓ Upon completion of the Bi-Weekly Stormwater Inspection Reports, project inspectors are required to distribute the completed inspection report to the Prime Contractor, Erosion Control Sub-Contractor, Project Manager and NDOR Central Office. Hard copies of the inspection reports are also kept with the project SWPPP. The total number of inspection reports are shown in Table 3.2.

- ▶ Record the number and the findings of Compliance Assistance Site Visits.
 - ✓ In 2009 the Department developed the ECO-Database or ECOD. This program allows NDOR to conduct and track environmental compliance inspections electronically through a web based computer program. District Environmental Coordinators and Roadside Stabilization staff began utilizing the new inspection program in 2010 and recorded approximately 180 inspections statewide throughout the year.
 - ✓ ECO-Database allows NDOR to query data and generate reports. For example, the most common “field BMP corrective action” noted on 2010 inspection reports was related to silt fence. This is not surprising as silt fence is probably the most widely used field BMP on NDOR construction projects. The most commonly noted “documentation corrective action” was related to the temporary erosion and sediment control plan. Additional information queried from the reports is noted in Table 3.2. Future training will focus on the most common problems occurring in the field.

- ▶ Utilize on-call consultants for project inspections when needed.
 - ✓ NDOR utilized on-call consultant assistance for monthly Environmental Compliance Inspections on interstate construction projects within District 1.

- ▶ Implement Environmental Compliance Oversight Database (ECOD) software for stormwater inspections.
 - ✓ See “Record the number and the findings of Compliance Assistance Site Visits” above for information on the ECO-Database.
 - ✓ Since 2010 was the first year using ECO-Database, NDOR held quarterly meetings with District Environmental Coordinators to discuss improvements to the software as is was tested in the field. Recommendations were collected and in 2011 ECO-Database will undergo a series of changes to improve the function of the software. Noted changes will include adding inspection templates so the program can be utilized for other environmental inspections such as Facility Runoff Control Plan (FRCP) inspections and/or outfall monitoring. In addition, another change will allow NDOR to set up project specific questions for projects that have multiple environmental commitments. This allows NDOR to customize inspection reports for each project if needed.

Summary of Construction Site Runoff Control Inspections and Enforcement Actions

NDOR follows the inspection frequency requirements listed in the Nebraska Construction Stormwater General Permit. After final stabilization measures are in place and the Notice of Termination (NOT) has been submitted to NDEQ, inspection frequency is reduced to monthly during the 180 day period. In addition, selected projects receive comprehensive Environmental Compliance Inspections conducted by District Environmental Coordinators, consultants and Roadside Stabilization Staff.

Table 3-2 Summary of Construction Site Runoff Control Inspections and Enforcement Actions

Activity	Summary of Activity	
Construction Site Inspections	Bi-Weekly	<ul style="list-style-type: none"> ▶ NDOR Inspectors conduct inspections on a biweekly basis and after every 0.5" of rain as required by the Construction Stormwater General Permit. ▶ The Falcon recordkeeping system indicated that in 2010, NDOR Inspectors, Project Managers and/or the Operations Division staff completed approximately 400 NPDES Construction Stormwater Permit compliance inspections for construction projects that occurred within the MS4 boundary.
	Environmental Compliance	<ul style="list-style-type: none"> ▶ NDOR utilized on-call Consultants, District Environmental Coordinators and Roadside Stabilization Staff to provide environmental compliance inspections for NDOR projects. ▶ The Falcon recordkeeping system indicated that in 2010, approximately 50 environmental compliance inspections were conducted on construction projects occurring within the MS4 boundary.
Erosion and Sediment Control Enforcement Actions	Permitting Authority	<ul style="list-style-type: none"> ▶ One letter of warning was issued by EPA in 2010. The letter stated that NDOR was not in full compliance with the requirements of the NPDES permits on two interstate projects (Mahoney to Greenwood and Greenwood to Waverly). The letter recommended the following actions: 1) NDOR should consistently implement the SWPPP at both sites by ensuring that all temporary erosion control measures are done in consultation with NDOR staff and 2) Earth berms (checks) should be constructed in accordance with NDOR guidance. In addition, the use of uncovered earth berms (checks) near and especially adjacent to stream banks should be discouraged and alternative measures used whenever possible. <p><i>NDOR Resolution: NDOR immediately implemented the recommendations made by EPA on those projects and also distributed the information across the state to project managers, field staff and contractors. The inspection was summarized in the NDOR Environmental Bulletin and Erosion Control Training Classes and at AGC Partnership Meetings.</i></p>

Construction Site Runoff Control Activities Scheduled for 2011

Measurable Goal 4.1 (a) - Update existing specifications and manuals to include erosion and sediment control sanctions to ensure compliance.

