



INDOT SWQMP
Annual Report
April 2017-April 2018

INDOT SWQMP Annual Report – April 2016- April 2017

Characterization and Prioritization of Receiving Waters

0A-Identify Receiving Waters

Identify all known receiving waters that overlap with INDOT roadways and other facilities within 2010 Census mapped Urbanized Areas (UA). Send findings and completed SWQMP - Part B to IDEM within 180 days of the NOI date. Updates to the Baseline Characterization will be submitted in the annual reports and will be kept in the MS4 Coordinator's files.

This measure was completed and submitted to IDEM on October 24, 2014.

0B- Identify Impaired Waters

Identify impaired receiving waters within UA. Send findings and completed SWQMP - Part B to IDEM within 180 days of the NOI date. Updates to the Baseline Characterization will be submitted in the annual reports and will be kept in the MS4 Coordinator's files.

This measure was completed and submitted to IDEM on October 24, 2014.

0C- Identify Sensitive Waters

Identify known sensitive waters such as swimming areas, water supplies, endangered species habitat, outstanding resource and exceptional waters that overlap INDOT roadways and facilities within UA. Send findings and completed SWQMP - Part B to IDEM within 180 days of the NOI date. Updates to the Baseline Characterization will be submitted in the annual reports and will be kept in the MS4 Coordinator's files.

This measure was completed and submitted to IDEM on October 24, 2014.

0D- Part B

Submit Part B: Baseline Characterization and Report to IDEM

This measure was completed and submitted to IDEM on October 24, 2014.

0E- Part C (4/28/15)

Submit Part C: Program Implementation to IDEM

The step by step Rule 13 program implementation was included in the 2014-2015 Annual Report.

Public Education and Outreach

1A-Awareness Program (12/15/14)

Develop and/or update a public awareness program including brochures, electronic communications, etc. The completion of this goal will be measured by the delivery of business rules and formal INDOT policies that describe the communication method, frequency and measure of success for this awareness program. Communications and measures of success will be included in the annual report and kept in the MS4 Coordinator's files.

Public Awareness program Completed for 2014-2015 Annual Report. During the 2016-2017 report cycle a Storm Water Awareness Brochure was distributed to Rest Areas/Rest Parks, district offices, and to the public via our public hearings. This brochure is also located on the INDOT Storm Water webpage and the ERIN Document Library webpage. A copy of this brochure is kept in the MS4 Coordinator's files. New for the 2017-2018 permit cycle was the printing and distribution of pollution awareness/reporting wallet cards for maintenance staff. 1500 were distributed across the 6 districts.

1B-Awareness Training (12/15/14)

Develop and/or update a program of annual stormwater pollution awareness training for appropriate INDOT maintenance staff. Training shall include general stormwater awareness, identification of stormwater pollution potential, and appropriate contacts for reporting spills and illicit discharges. The completion of this goal will be measured by the submittal of the training materials, frequency, audience and number of people trained each year. This information will be kept in the MS4 Coordinator's files.

In December 2017, Storm Water Awareness Training for Supervisors was launched. Phase I of this training effort was in-person training at each of the 6 districts for INDOT Maintenance supervisors and foremen. During the training, participants received a copy of the INDOT Storm Water Management Field Guide, the One-Step Removal process support material, and the pollution reporting wallet cards. Phase II of this training was rolled out in January 2018 for maintenance support staff. This training is web based as part of our INDOT University format. At this time this report was filed 803 INDOT Maintenance staff have completed the training. This training is on-going and will be completed annually. Detailed records are kept of each individual who participates in the training and passes the exam. These records are updated daily and is kept by the MS4 Coordinator and updated daily.

1C- Volunteer Training (09/25/14)

Develop and/or update an ongoing program for training Adopt-A-Highway volunteers. The completion of this goal will be measured by the submittal of the training materials, frequency and trainee audience each year. This information will be kept in the MS4 Coordinator's files.

Adopt-A-Highway volunteers receive a fact sheet about storm water quality in their training briefing. A copy of the fact sheet is kept in the MS4 Coordinator's files.

1D- Internal Education and Involvement Plan (12/15/14)

Develop and/or update an Internal Education and Involvement Plan. The plan shall detail the internal training requirements related to the assigned specific responsibilities of INDOT staff. The completion of this goal will be measured by the submittal of the Internal Education and Involvement Plan, any training materials developed and an accounting of staff trained in each year. This information will be kept in the MS4 Coordinator's files.

The internal education and involvement plan was completed for the 2014-2015 annual report. The total number of INDOT Construction staff that has attended the Storm Water Management training in this permit cycle is 109. Plan kept in the MS4 Coordinator's files.

1E- Public Involvement Programs (Ongoing)

Continue the Trash Bash, Adopt-A-Spot, Sponsor-A-Highway and Adopt-a-Highway programs. Timber planting, native vegetation and additional programs may also be expanded or developed. The completion of this goal will be measured by the annual submission of documentation of the number of programs, projects, lane miles or areas adopted and number of participants.

Throughout the State dedicated citizen volunteers participate in programs such as Trash Bash Adopt-A-Highway, Adopt-A-Spot as well as Sponsor-A-Highway programs. Reportable numbers of programs, projects, lane miles, areas adopted and numbers of participants are recorded by each district. INDOT does keep track of the amount of litter that these volunteers gather and that data is recorded for MCM 1F. A press release was issued on 3/22/2018 about the Trash Bash Spring Cleanup. A copy of this release is located in the MS4 Coordinator's files. The INDOT Public Involvement Policies and Procedure Manual is located in the MS4 Coordinator's files.

1F- Anti-Litter Programs (09/25/14)

Develop informational anti-litter and vehicle maintenance programs designed to educate and involve the public in reducing this major cause of storm water pollution. The completion of this goal will be measured by the annual submission of the communication message (i.e. proper disposal of cigarette butts), type (i.e. signs on restroom doors), message (i.e. copy of poster), quantity delivered (i.e. posted on 50 restroom doors for six months) and estimated audience reached for each communication activity. This information will be kept in the MS4 Coordinator's files.

Row Labels	Sum of Actual Amount	Sum of Actual Mh Used	Sum of Actual Total Cost
2750 - FULL WIDTH LITTER PU (CY - CU YARD)	10269	15961	\$ 394,966.12
(1000) - CRAWFORDSVILLE DISTRICT	1615	901	\$ 23,739.40
(2000) - FORT WAYNE DISTRICT	423	1040	\$ 26,457.45
(3000) - GREENFIELD DISTRICT	5297	4469	\$ 148,501.86
(4000) - LAPORTE DISTRICT	2117	7473	\$ 152,419.48
(5000) - SEYMOUR DISTRICT	706	1289	\$ 27,306.88
(6000) - VINCENNES DISTRICT	110	789	\$ 16,541.05
2760 - SPOT LITTER PICKUP (CY - CU YARD)	38703	116840	\$ 2,968,013.78
(1000) - CRAWFORDSVILLE DISTRICT	3431	15672	\$ 377,278.68
(2000) - FORT WAYNE DISTRICT	4882	11456	\$ 301,172.47
(3000) - GREENFIELD DISTRICT	15340	29456	\$ 813,208.08
(4000) - LAPORTE DISTRICT	6228	21893	\$ 555,219.19
(5000) - SEYMOUR DISTRICT	5971	26208	\$ 662,285.21
(6000) - VINCENNES DISTRICT	2850	12154	\$ 258,850.14
Grand Total	48972	132801	\$ 3,362,979.90

INDOT has a webpage dedicated information about trash removal on INDOT right-of-way. <http://www.in.gov/indot/2598.htm>. There are many litter clean up events and groups that routinely pick up litter on INDOT right of way. Most Trash Bash activities will be taking place in April after this annual report is submitted. Those numbers will be captured in the 2018-2019 annual report.

Street Sweeping

ORB SR 265 Toll Bridges January 1, 2017-March 31, 2018

15.24 Tons of dirt and debris

Indiana Toll Road I80-I90

64 Tons of dirt and debris

1G- Storm Water Web Site (12/15/14)

INDOT's website will be expanded to include a storm water web page with information on INDOT storm water activities. These will include outreach programs, brochures, guidelines for erosion and sediment control, maintenance activities and how to obtain information. The completion of this goal will be measured by the annual submission of documentation of website content and the number of visitors to the website. This information will be kept in the MS4 Coordinator's files.

During the 2017-2018 permit cycle there were 2364 Visits and 3374 Page Views.

<http://www.in.gov/indot/2892.htm>

1H- Storm Water Information Center (12/15/14)

Create an online library of storm water-related materials accessible through the storm water website. Materials will be updated quarterly with the most recent guidance, research, publications and training materials. The completion of this goal will be measured by annual submission of a list of available library resources and the number of visitors to the website. This information will be kept in the MS4 Coordinator's files.

The INDOT Storm Water Information Center is intended as a resource for MS4 communities and other user groups throughout the state of Indiana. This on-line library exists to distribute material in various forms that can assist MS4 communities and others that are interested in the prevention of storm water pollution. The Information Center contains various materials including brochures, handouts, processes, research articles, and website links. New material has been added during this permit cycle. This material can be accessed through the INDOT Storm Water webpage. <http://www.in.gov/indot/2892.htm>

1I- Employee Education (Ongoing)

Publish two articles in either The Torch (monthly State Personnel Department) and/or Inside INDOT (monthly INDOT) publications annually. The completion of this goal will be measured by annual submission of copies of the articles and an estimate of the number of recipients. This information will be kept in the MS4 Coordinator's files.

Two articles have been published internally and distributed via INDOT intranet and email during this annual report cycle. Copies of these articles can be found in the MS4 Coordinator's files.

1J- Collaboration (03/15/15)

Coordinate with IDEM and MS4s statewide to share ideas and resources. The completion of this goal will be measured by including the agenda, copies of the presentations, discussion group notes, attendee list, and INDOT participants (presenters, volunteers, etc.) in the annual report. This information will be kept in the MS4 Coordinator's files.

The INDOT MS4 coordinator continues to sit on the Indiana MS4 Partnership committee and attends regular meetings. The MS4 Annual Meeting was held on May 16th, 2017. The MS4 coordinator continues to work on the planning committee for that conference. This coming MS4 conference in May of 2018, the MS4 Coordinator is scheduled to speak at one session and will moderate another. More information about this growing organization can be found at www.indianams4.org and in the MS4 Coordinator's files. The district's INDOT Construction Erosion Control Specialist have some involvement with the MS4 groups in their area.

1K- Road School (06/15/15)

Develop storm water quality training module(s) and present annually at the Purdue Road School (Joint Transportation Research Program (JTRP) and Indiana Local Technical Assistance Program (LTAP) sponsored) and the LTAP Stormwater Drainage Conference. The completion of this goal will be measured by including a copy of the presentation, number of attendees and INDOT presenters/volunteers in the annual report. This information will be kept in the MS4 Coordinator's files.

The MS4 Coordinator presented at the 2018 Purdue Road School on the topic of "Lessons Learned, Moving Forward, a Conversation with INDOT and Consultants" A copy of the presentation is in the MS4 Coordinator's files. There were approximately 110 attendees. On October 3rd, 2017 the MS4 Coordinator presented at the Fort Wayne Contractors Workshop. Presentation housed in the MS4 Coordinator's files. There were approximately 40 attendees.

1L-Facility Signage (03/15/15)

Develop educational signage (i.e. illicit discharges, waterway protection) and install signage in rest areas, weigh stations, and other public facilities. The completion of this goal will be measured by including a copy of the signage and location installed in the annual report. This information will be kept in the MS4 Coordinator's file.

INDOT was out of the rotation to do tunnel posters this year. Storm Water Awareness themed posters and brochures are continual replenished at the Rest Areas/Rest Parks.

1M- Public Education and Outreach Certification (04/28/15)

Submit Public education and outreach program development certification to IDEM

The Rule 13 state form 51279 signed by the INDOT MS4 Operator is included in this submittal and stored in the MS4 Coordinator's files.

Public Participation and Involvement

2A – SWQMP Public Meetings

INDOT will hold a public meeting in each INDOT district once during the first year of the plan. Participants will be solicited by advertising in key newspapers and emails to MS4s located in the district. The website will be updated with a copy of the SWQMP, contact information, meeting times and locations prior to the meeting. Comments will be considered for incorporation into the SWQMP. The completion of this goal will be measured by meeting attendee records, meeting minutes and a summary of the comments received and response. This information will be kept in the MS4 Coordinator's files.

Completed in the 2014-2015 permit cycle

2B- Public Involvement in Project Development (Ongoing)

Public involvement in project development follows the National Environmental Policy Act (NEPA) requirements that results in a varying amount of involvement depending on the project scope. INDOT's public includes citizens, state employees, consultants and contractors. The completion of this goal will be measured by analyzing the contracts let for the reporting year (i.e. projects let, number requiring public involvement under NEPA, number falling within a UA, etc.) and including this in the annual report. The supporting information will be available to the MS4 Coordinator through INDOT electronic storage mediums.