- ▶ Continue promoting the use of “Disincentive Assessment, Special Provision” when corrective actions are not completed as required in the NPDES Construction Stormwater General Permit.
- ▶ Finalize any changes to the Section 800 (Seeding/Erosion Control) for the updated Standard Specifications Book.

Measurable Goal 4.2 (a) - Require construction site operators to implement erosion and sediment control practices.

- ▶ Develop and administer Erosion and Sediment Control for Inspectors Re-certification Class. NDOR anticipates this class will be held at least 6 times to accommodate the number of people needing re-certification in 2011.
- ▶ Continue offering the Erosion and Sediment Control for Inspectors Certification Class. This class will be held on an as needed basis across the state.
- ▶ Distribute remaining copies of the Construction BMP pocket guide to Erosion and Sediment Control course participants and upon request.

Measurable Goal 4.3 (a) – Develop and implement procedures for site plan review to include consideration of water quality impacts.

- ▶ Implement current SWPPP on stormwater permitted projects.
- ▶ Implement the Temporary ESC Plan template and checklist of requirements that must be considered for each Plan before being submitted to the NDOR engineer for approval.

Measurable Goal 4.4 (a) - Develop and implement site inspection process.

- ▶ Utilize ECO-Database for Environmental Compliance Oversight Inspections
- ▶ Continue to enhance the functionality of ECO-Database to conduct other environmental inspections.
- ▶ Utilize on-call consultants for project inspections as needed.

5.0 POST-CONSTRUCTION SITE RUNOFF CONTROL

Since a Post Construction Stormwater Guidance Document was created in 2009, several changes have been made to address the Program. The main focus was to create a design manual that would incorporate Treatment BMP consideration into the Roadway Design process. In early 2010 the CTAG Post Construction Workgroup began drafting a Chapter III (Post Construction Stormwater Management) for the Drainage Design and Erosion Control Manual. This Chapter will outline the Post Construction Stormwater design steps from Project Scoping through Functional Design. Meetings were conducted throughout 2010 to make the necessary changes and by the end of the year Chapter III was again distributed to all CTAG members for review.

NDOR is currently reviewing projects for Treatments BMPs while the Post Construction Program develops. Environmental Coordination Meetings are held throughout the design process so the Design and Environmental sections can correspond on project environmental commitments. Post Construction Treatment BMPs are now discussed along with other requirements during these meetings.

Several research projects are also underway or are being proposed that may provide valuable data for the post construction program and they are detailed in Section 7.5. In addition to research, NDOR constructed bio-retention areas to treat stormwater runoff from the NDOR District 1 Construction Office. This project was the first of its kind for NDOR and will be a good pilot project for future training and outreach. The following are pictures of the completed project.



The 2010 measurable goals for Post-Construction Site Runoff Controls are summarized below.

Measurable Goal 5.1 (a) - Develop procedures for site plan review to include consideration of structural and/or non-structural BMPs.

(Percent Complete = 80)

- ▶ Update Design Process Outline (DPO) to include Post Construction Treatment BMP activities and tasks (2010 – 2011).
 - ✓ The Post Construction Workgroup focused on incorporating a design process into Chapter III that will coincide with the current DPO. The Roadway Design DPO will also be updated to reference Chapter III at the necessary design stages.

- ▶ Update Environmental Coordination Meetings to include consideration for Post Construction Stormwater commitments (2010 – 2011).
 - ✓ Projects are informally reviewed for Post Construction BMPs at Environmental Coordination Meetings. As Chapter III is completed and training is initiated for designers, a formal review process will be implemented.

Measurable Goal 5.1 (b) - Establish cooperative effort to coordinate both planning and design of structural and non-structural BMPs.

(Percent Complete = 80)

- ▶ NDOR will continue to coordinate and partner with local MS4s to develop a compatible program.
 - ✓ NDOR has utilized the City of Omaha's Post Construction Program as guidance while developing Chapter 3. It is expected that most of the water quality BMPs to be utilized by NDOR will overlap with those approved for use by adjacent MS4s.