INDOT Public Involvement Procedures (August 2012) is located on the internet at:

http://www.in.gov/indot/files/PI_PublicInvolvementManual_2012.pdf

Following the public involvement requirements of the National Environmental Policy Act, INDOT holds public meetings across Indiana to inform the public and receive input for highway projects. Approximately 453 people attended INDOT public meetings in this permit cycle. Copies of the public meeting participation sign in sheets in the MS4 Coordinator's files.

2C-Annual Reporting (Ongoing)

An Annual Report will be developed and posted on the website. An availability notice will be sent to a list serve containing the MS4s and interested public. The completion of this goal will be measured by recording the posting of the document on the website, list serve message and tracking the public comments received, if any. This information will be kept in the MS4 Coordinator's files.

The 2017-2018 Annual Report will be posted on the INDOT Storm Water webpage and will be in the MS4 Coordinator's files.

2D- Public Involvement and Participation Certification (04/28/15)

Submit Public involvement and participation program development certification to IDEM

The Rule 13 State Form 51273 has been signed by INDOT's MS4 Operator, and is attached to this annual report, and is housed in the MS4 Coordinator's files.

Illicit Discharge Detection and Elimination

3A- IDDE Program Development (12/15/14)

INDOT will develop a program for illicit discharge detection and elimination. The completion of this goal will be measured by including a summary and a copy of the program and policies developed in the annual report. The information will be kept in the MS4 Coordinator's files.

INDOT's current IDDE Program and policies are contained in an INDOT Operations Memo 09-07. This policy is currently being evaluated and updated for improved compliance. Coordination is occurring between INDOT Hazardous Waste Management, INDOT Environmental Services, INDOT Safety, INDOT Facilities, IDEM Emergency Response, and INDOT Maintenance. A new Hazardous Material Unit Operating Manual should be completed by the summer of 2018. An expanded and up to date section has been added to the INDOT Environmental Policy webpage (www.in.gov/indot/2523) with more guidance and the Red Flag template. The new policies and procedures were included in the INDOT Maintenance Storm Water Awareness, and IDDE Training. A copy of Memo is kept electronically and in hard copy within the MS4 Coordinator's files.

3B- IDDE Program Review (01/15/15)

INDOT shall review their programs, policies, practices for issuing utility and access permits and make modifications necessary to ensure that non-storm water discharges are not connected into the INDOT storm sewer system. The completion of this goal will be measured by including a summary and copy of the changes to the policies in the annual report. The information will be kept in the MS4 Coordinator's files.

The INDOT Driveway Permit Manual Section 24: Drainage, has been updated.

<http://www.in.gov/indot/files/driveway.pdf>. Information is located in the MS4 Coordinator's files.

3C-IDDE Reporting (01/15/15)

INDOT shall develop a standard reporting format and phone and website contacts for all complaints and reports of illicit discharges. The completion of this goal will be measured by including a copy of the reporting form and a summary of complaints received and actions taken in the annual report. The information will be kept in the MS4 Coordinator's files.

See Something, Smell Something, Say Something.



New for this permit cycle was the distribution of wallet cards with numbers on the back of agencies/people to call in the event that our field staff finds pollution within INDOT right of way. 1500 were distributed during this permit cycle. More are being printed for distribution at the INDOT Construction Storm Water Management trainings.

Protect Our WATER

SEE Something

SMELL Something

SAY Something

INDIANA DEPARTMENT OF TRANSPORTATION

NextLevel INDIANA

Please report spills or dumps on INDOT right-of-way.
 If there's a public safety concern: Call 911
 Notify your INDOT Supervisor: _____
 Report a spill to IDEM: 1-888-233-7745
 Contact INDOT Customer Service: 1-855-463-6848

INDOT4U
855-463-6848

The icon “Report a Concern” is on every INDOT webpage and is on the INDOT Storm Water Webpage so that citizens can submit an electronic concern that automatically notifies the INDOT MS4 Coordinator when there is a concern that needs addressing. The INDOT Customer Service Call Center records complaints and reports of Storm Water and Drainage related issues from emails and phone calls from Indiana Citizens. Copies of every data entry related to storm water are in the MS4 Coordinator’s files.

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GOVERNOR MIKE PENCE

Indiana Department of Transportation

REPORT A CONCERN

Welcome to the INDOT's Report a Concern page. Please use this form to let us know of any roadway hazards, repair needs, or issues that you encounter on Indiana's interstates, U.S. highways or state highways. Your input will enable us to more effectively identify and address roadway issues, which saves taxpayer money, enhances safety, and enables us to continue to improve Indiana's highway network.

Required Field

Title/Prefix:

First Name:

Middle Initial:

Last Name:

Suffix:

Online Services

- Traffic Conditions
- Report a Concern
- Notice of Tort Claim Form
- Indiana GIS Atlas
- Rules IN.gov

MORE ONLINE SERVICES »
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Top FAQs | I Want To...

1. Check current traffic conditions
2. File a claim for property damage and/or personal injury
3. Contact INDOT
4. Check recent news releases
5. Know about public meetings

These issues/complaints are forwarded to the individual district for addressing. Data from April 2017 through January 2018 was compiled from our Customer Service Data base and can be found in the MS4 Coordinators Files. Our Customer Service IQ program was replaced with a new INDOT agency wide call center. In the old IQ program from January 1, 2017 to January 21st 2018 there were 1181 drainage complaints and 164 flooding complaints. In our new INDOT Customer Service System from February 2018 through April 13, 2018 there were a total of 43 issues/complaints related to storm water. Each individual issues/complaint can be found in the MS4 Coordinator's files.

3D- IDDE Staff Training (05/15/14)

INDOT shall develop a training program and provide it annually to appropriate staff and contractors. Training shall include identification and reporting of illicit discharges and illegal dumping. The completion of this goal will be measured by including a copy of the training material, a summary of the individuals that received training (number, contractor, INDOT, etc.) in the annual report. The information will be kept in the MS4 Coordinator's files.

IDDE training has been incorporated into the INDOT Storm Water Awareness Training for Maintenance Staff. A copy of this training material can be found in the MS4 Coordinator's files. This training was rolled out in December of 2017. Six in-person training secessions were conducted, one at each district for all maintenance supervisors and foreman. The rest of the maintenance staff is working on completing the on-line version of the training. To date 803 maintenance employees have been trained.

3E- Facilities Mapping (06/15/15)

Complete GIS mapping of all INDOT facilities other than roadways (i.e. district, sub district and maintenance offices, salt storage, rest areas, etc.) statewide. The completion of this goal will be measured by including the number and type of additional facilities mapped in the annual report. The information will be stored in the INDOT GIS system and accessible to the MS4 operator.