- ▶ Partner with the City of Omaha to administer a Post Construction Workshop in the fall of 2010.
 - ✓ IECA-Great Rivers Chapter and City of Omaha hosted the Designing for the Future Conference and Expo on October 26-28. Presentations were focused around Post Construction Stormwater requirements and Bioretention BMPs. Several NDOR Designers and Environmental Staff attended the two day conference.
 - NDOR gave a presentation outlining the Department's Post Construction Program.

- ▶ Continue to partner with UNL for research projects studying Treatment BMPs along highway systems.
 - ✓ Several research projects are either underway or are being considered for 2011. See Section 7.5 for details on current and proposed research projects.

Measurable Goal 5.2 (a) - Update existing Specifications, manuals, and Standard Plans to address post-construction storm water runoff from new development and redevelopment projects.

(Percent Complete = 80)

- ▶ Complete Chapter III (Post Construction Stormwater) to include in the Drainage Design and Erosion Control Manual (2010 – 2011).
 - ✓ A draft of Chapter III was completed at the end of 2010 and was distributed to CTAG members for review. Comments will be received by February 2011 and further modifications will be made throughout 2011.

- ▶ Update the Construction Manual to address Treatment BMPs (2010 - 2011).
 - ✓ Scheduled for 2011.

- ▶ Develop Standard Plans for Treatment BMPs (2010 – 2011)
 - ✓ Scheduled for 2011.

- ▶ Develop Specifications for Treatment BMPs (2010 – 2011).
 - ✓ Scheduled for 2011.

- ▶ Discuss a transition plan for incorporating treatment BMPs into NDOR projects
 - ✓ Treatment BMPs are currently being considered for NDOR projects letting in 2013 or later.

- ▶ Begin developing Post Construction Training Course for Designers and Engineers (2010-2011).
 - ✓ Scheduled for 2011.

Measurable Goal 5.3 (a) - Communicate specific maintenance requirements for the long-term operation and maintenance of stormwater BMPs.

(Percent Complete = 80)

- ▶ Research maintenance requirements for Treatment BMPs applicable to NDOR.
 - ✓ Treatment BMP Design Guides are currently being developed. NDOR is using existing guidance from other State programs as well as available research data to establish maintenance requirements applicable to highway environments.

- ▶ Coordinate meetings with Operations Division and local MS4s to discuss BMP selection, maintenance requirements and costs.
 - ✓ Scheduled for 2011.

- ▶ Review maintenance activities and/or requirements of existing stormwater treatment BMPs and develop/revise maintenance scheduling and tracking for treatment BMPs.
 - ✓ Scheduled for 2011.

Summary of Post-Construction Site Runoff Control Inspections and Enforcement Actions

Table 4 Summary of Post-Construction Site Runoff Control Inspections and Enforcement Actions

Activity	Summary of Activity
BMP Design Review	<ul style="list-style-type: none"> ▶ Currently, projects are reviewed for stormwater velocity control BMPs and soil stabilization BMPs. In 2010, projects scheduled to be let in 2013 or later, that occur within NDOR's MS4 boundary, were also informally reviewed for Post Construction Treatment BMPs. A formal review process will be incorporated as Chapter III is reviewed and approved.
BMP Field Implementation Inspections	<ul style="list-style-type: none"> ▶ Construction projects are inspected by a NDOR Project Manager and/or Inspector familiar with the design standards and construction methods for current water quality BMPs. Stormwater velocity control and soil stabilization BMPs are checked against project plans and specifications in the field. NDOR also implemented a new Special Provision for projects let in 2010 and later that requires certified inspectors. See below: <i>The Construction Stormwater Management Control - Special Provision, includes the following language: "The Contractor's NDOR-Certified Erosion and Sediment Control Inspector shall be responsible for ensuring that all BMPs are installed in accordance with NDOR Specifications, Special Provisions, NDOR Standard Plans, or the manufacturers' recommended installation instructions. The Contractor's NDOR-Certified Erosion and Sediment Control Inspector shall be capable of reading and interpreting these documents. The Inspector shall be familiar with product and structural BMPs. The Contractor's NDOR-Certified Erosion and Sediment Control Inspector is required to inspect, assess, and supervise the maintenance of erosion and sediment control BMPs to ensure compliance with the NPDES Construction Storm Water General Permit while preserving BMP functionality."</i>
Enforcement Actions	<ul style="list-style-type: none"> ▶ No enforcement actions were taken for water quality BMP design, construction, or maintenance.

Post Construction Site Runoff Control Activities Scheduled for 2011

Measurable Goal 5.1 (a) Develop procedures for site plan review to include consideration of structural and/or non-structural BMPs.

- ▶ Continue to review and finalize Chapter 3.
- ▶ Review projects for Post Construction Treatment BMPs at Environmental Coordination Meetings.

Measurable Goal 5.1 (b) Establish cooperative effort to coordinate both planning and design of structural and non-structural BMPs.

- ▶ Maintain partnerships with the Nebraska Stormwater Cooperative, Papillion Creek Watershed Partnership and NeFSMA.

Measurable Goal 5.2 (a) Update existing Specifications, manuals, and Standard Plans to address post-construction storm water runoff from new development and redevelopment projects.

- ▶ Continue to review and finalize Chapter 3.
- ▶ Develop Treatment BMP Design Guides
- ▶ Update Maintenance Manual as Treatment BMP Design Guides are finalized. Design Guides will outline maintenance requirements for Treatment BMPs.

Measurable Goal 5.3 (a) Communicate specific maintenance requirements for the long-term operation and maintenance of stormwater BMPs.

- ▶ For projects constructed on interstate/freeway sections of state highways, within MS4 boundaries, NDOR will retain maintenance responsibilities for Treatment BMPs. This will be coordinated and tracked through the Roadside Stabilization Unit in coordination with the Operations Division. Additional discussion will occur in 2011 regarding this process.
- ▶ For projects constructed on non-interstate/non-freeway segments of state highways, within MS4 boundaries, the adjacent MS4 will be responsible for maintenance of Treatment BMPs. The CTAG Post Construction Workgroup will address how this "handoff" process will be coordinated and tracked in 2011.

6.0 POLLUTION PREVENTION AND GOOD HOUSEKEEPING

NDOR uses the Facility Runoff Control Plan Program to ensure ongoing good housekeeping and pollution prevention activities through regular monthly inspections at maintenance facilities located within MS4 boundaries. The FRCP development document was completed in 2008. The program document details the purpose/objectives of the FRCP program and provides templates for implementing and auditing the program. Areas of focus under the program include building and grounds, vehicle and equipment storage and maintenance areas, and material control. Key field leadership provides program and inspection training to new employees assigned to yards with an active monthly inspection requirement. Five NDOR maintenance facilities voluntarily participate in the FRCP program. These facilities are located in Blair, David City, Gering, Melia Hill (Gretna), and Plattsmouth. A majority of other NDOR facilities have chosen to implement key Best Management Practices to manage potential sources of pollutant runoff from agency operations (e.g. actively covering material stockpiles). Currently NDOR has 25 facilities participating in the FRCP program.

The 2010 measurable goals for Good Housekeeping and Pollution Prevention Program are summarized below.

Measurable Goal 6.1(a) - Perform internal evaluation of NDOR maintenance operations.

(Percent complete = 95)

- ▶ Coordinate with any additional non-regulated maintenance facilities to voluntarily implement the FRCP (upon request).
 - ✓ Five NDOR maintenance facilities voluntarily participate in the FRCP program. No non-regulated facilities were added to the FRCP program in 2010.

- ▶ Conduct FRCP Audits of MS4 facilities in District 2 and Operations Headquarters.
 - ✓ A total of 17 audits were performed across NDOR District 2 and Operations Headquarters. Seven of nine total areas on the Operations campus had satisfactory grades under the FRCP program, while two received grades of needs improvement due to lack of documentation. District 2 audits resulted in grades of Needs improvement for two facilities, Satisfactory at four facilities, and one Outstanding grade was received in that district.

Measurable Goal 6.1(b) - Develop Operation and Maintenance Standard Operating Procedures for reducing pollutants in storm water runoff from Agency operations.

(Percent complete = 90)

- ▶ Review and Evaluate effectiveness of FRCP program as needed.
 - ✓ Audits provide a mechanism to evaluate and review the FRCP program. NDOR will revisit this process as necessary.

- ▶ Update Maintenance Manual as Chapter 3 (Post Construction) of the Drainage Design and Erosion Control Manual is developed and finalized.
 - ✓ Chapter 3 is currently under review. Treatment BMP design guides will be developed throughout 2011 and the appropriate guidance will be incorporated into the Maintenance Manual.