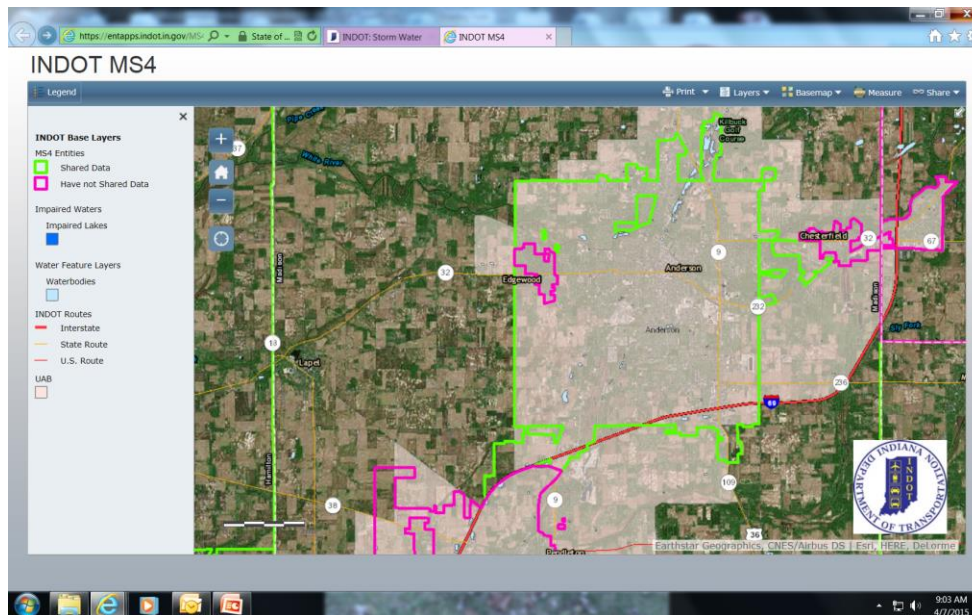
INDOT is currently completing the required facility mapping as part of the facility SWPPP development. As of April 2018 all 43 INDOT facilities have completed their SWPPP. Walsh from the Ohio River Bridges project has summited to INDOT their maintenance building SWPPP and mapping. The I-80/I-90 toll road has not reported anything to INDOT at this time.

3F- Outfall Mapping GIS (09/10/14)

Develop a GIS database for mapping of conveyances and outfalls within UA. Database tracking and reporting is described in measures 3H-3K. The completion of this goal will be measured by the completion of 3H, 3I and 3K and will be discussed in the annual report. The information will be stored in the INDOT GIS system and accessible to the MS4 operator.

This GIS Map of UABs is available to public view on the INDOT Storm Water Website. INDOT has been collecting GIS data from MS4s though out the state.

<http://www.in.gov/indot/2892.htm>



3G- Outfall Mapping SOP (07/15/14)

Develop SOP for as built outfall data collection and for incorporating data into GIS when the collection tools and procedures are implemented. The completion of this goal will be measured by including a copy of the SOP in the annual report. The information will be kept in the MS4 Coordinator's file.

INDOT's current approach to Outfall Mapping SOP is to update the database with new outfalls on a project by project basis. INDOT as an agency is in the process of acquiring the technology, developing a database, and developing an SOP for data collecting. This is an agency wide effort that includes all INDOT drainage structures, bridges and culverts. The MS4 coordinator is working with the team developing this effort including assisting on the SOP. INDOT is also working on developing "as built" requirements for identifying and mapping structures upon project completion. During the design phase of the INDOT project the designer will enter the location(s) of outfalls into the database, as part of final tracings or other end of the project milestone. These locations can then be verified with a field check at project completion.

Current (2018) INDOT Mapping efforts include:

- **Data:** Statewide GIS layer of the high resolution National Hydrography Dataset – status complete (133,413 segments, representing 103,108 kilometers of intermittent or perennial streams.
- Point location of culverts > 4'. – Status complete 8,884 culverts, of which **~4035 are high priority** for representing as a line with attributed flow direction.
- A plan to create line representations (by July 2018) of the high priority structures where NHD does not already identify the flow direction.
- A plan to create line representations (by December 2018) of the remaining structures > 4' where NHD does not already identify the flow direction
- INDOT is in the process of collecting inlets (13,377), farm tile entering or leaving (1913), manholes (7002), catch basins (5221), slotted drain (92), slab top drain

(118) and weir (17). Estimate is that this inventory at about 23% complete statewide.

- INDOT is presently re-evaluating how the organization collects and stores its small pipe (< 48") inventory. Presently pipe ends (count of 2246) are inventoried as pipe 'end points' but we may change to a line based feature to assist with representing flow direction among other benefits.
- INDOT presently has in place the following GIS database structure:
- **Database:** Structured enterprise GIS database for the point layers Outfalls, Inlets, Manholes
- Structured enterprise GIS database for the line layers Surface drains (ditches), Gravity mains.

3H- Outfall Mapping 1Q (10/01/15)

Map first 25% of conveyances and outfalls within UA. Collect existing outfall data from local MS4s to minimize redundancy. Verify accuracy of MS4 information. Maps will be housed in the INDOT GIS system and can be made available to IDEM and other MS4s. The completion of this goal will be measured by either MS4, county, road mile or other measurable unit and will be discussed in the annual report. The information will be stored in the INDOT GIS system and accessible to the MS4 Coordinator.

Completed in the 2014-2015 reporting cycle.

3I- Outfall Mapping 2Q (09/30/16)

Complete mapping of 50% of conveyances and outfalls within UA. Collect existing outfall data from local MS4s to minimize redundancy. Verify accuracy of MS4 information. Maps will be housed in the INDOT GIS system and can be made available to IDEM and other MS4s. The completion of this goal will be measured by either MS4, county, road mile or other measurable unit and will be discussed in the annual report. The information will be stored in the INDOT GIS system and accessible to the MS4 operator.

INDOT has currently collected outfall GIS data from 51 Indiana MS4s. The MS4 map is in real time and all the current MS4 data is recorded on the map. The map can be found at:

<https://entapps.indot.in.gov/MS4/>

There have been multiple attempts to encourage Indiana MS4s to share their data with INDOT. The MS4 coordinator will again ask for data at the 2017 MS4 Annual Meeting at a session about Outfall Mapping.

3J- Outfall Mapping 3Q (09/30/17)

Complete mapping of 75% of conveyances and outfalls within UA. Collect existing outfall data from local MS4s to minimize redundancy. Verify accuracy of MS4 information. Maps will be housed in the INDOT GIS system and can be made available to IDEM and other MS4s. The completion of this goal will be measured by either MS4, county, road mile or other measurable unit and will be discussed in the annual report. The information will be stored in the INDOT GIS system and accessible to the MS4 operator.