- ▶ Other
 - ✓ One key environmental program the works in tandem with the stormwater program is the Spill Prevention Control and Countermeasure Program (SPCC) (40 CFR part 112). The SPCC program is in place at the majority of NDOR maintenance facilities and requires NDOR staff with oil handling responsibilities to obtain annual training. NDOR Operations Division worked with Human Resources and Information Technology in 2010 to update the training narrative, slides, and test to make it specific to NDOR maintenance facilities. The training and test are administered online through Talent Edge Learning Management and PureSafety.

Measurable Goal 6.1(c) - Establish process to track permanent BMPs.

(Percent complete = 95)

- ▶ The Enterprise Asset Management System (EAMS) is still under consideration for tracking permanent BMPs. Ongoing discussions will occur in 2010-2011 to determine EAMS feasibility.
 - ▶ It was determined that EAMS will not be used at this time to track permanent BMPs. These measures will be tracked and inspected through the established FRCP Program. Post Construction Treatment BMPs will be tracked through an internal database managed by the Roadside Stabilization Unit.

Measurable Goal 6.1(d) - Ensure existing maintenance agreements between NDOR and MS4 communities address the goal of reducing pollutant runoff from municipal operations.

(Percent complete = 80)

- ▶ It has been determined upon examination of the maintenance agreements the MMAs are not the appropriate document for achieving this goal. NDOR will continue involvement with existing alternative partnerships and will address the goal of reducing stormwater pollution in municipal operations through the use of Good Housekeeping BMP's.
 - ▶ NDOR attended meetings of the Papillion Creek Watershed Partnership and Nebraska Stormwater Cooperative. NDOR is also involved with the Nebraska Floodplain and Stormwater Managers Association (NeFSMA). Through these meetings, NDOR and adjacent MS4s collaborate on the common goal of reducing stormwater pollution.

Measurable Goal 6.1(e) Develop Quick Reference Guides for maintenance employees regarding storm water responsibilities.

(Percent complete = 95)

- ▶ Complete final revisions and distribute the FRCP training CD to NDOR maintenance facilities.
 - ▶ A statewide email to District Operation and Maintenance Managers, District Superintendents, District Supervisors and District Environmental Coordinators was provided to access the on-line training video in lieu of distributing a hard copy to each facility. Some hard copies were provided in the New Highway Maintenance Supervisor and Superintendent Course.

- ▶ Continue to provide basic stormwater awareness education during the FRCP program audits.
 - ✓ Interviews conducted during FRCP audits provide an excellent opportunity to increase stormwater awareness and provide additional training.

- ▶ Utilize newly developed training program for New NDOR Supervisors/Superintendents to communicate storm water requirements and responsibilities under the MS4 permit.
 - ✓ All NDOR Stormwater permit requirements and programmatic components are communicated to the NDOR Supervisors/Superintendents attending the class.

Summary of Pollution Prevention and Good Housekeeping Inspections and Enforcement Actions

Table 5 Summary of Pollution Prevention and Good Housekeeping Inspections and Enforcement Actions

Activity	Summary of Activity
Facility Runoff Control Plan Site Inspections	<ul style="list-style-type: none"> ▶ Qualified individuals from each facility conduct monthly site-evaluations using the FRCP inspection checklist and corrective action form. Twenty five facilities statewide are actively participating in performing monthly inspections. ▶ FRCP Audits were conducted in District 2 and Operations Headquarters in Lincoln. The Auditors reviewed inspection records, provided reinforcement and guidance for stormwater protection, and identified modifications that were made to each facility's FRCP document.
PP/GH Enforcement Actions	<ul style="list-style-type: none"> ▶ One facility required additional training and enforcement of the FRCP program from leadership in District 2 and three areas on the Operations campus were provided with guidance to reinforce the importance of the inspection documentation. Areas included Grounds, Fleet and Surplus.

Pollution Prevention and Good Housekeeping Activities Scheduled for 2011

Measurable Goal 6.1 (a) - Perform internal evaluation of NDOR maintenance operations.

- ▶ Perform FRCP audits in NDOR Districts 4 and 6.
- ▶ On site evaluations of Good Housekeeping and Pollution Prevention practices will be recorded for facilities receiving an SPCC update in 2011.

Measurable Goal 6.1 (b) - Develop Operation and Maintenance Standard Operating Procedures for reducing pollutants in storm water runoff from Agency operations.

- ▶ NDOR has begun to use a computerized Maintenance Decision Support System and Mobile Data Collectors to assess deicing materials, weather conditions, rates of application and efficacy.

Measurable Goal 6.1 (c) - Establish process to track permanent BMPs.