INDOT's current approach to the Outfall Mapping SOP is to create a database of outfalls and to update that database in coordination with a variety of INDOT activities such as maintenance, condition inspection and new projects. INDOT Environmental Services is working with multiple departments within INDOT to develop the mapping program.

3K- Outfall Mapping 4Q (09/30/18)

Complete mapping of 100% of conveyances and outfalls within UA. Collect existing outfall data from local MS4s to minimize redundancy. Verify accuracy of MS4 information. Maps will be housed in the INDOT GIS system and can be made available to IDEM and other MS4s. The completion of this goal will be measured by either MS4, county, road mile or other measurable unit and will be discussed in the annual report. The information will be stored in the INDOT GIS system and accessible to the MS4 operator.

Agency wide mapping for structures is underway. See 3G for an update on this effort.

3L- Illicit Discharge Certification (04/28/15)

Submit Illicit Discharge Detection and Elimination plan and regulatory mechanism certification to IDEM

The Rule 13 State Form 51271 has been signed by INDOT's MS4 Operator, and is attached to this annual report and is housed in the MS4 Coordinator's files.

Construction Site Stormwater Runoff Control

4A-JTRP Document Updates (08/06/14)

Incorporate remaining updates from the JTRP study in 2014 Standard Specifications and Design Manual. The completion of the goal will be measured by summarizing the updates added to the design manual in the annual report. The MS4 operator will have access to the Design Manual and Standard Specification updates on the INDOT website.

INDOT is not currently working with any JTRP studies for Storm Water. However there have been some changes to our specifications that will assist construction with improved compliance and lessen issues with sediment and erosion.

RSP 629-R-630 Plant Growth Layer (revision 4-16-2017) A copy of this new standard can be found on line and in the MS4 Coordinator's files.

RSP 205-R-636 Storm Water Management (revision 9-1-2017) A copy of this new standard can be found on line and in the MS4 Coordinator's files.

ITM 803 Chapter 15, and SWQMP Check List.

RSP 621-R-637 Seed Mixtures and Seed Requirements (revision 9-1-2016) A copy of this new standard can be found on line and in the MS4 Coordinator's files.

New Concrete Waste Water Standard Specifications. INDOT has completely rewritten the concrete washout specifications. This new spec is contained in the RSP 205-R-636 (9-1-2017) for all contracts letting after March 1, 2017 the new specs apply. The contractor must provide a Concrete Waste Water plan as part of their Storm Water Quality Control Plan. More detailed requirements are contained in the ITM 803 document. A copy of the appropriate section of ITM 803 is in the MS4 Coordinator's files.

Storm Water Quality Control Plan. For Project letting after 9-1-2016 Contractors are required to submit a Storm Water Quality Control Plan (SWQCP) at least 14 days before the start of construction. This SWQCP gives the Contractor the opportunity to strengthen the sediment and erosion control from the original design if needed. This is leading to better compliance in the field and more contractor buy-in as part of the permitting process. Information about the SWQCP is contained in RSP 205-R-636 and ITM 803.

The Construction and Design Memos related to Storm Water issued during this permit cycle:

Construction Memorandum: 17-01

Construction Memorandum: 17-07

Design Memorandum: 16-27

4B- Certification (08/06/14)

Develop policy that requires contractors' onsite Erosion Control Supervisor and select INDOT personnel to be certified. Develop the certification program and training. Implement policy within 2 years. The completion of the goal will be measured by including a copy of the policy, certification program, and training materials in the annual report. The number of projects requiring the certification will be reported until the policy is fully implemented. The

report will also provide a summary of the individuals that received training (contractor, designer, consultant, INDOT, etc.) The information will be kept in the MS4 Coordinator's files.

During the 2017-2018 permit cycle INDOT has continued to offer Storm Water Management training to the certification training has been offered to both INDOT employees and contractors. Seven classes were conducted during this permit cycle. A total of 436 people attended the trainings. Starting in the fall of 2016, any INDOT project that disturbs soil that let after September 1st, 2016 will have the requirement that the Contractor's "Trained Individual" will at minimum have been through the INDOT Construction Storm Water Management Training and passed the exam. To date over 870 contractors/consultants have been trained as well as over 450 INDOT employees. Starting in the spring of 2016 the certification program added an on-line element as part of the INDOT University system. After attending the classroom training, participants have 30 days to enter our on-line program, read additional information and take an on-line exam.

Copies of the Presentation and test questions are available electronically or in the MS4 Coordinator's files in hard copy. The policy for this Certification Training can be found in the new INDOT Standard Specification 205:

<http://www.in.gov/dot/div/contracts/standards/specprovta/>

4C- Rule 5 Inspection & Tracking (08/06/14)

INDOT district representative will visit each construction site with a Rule 5 permit quarterly, complete a Rule 5 inspection and document/track findings in central database (basically an oversight program). The completion of the goal will be measured by including a summary of the number of inspections conducted in the annual report. The supporting information will be maintained electronically and accessible to the MS4 operator.

For all soil disturbing projects that let after September 1, 2016, Contractors and consultants are required to submit the weekly/post rain event inspections electronically using our Field Assistant Application. The Construction Memo 16-04 and some supplemental information was distributed to contractors and consultants and can be found in the MS4 Coordinator's files. 6230 electronic Storm Water Quality Inspections were recorded for this permit cycle. A copy of all submissions to date are included in the MS4 Coordinator's files.

4D- Inspection Form (Ongoing)

Standardized inspection form is required on all contracts let after September 1, 2012 that requires a Rule 5 permit. This inspection form is available on the INDOT website. The completion of the goal will be measured by including a copy of the form in the annual report. The form will be kept in the MS4 Coordinator's files.

INDOT has developed a standardized inspection form that is required to be used on all contracts let after September 1, 2012 with a Rule 5 permit. The name of this form is 108-c-192d. A copy of the inspection form is kept in the MS4 Coordinator's files.

INDOT now requires an electronic submission from the Field Assistant Application. This digital submission is similar to the 108-C-192d form. Information about this application is explained in 4C. Completed inspection reports are entered into the database automatically. A list of these inspection reports can be found in the MS4 Coordinator's files.

Link to current INDOT Storm Water (Sediment and Erosion Control) Inspection Form

<http://www.in.gov/dot/div/contracts/standards/rsp/sep13/100/108-C-192d%20130901.pdf>

4E- Inspection Tracking (Ongoing)

Continue to track central office and IDEM inspections and violations in centralized database. The completion of the goal will be measured by including a summary of the inspections and violations in the annual report. The supporting information will be maintained electronically and accessible to the MS4 operator.

The inspections conducted by INDOT Storm Water Specialists and the IDEM Storm Water Inspectors are tracked with the computer data base Environmental Waterway Permit System (EWPS). The MS4 Coordinator has the report that shows how many inspections were conducted by INDOT Storm Water Specialists as well as the inspections conducted by IDEM Storm Water Inspectors. This report does not cover LPA projects. Totals for the time period of April 2017 to April 2018 can be found in the table below. The full report is located in the MS4 operator's files.

IDEM Storm Water Inspections	Satisfactory 15	Marginal 8	Unsatisfactory-Permit Violation 16
INDOT Storm Water Inspections	Satisfactory 16	Marginal 7	Unsatisfactory-Permit Violation 12

The following Data is from a report ran out of the ITAP Field Assistant Inspection App. A more detailed analysis is located in the MS4 Coordinator's files.

INDOT Field Staff, district Erosion Control Specialist quality assurance inspections
Conducted 336 Inspections
Contractor Storm Water Quality Managers weekly/post rain event inspections
Conducted 5894 Inspections

4F- District Inspection Employees (03/01/15)

Each district shall have a minimum of one full time equivalent employee dedicated to water quality compliance. The completion of the goal will be measured by including documentation of the location, personnel assigned, job description and dedicated hours in the annual report. The information will be kept in the MS4 Coordinator's file.

All six INDOT districts have a full time Erosion Control Specialist on staff, with offices in each district office. We had a change in staff in Crawfordsville District, the new employee is listed below. These individuals have been extremely helpful to the INDOT Storm Water Program. They complete site visits, quality assurance inspections, and serve as technical advisors for INDOT staff and contractors. They have been working to close out old NOTs, visit LPA projects, assist with process questions and review Storm Water Quality Control Plans. Each district wrote a slightly different job description but basically they are all completing similar tasks. Every two weeks all 6 district Erosion Control Specialists along with Central Office Storm Water Specialists participate in a conference call. These conference calls discuss issues that have come up in the various districts, discuss policy and spec changes, distribute any important information and serve as support in many other ways.

Current Staff Assignments:

La Porte District: Donovan Wilczynski

Fort Wayne District: Jennifer Napier

Crawfordsville District: Megan Bolyard

Greenfield District: Cory Senich

Seymour District: Devan Jerrell
Vincennes District: Rich Montgomery

4G-Field Guide (05/13/14)

Develop a SWQ Pocket Field Guide as technical field resource. The completion of the goal will be measured by including a copy of the pocket guide, a record of the number of guides printed and distributed in the annual report. The information will be kept in the MS4 Coordinator's file.

The following is the location for the PDF version of the 2018 INDOT Storm Water Management Field Guide.

[http://www.in.gov/indot/files/Indiana Storm Water Field Guide.pdf](http://www.in.gov/indot/files/Indiana_Storm_Water_Field_Guide.pdf)

All 2000 copies of the original first printing have been distributed as part of the INDOT Construction Storm Water Management Trainings, and to INDOT Maintenance Supervisors. 1500 copies of the 2nd Edition or second printing will be delivered on or around April 20th, 2018. The 2nd addition field guides will be distributed at all upcoming trainings. Many changes, updates and improvements were made in the 2nd edition. A new section was added called “Successful Strategies (for compliance)” to assist with field decisions and compliance efforts.

4H- Construction Staff E&SC Training (08/06/14)

Develop and implement a training program to provide INDOT construction staff an understanding regarding E&SC and waterway permitting. Recommended cycle includes initial and 3rd year review. The completion of the goal will be measured by including a copy of the training program and a summary of the individuals trained each year in the annual report. The information will be kept in the MS4 Coordinator's file.

Erosion and sediment control training for INDOT construction staff was completed via the certification training described in MCM 4B - Certification. Starting in the spring of 2016 the certification program added an on-line element as part of the INDOT University system. After attending the classroom training, participants have 30 days to enter our on-line program, read additional information and take an on-line exam. During this permit cycle of April 2017- April 2018 436 people have gone through this training program. The training is valid for 3 years, renewals are conducted on line. This training is evaluated internally each year and appropriate changes/updates are made annually.

4I- Construction Site Program Certification (04/28/15)

Submit Construction Site program plan and regulatory mechanism certification to IDEM

The Rule 13 State Form 51272 has been signed by INDOT’s MS4 Operator, and is attached to this annual report and is housed in the MS4 Coordinator’s files.

Post Construction Stormwater Runoff Control

5A- Pollutant Identification (12/15/14)

Research and determine pollutants of concern and BMP effectiveness for likely pollutants. Complete a cost benefit analysis for each BMP. The completion of the goal will be measured by including a summary of the research and the cost benefit analysis in the annual report. The information will be kept in the MS4 Coordinator's file.

This measure was addressed by a Joint Transportation Research Project (JTRP) SPR 3941 "Lack of Data for Predicting Storm Water Pollutant Removal by Post-Construction Best Management Practices":

The final report and findings can be found in the MS4 Coordinators files. The following is the abstract for the report.

"The project objective was to conduct a detailed literature review of storm water pollutants and mitigation technologies and synthesize the information so that INDOT can implement project results into standards. Because INDOT is a Municipal Separate Storm Water Sewer System (MS4) INDOT is required to minimize storm water pollution. A literature review was carried-out to identify pollutants examined by other transportation agencies, the pollutant's relevance to Indiana roadways, and the effectiveness of storm water pollution minimization best management practices (BMP). A cost benefit analysis was also conducted for a few BMP devices used in Indiana. Results showed that a variety of databases contained BMP testing studies and the same type of BMP may not perform similarly at different sites. Some BMPs can also generate pollutants. Very little BMP design, cost, and performance data were obtained during this study from INDOT and municipalities contacted due to the organizations being unable to access it. Manufacturer self-reported BMP device performance data found was not corroborated by independent device testing data. Manufacturer reported data greatly overestimated the device's cost benefit; Field validated device performance data are needed. Based on project results INDOT should consider (1) Establishing agency-wide procedures to begin collecting pertinent storm water BMP information from ongoing and planned projects, (2) Surveying which and how many BMPs are under INDOT control, (3) Apply caution when estimating BMP performance based on manufacturer reported data or BMP performance data from other parts of the U.S., (4) Conduct a field investigation to determine pollutant removal effectiveness for select BMPs."

5B- NEPA (06/15/16)

Develop policy for identifying projects in sensitive areas such as part of the Red Flag Investigation. Use GIS layer identifying these areas. The number of projects flagged will be tracked. The completion of the goal will be measured by including the revised policy and a summary of the projects flagged in the annual report. The information will be kept in the MS4 Coordinator's file.