- ▶ Process has been established via the FRCP program. NDOR will review/update the process as needed in 2011 (e.g. Enterprise Asset Management or Eco-Database).

Measurable Goal 6.1 (d) - Ensure existing maintenance agreements between NDOR and MS4 communities address the goal of reducing pollutant runoff from municipal operations.

Continue partnering with

- ▶ Continue involvement with Papillion Creek Watershed Partnership, Nebraska Stormwater Cooperative and Nebraska Floodplain and Stormwater Managers Association (NeFSMA).

Measurable Goal 6.1 (e) - Reference Guides for maintenance employees regarding storm water responsibilities.

- ▶ Participant guide will continue to be distributed via the New Highway Maintenance Supervisor/Superintendent Training Course. Updates will be provided as necessary.

7.0 Additional Requirements

This Section of the Annual Report summarizes NDOR's efforts to comply with additional MS4 Permit requirements that are not specifically associated with the six Minimum Control Measures.

7.1 Evaluation of Compliance and the Appropriateness of Identified BMPs

Part III.C of the MS4 Permit requires NDOR to evaluate SWMP compliance and the appropriateness of identified BMPs.

- ✓ NDOR is in compliance with conditions and requirements of the MS4 Permit.
- ✓ NDOR is on track or ahead of schedule for accomplishing year four MCM milestones listed in the SWMP.
- ✓ NDOR is on track with accomplishing the Desired Outcomes for each Minimum Control Measure BMP listed in the SWMP Evaluation and Assessment Plan.

7.2 Proposed Changes to SWMP

Either the Department or the Permittee may propose amendments that are consistent with the requirements in Part III of the Permit for the SWMP or evaluation program at any time. Proposed amendments shall not be implemented without agreement from both the Department and Permittee.

- ✓ No changes are proposed to the current SWMP.

NPDES Permit Reapplication (Notice of Intent)

- ✓ The Nebraska Department of Roads intends that this fourth year annual report will serve as Notice of Intent to seek authorization under an NPDES permit for discharges from Separate Storm Sewer Systems under the authority of the Department within the boundaries of Regulated MS4s throughout the State of Nebraska. The Department intends this annual report to fulfill the requirement to reapply.
- ✓ A draft SWMP will be submitted to the Department of Environmental Quality for review in 2011. Proposed changes will include:
 - Continued emphasis on stormwater education and training programs.
 - Enhancement of the ECO-Database for environmental compliance and oversight reporting.
 - Implementation of the NDOR Post Construction Stormwater Program. This will involve training NDOR designers to utilize the treatment BMP design manual currently under development.
 - Increased utilization of the Department's Incident Reporting and Knowledgebase (DIRK) system to supplement the IDDE Program.

7.3 Improvements or Degradation in Receiving Waters

- ▶ NDOR is aware that the 2010 Integrated Report was published by NDEQ. NDOR is not aware of any improvements or degradations to receiving water quality that are currently caused by stormwater runoff from highways or maintenance facilities.

7.4 Compliance Assistance from other Entities

- ✓ NDOR has formed a partnership with the Local Technical Assistance Program (LTAP) of the University of Nebraska and the Nebraska Stormwater Cooperative.
- ✓ NDOR enforces State Statute Section 39-1339, 39-1372, and 39-2105. Under this authority, NDOR will require Adjacent MS4s to implement elements of the local SWMP along portions of the State Highway System that are within their MS4 boundary. This will be coordinated through Memoranda of Understanding.

7.5 Data Collection and Analysis

Table 6 Current Research Projects (University of Nebraska)

Research Topic	Description	Status
Feasibility of Integrating Natural and Constructed Wetlands in Roadway Drainage System Design	This research project will collect and analyze data on roadway pollutant discharges and the effectiveness of selected established stormwater BMPs. In addition, it will provide improved design guidelines for future BMP applications considering specific suites of roadway pollutants and constraints such as space and safety. The results of this study will be useful for planning, design, construction, and operation of Nebraska's transportation infrastructure and for implementing BMPs so that NDOR can effectively address the requirements of the NPDES Program.	In progress
Establishing Permanent Vegetation after Highway Construction	The objective of this work is to determine the effect of compost blankets and other types of blankets or soil surface treatments on soil movement and establishment of seeding mixtures on roadway shoulders and backslopes. The rapid establishment of the grass mixture on roadway shoulders and backslopes will reduce the likelihood of soil erosion on roadsides. Erosion on roadsides negatively impacts the aesthetics, stability, maintenance costs, and safety of the roadway shoulders and backslopes.	In progress