The Urbanized Area Boundary (UAB) has been added to the Red Flag investigation as a layer on the GIS map. A link has been created for MS4s to the UAB layer on the GIS map. A new Red Flag Investigation process letter has been written to explain this process to designers.

The SOP for Early Coordination letters has been updated to include notifying MS4 operators when a project is within an MS4 area. This information can be found on the INDOT Environmental Policy Webpage: www.in.gov/2523.htm

To make this process function the INDOT Storm Water team updated an out of date IDEM list of all Indiana MS4 contacts. This list of MS4s and their contacts can be found on the INDOT Environmental Policy Webpage: www.in.gov/2523.htm and the INDOT Storm Water

Webpage www.in.gov/2892.htm. IDEM is sending the INDOT MS4 coordinator updates as reported to them so that the list can remain as up to date as possible. In 2017 567 red flag investigation documents were approved.

5C-New Impervious Pavement Policy (12/15/15)

Revise policy for post construction BMPs for projects with increased impervious area. Policy should consider water quality and quantity. The number of projects incorporating post-construction BMPs and BMP type will be tracked. The completion of the goal will be measured by including the revised policy and a summary of the project BMP data in the annual report. The post construction BMPs will be tracked in the GIS database created in Measure 7A. The policy information will be kept in the MS4 Coordinator's file.

INDOT is currently taking inventory of installed Post-Construction BMPs, developing maintenance guidelines and schedules, and a tracking data base. INDOT's mapping efforts will also record locations and types of BMPs in right of way.

5D- Evaluate design related BMPs (12/15/15)

Investigate and document stormwater quality and quantity impacts to evaluate and determine appropriate BMPs such as reduced pavement widths, eliminating curb and gutter, providing diffuse flow, etc. The investigation may consist of pilot studies, monitoring, literature research, and other appropriate resources. Documentation shall include pollutant reduction for each BMP and recommendations on incorporating these measures into the INDOT planning process. The completion of the goal will be measured by including the findings in the annual report. The information will be kept in the MS4 Coordinator's files.

INDOT is in the process of re-evaluating its approach to post construction BMPs after the results of SPR 3941. Considerations are currently being reviewed for changes to the INDOT design manual to incorporate design for post construction pollution prevention and containment. It is hoped that drafts of changes will be available for the next permit cycle. Through efforts to improve our post construction BMP program INDOT has been working to identify type of post construction BMPs currently installed within INDOT right of way. A list of mechanical post construction BMPs is stored in the MS4 Coordinator files. As part of the agency wide mapping and facility management efforts, these post construction BMPs will be located, recorded and maintained as part of the new process and system.

5E-Document updates for Post Construction (06/15/16)

Update design manual and specifications to include new and revised policies and guidance. The design manual and specifications will be housed on the INDOT website. The completion of this goal will be measured by the inclusion of a summary of the updated design manual and specifications and documentation that they have been loaded on the INDOT website in the annual report. The supporting information will be kept in the MS4 Coordinator's files.

INDOT is currently reviewing considerations for adding post construction guidance to the design manual and specifications.

5F- Post construction Program Certification (04/27/16)

Submit Post construction program plan and regulatory mechanism certification to IDEM

The Rule 13 State Form 51274 has been signed by INDOT's MS4 Operator, and is attached to this annual report and is housed in the MS4 Coordinator's files.

Operations Pollution Prevention & Good Housekeeping

6A- Facility SWPPP Review (12/15/14)

Determine the availability of current SWPPPs. Evaluate the SWPPPs applicability to the specific district, sub district and maintenance unit location, in addition to their consistency, quality and quantity. The completion of this goal will be measured by the inclusion of a summary of the findings in the annual report. The information will be kept in the MS4 Coordinator's files.

The review was completed in the 2014-2015 permit cycle and can be found in the MS4 Coordinator's files.

6B- Facility SWPPP Development (12/15/14)

Develop and implement statewide facilities SWPPP. The SWPPP will provide statewide standard information and also address requirements based on the district, sub district and maintenance unit conditions (i.e. site map showing site location in relation to nearby water bodies, classification, etc.). The SWPPP will be kept at each facility. The completion of this goal will be measured by the submittal of the facility SWPPP with the annual report and a summary of the monthly inspection reports, findings and corrective action by district. The information will be kept in the MS4 coordinator's file.

All 43 facilities have completed their SWPPPs. In 2018 INDOT is planning on auditing our facilities for quality assurance. A list of completed facilities and their status of completion can be found in the MS4 Coordinator's files. A working copy of all Facility SWPPPs including the maintenance building on ORB SR 265 Toll Bridges are kept in the MS4 Coordinator's files.

6C-Maintenance Guidelines (07/27/14)

Review and revise guidelines for right-of-way maintenance to include mowing (height, frequency, fuel consumption, etc.) and weed control (herbicide use, type, amount, frequency, etc.). The completion of this goal will be measured by the submittal of the revised guidelines with the annual report and a comparative summary of the frequency of mowing annually. The information will be kept in the MS4 Coordinator's files.

Operations Memorandum Vegetation Management 14-05 which is found on INDOT intranet is a set of guidelines for vegetation management on INDOTs right-of-ways. A copy of the Operations Memo 14-05 is stored in the MS4 Coordinator's files.

6D- Recycling (09/15/14)

Review and revise the policy for recycling practices (scrap metal, tires, plastics, aluminum, paper, etc.). The amount of recycling by type will be tracked. The completion of this goal will be measured by the inclusion of the revised policy and a summary of the recycling activity in the annual report. The information will be kept in the MS4 Coordinator's file.

Information about INDOTs recycling programs and policy can be found on the website; <http://www.in.gov/indot/2586.htm>

INDOT Executive order 05-21 has the guidelines for minimizing waste and recycling at INDOT. This executive order is stored in the MS4 Coordinator's files.

INDOT facilities recycles a variety of materials, including tires, shop hazardous waste, batteries, bulbs and ballasts. A spread sheet has been provided with a list of hazardous and nonhazardous materials that were collected for recycling has been provided and is in the MS4 Coordinator's files. A detailed report of, 2017-2018 reporting year, INDOT recycling efforts can be found in the MS4 Coordinator's files.

6E- Snow Removal practices (Ongoing)

Evaluate current snow removal practices and chemical storage and research feasibility and benefits of innovations to minimize fuel, salt and chemical usage with a consideration for public safety. The amount of material consumed (fuel, salt and chemicals) will be tracked in comparison to mobilizations and weather factors. The completion of this goal will be measured by the conclusion of the findings, implementation progress and usage analysis in the annual report. The information will be kept in the MS4 Coordinator's files.

INDOT 2017-2018 Winter Operations Data Totals for all 6 districts

378,047 Tons of Salt

6,151,764 Gallons of Brine

A more detailed analysis of INDOT Winter Operations including gallons of fuel used, labor hours, lane miles treated ext. can be found in the MS4 Coordinator's files.

ORB SR 265 Toll Bridges 2017-2018 Winter Season

142.48 Tons of Salt

50,558 Gallons of Brine

57.8 Tons of solid Brine

Indiana Toll Road I80-I90 2017-2018 Winter Season

16,077 Tons of Salt

17,616 Gallons of Brine

INDOT has started a new program involving Telematics, an electronic tracking system not only in salt trucks but on all INDOT vehicles. This system tracks vehicle maintenance, records data such as mileage, fuel management and driver behavior, fleet utilization and optimization and assists with snow fleet efficiency.

As the telematics program comes online, INDOT plans to manage in real-time the use and application rates of salt and deicing materials. The trucks will be able to communicate back to the office in an automated fashion. This sort of visibility will likely enhance the decision making process with data and conditions that has not been available in the past. The goal and the expectation is to reduce the instances where materials are broadcasted unnecessarily, yet allow field supervisors to dispatch and respond in better informed way.

INDOT has been committed to reducing the amount of salt needed to regain travel conditions during winter events. A large part of this effort has been to increase our abilities to mix, store, and apply salt brine. INDOT has enhanced several sites and each ones mixing operations over the last year by building a number of new facilities, most of which use a highly efficient recycling process. The new, fully automated systems are coming online at locations such as Lebanon and Loogootee Units where the stage one prewash station is located on the interior of the salt building. The advantage with these systems is that all operations are under one roof in close proximity, and the chance of environmental mishaps are greatly reduced. These new sites and many others also host added storage capacity, which gives INDOT the ability to deploy these highly effective anti-icing solutions much

quicker than in years past. This results in savings and efficiency that allow INDOT to more effectively manage of materials.

Several snow removal and salt/brine usage matrices can be found in the MS4 Coordinator's files. The INDOT Answers database keeps a very good matrix of these activities.

6F- Vegetation Management (Ongoing)

Restrict pesticide and fertilizer usage to those materials approved by EPA. Pesticide and fertilizer shall be used in accordance with label restrictions. The completion of this goal will be measured by the inclusion of the policy in the first annual report and policy changes included in subsequent reports. The information will be kept in the MS4 Coordinator's files.

The purpose of INDOTs vegetation management is to:

- **Enhance the safety of the motoring public**
- **Enhance environmental protection**
- **Mitigate erosion while providing adequate drainage**
- **Promote and preserve native wildlife habitats and native flora throughout the state**

The full Vegetation Management guidelines can be found at:

<http://www.in.gov/indot/3262.htm>

6G-Vegetation Management Training (11/15/14)

Develop and conduct training for personnel assigned vegetation management responsibilities. Training will include proper mowing techniques, use, handling and application of biological and chemical agents, spill response procedures, potential water quality impacts, etc. The completion of this goal will be measured by the inclusion of the training materials and personnel trained in the annual report. This information will be kept in the MS4 Coordinator's files.

Additional Vegetation Management Training was provided to INDOT Maintenance Personnel through the Storm Water Awareness Training for Maintenance. See MS4 Coordinators files for copy of training material.

6H- Operations and Maintenance Program Certification (04/28/15)

Submit Operational and maintenance plan certification to IDEM

The Rule 13 State Form 51281 has been signed by INDOT's MS4 Operator, and is attached to this annual report and is housed in the MS4 Coordinator's files.

Ongoing Water Quality Characterization/BMP Inspection & Maintenance

7A- BMP Tracking (12/15/15)

Develop database of structural BMP locations, to include watershed, level/type of service, maintenance required, maintenance completed, cost, etc. Incorporate structural BMP information for past projects. Create SOP for tracking future projects in GIS based database. The completion of this goal will be measured by the number of structural BMP locations in the database and development of the SOP that will be included in the annual report. This information will be kept in the MS4 Coordinator's files.

Efforts are moving forward for an agency wide mapping program and database. The INDOT Central Office Storm Water team is assisting in the development of a SOP as well as example photographs of post construction BMPs. A list of existing post construction mechanical devices has been completed and these BMPs will be entered into the asset management program for maintenance. The complete list of post construction BMPs that have been located is on file with the MS4 Coordinator's files.

7B- BMP Inspection Manual (12/15/15)

Develop written procedures outlining the inspection and maintenance requirements for structural stormwater BMPs. Written procedures will outline the inspection frequency, provide an inspection checklist, "how-to" instructions for regular maintenance, evaluation and reporting procedures for non-routine maintenance, and an inspection and maintenance tracking mechanism. The completion of this goal will be measured by the submission of the written procedure in the annual report with subsequent reports providing procedure updates made during the year. The written procedure will be kept in the MS4 Coordinator's files.

An update on this measure will be provided in the 2019 Annual Report.

7C- Develop BMP Inspection Program (11/15/16)

Develop and implement a BMP Inspection and Maintenance Program. The program will include development and presentation of training for appropriate INDOT staff and contractors. The completion of this goal will be measured by the submission of the training materials and number of people trained by district in the annual report. The report will also include a summary of inspection and maintenance activity by district. The training materials and training records will be kept in the MS4 Coordinator's file.

An update on this measure will be provided in the 2019 Annual Report.

7D- Evaluation of BMP Inspection Policies (12/15/17)

Develop and implement a water quality sampling plan to evaluate BMP Inspection and Maintenance programs, practices and effectiveness. Findings and recommendations will be used to improve the program. The completion of this goal will be measured by the submission of the water quality sampling plan and subsequent sampling results and recommendation response in the annual report. This information will be kept in the MS4 Coordinator's files.

An update on this measure will be provided in the 2019 Annual Report.

Retrofit Program

8A- Retrofit Program Assessment (11/15/18)

Assess the feasibility and need for a retrofit program to include an analysis of the benefits (i.e. pollutants of concern, BMP effectiveness, waterway priority, TMDL, etc.), feasibility (i.e. budget, life cycle, etc.) and develop a retrofit/maintenance plan to implement program starting in 2019. The completion of this goal will be measured by a summary of the findings and retrofit/maintenance plan in the 2018 annual report and the inclusion in the permit renewal. This information summary will be kept in the MS4 Coordinator's files.

An update on this measure will be provided in the 2019 Annual Report.