*SWMP Annual Report
(January 1 to December 31, 2010)*

Research Topic	Description	Status
Fertilizer Effects on Attaining Vegetation Requirements	This project seeks to determine the interacting effects of application rates of N and P on roadside backslopes shaped from fill (with and without mycorrhizae) or stock-piled topsoil on establishment of NDOR's complex seeding mixture(s) (Type A) and soil movement. The expected benefits will be a more thorough understanding of the multiple interactions occurring on the newly installed seeding locations; thereby giving NDOR the ability to adjust project inputs as needed for soil types, project location, and season of installation to best insure the success of the vegetation establishment.	In Progress
Stormwater Pollution Treatment BMP Discharge Structures	The objective of the proposed work is to identify an effective outlet structure design for stormwater treatment BMPs (detention BMPs). This objective will be achieved by (1) and extensive review of literature on detention based BMPs and BMP outlet structures, and (2) laboratory testing of structures that are not sufficiently documented but hold promise for being effective. The effectiveness of each structure is assessed based on efficiency for removing suspended solids, long-term reliability and susceptibility to obstruction by debris and long-term maintenance requirements.	In Progress
Development and Evaluation of BMPs for Highway Runoff Pollution Control	The goal of this research is to develop and evaluate BMPs that rely on bioretention, infiltration, and slow conveyance of stormwater, to ultimately provide improved water quality. The first objective is to find the combinations of native plant species and growth media that will be sustainable (cost and maintenance effective), while treating the first 0.5" Water Quality Volume. The second objective is to test the feasibility of using shredded tires as an available porous media in structural stormwater treatment BMPs such as infiltration and bioretention systems (BRSs), as well as aggregate media.	Begins in July 2011
Study of Bridge Deck Runoff from NDOR Highways	The objective of this research is to evaluate the quality of bridge deck runoff, and to determine the effects of bridge deck runoff on surface water bodies in Nebraska by evaluating both water and sediment chemistry as well as effects on aquatic life. The goal of this research project is to identify the potential environmental impacts of bridge deck runoff on receiving streams, and to determine design criteria that can be used by NDOR or regulatory agencies to identify when structural controls for bridge deck runoff may be necessary to protect in-stream water quality and aquatic life.	Begins in July 2011

*SWMP Annual Report
(January 1 to December 31, 2010)*

7.6 Annual Budget and Expenditures

	2010 Budgeted	2010 Expended	2011 Budgeted
Education and Involvement	NDOR Staff: \$5,000 MS4 Consultant: \$0	NDOR Staff: \$8,000 MS4 Consultant: \$0	NDOR Staff: \$8,400 MS4 Consultant: \$73,000
Illicit Discharge	NDOR Staff: \$20,000 MS4 Consultant: \$0	NDOR Staff: \$15,800 MS4 Consultant: \$0	NDOR Staff: \$20,800 MS4 Consultant: \$24,000
Construction Stormwater	NDOR Staff: \$58,000 MS4 Consultant: \$0 On-Call Consultants: \$90,000 Research: \$30,000	NDOR Staff: \$61,000 MS4 Consultant: \$0 On-Call Consultants: \$25,500 Research: \$26,599	NDOR Staff: \$63,100 MS4 Consultant: \$48,000 On-Call Consultants: \$95,000 Research: \$45,000
Post-construction Stormwater	NDOR Staff: \$22,000 MS4 Consultant: \$0 Research: \$60,000	NDOR Staff: \$17,700 MS4 Consultant: \$0 Research: \$52,428	NDOR Staff: \$21,300 MS4 Consultant: \$55,000 Research: \$380,000
Good Housekeeping	NDOR Staff: \$9,500 MS4 Consultant: \$0	NDOR Staff: \$10,400 MS4 Consultant: \$0	NDOR Staff: \$10,700 MS4 Consultant: \$26,000
Program Management	NDOR Staff: \$6,200 MS4 Consultant: \$0	NDOR Staff: \$12,200 MS4 Consultant: \$0	NDOR Staff: \$14,000 MS4 Consultant: \$26,000
Regulatory Compliance Support	MS4 Consultant: \$0	MS4 Consultant: \$0	MS4 Consultant: \$60,000
Total MS4 Program Cost	\$300,700	\$229,627	\$970,300