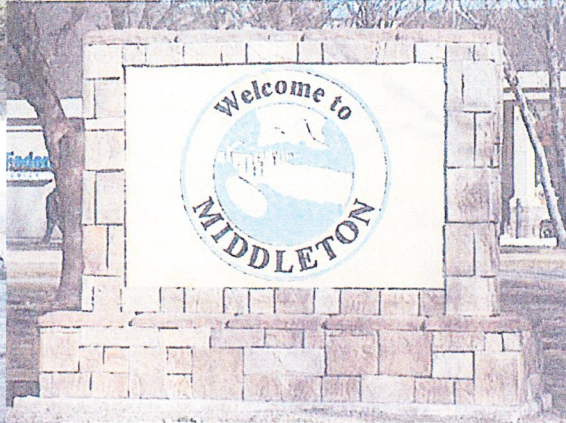




2015

# ANNUAL REPORT



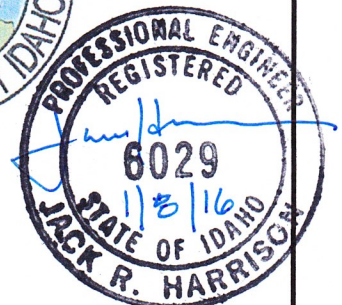
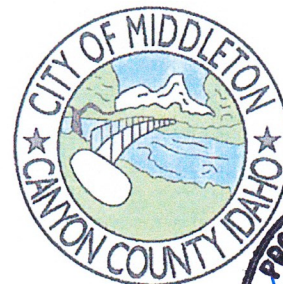
Year 6  
(October 2014 - October 2015)

**City of Middleton, Idaho**  
**MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) NPDES**  
Permit No. IDS - 028100

SUBMITTED TO

United States Environmental Protection Agency  
Storm Water Program  
NPDES Compliance Unit  
Region 10, Seattle, Washington

Idaho Department of Environmental Quality  
Boise Region Office  
Boise, Idaho



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Notes:

This report is intended to meet the annual reporting requirements as specified in the City of Middleton NPDES Stormwater Permit No IDS-028100. The City's primary goal for this report is to document progress and demonstrate substantial compliance with the City's NPDES requirements.

The permit expired on October 14, 2014 and was administratively extended (EPA October 2, 2014). This report covers actions related to stormwater management for the period up to and including Year 6 of the extended permit, which ended on October 15, 2015.

The format generally follows the headings as given in the MS4 Permit. The Attachments referenced above, which are provided as separate documents, form the City's Storm Water Management Program (SWMP) Plan, and are updated on a regular basis.

## I. Applicability

The City of Middleton (City) is regulated under the National Pollutant Discharge Elimination System (NPDES) through the United States Environmental Protection Agency (EPA). The City of Middleton owns and operates a regulated small municipal (i.e., urbanized areas with population below 100,000) separate storm sewer system (MS4) within the Nampa Urbanized Area. The EPA issued a draft NPDES permit in July 2008. Following review by the City and a public hearing, a final permit, IDS 028100, was issued with an effective date of October 15, 2009. The permit was set to expire on October 14, 2014 and was administratively extended (EPA October 2, 2014). It will remain effective until a new permit is issued. The City of Middleton is authorized to discharge from all MS4 outfalls in accordance with the conditions and requirements set forth in the permit.

## II. SWMP Requirements

### General Requirements

Under the MS4 permit, the City is required to implement a Storm Water Management Program (SWMP) for all areas within the Nampa Urbanized Area served by the municipal separate storm sewer system (MS4) owned or operated by the City of Middleton (permittee).

### Minimum Control Measures

This section presents a summary of minimum control measures (MCM) implemented under this permit. Each of the required elements is arranged in accordance with the required six MCMs outlined in the permit.

#### MCM 1. Public Education and Outreach

The City continues the development and implementation of public education activities:

- As part of the public education process, storm water grates have been permanently marked to inform the public they drain into the storm drain system, and then to either the Boise River, a tributary or groundwater.
- The City has provided pet clean up stations at parks and other areas of the city, along with information explaining why cleanup is important.
- The City has prepared and published information to educate the public about stormwater pollution. This information includes community actions citizens can take to reduce pollution, the City's requirements under the NPDES MS4 permit, relevant City stormwater ordinances, and organized activities aimed at reducing stormwater pollution. This information is published in City newsletters, water bill inserts, and on the City's website. Stormwater quality and other water quality

information is presented at City Council meetings. Published education and outreach materials are included in Attachment MCM1. Examples include “Phosphorus and Fish”, an article summarizing concerns regarding the effects of phosphorus on water quality and fish in the Boise River.

## **MCM 2. Public Involvement/Participation**

The City continues to implement efforts to encourage public involvement and participation:

- The City adheres to the public notification requirements of Idaho Code and Idaho Administrative Rules when implementing public involvement and public participation.
- The City conducted a city-wide leaf rake-up event in November of 2014, where residents were encouraged to assist neighbors in raking leaves
- The City encourages the use of pet cleanup stations in parks and other areas.

## **MCM 3. Illicit Discharge Detection and Elimination**

The City continues efforts to detect and eliminate illicit discharge. Specific efforts include the adoption of ordinances and the development of an Illicit Discharge Detection and Elimination Plan. Components of the plan include:

- Adoption of an ordinance (Middleton 2013) that addresses storm water and an ordinance prohibiting illegal discharges with enforcement procedures (See Attachment - City Storm Water Ordinances).
- Preparation of a comprehensive map of the storm water facilities (See Attachment - Storm Water Facility Map). The City’s storm water facilities have been mapped using the best available data and input from public works staff. The map is periodically updated to include new facilities and to include additional system information as it is collected or becomes available.
- Preparation of an inventory of industrial facilities that discharge into the MS4.

The City completed NPDES requirement for dry weather field screening of non-storm water flows at storm water outfalls. The permit requirement was for screening of 20% by the end of Year 5. Based on available information there are a total of 86 outfalls and a total of 19 (or 22%) were screened through Year 5. An additional 10 outfalls were screened in Year 6 (See Water Quality Monitoring Report).

## **MCM 4. Construction Site Storm Water Runoff Control**

The City has an ongoing program to require runoff control from construction sites. This includes compliance with the requirements of the Construction General Permit and local requirements (an Erosion and Sediment Control Plan) for all projects, including those administered by the City.

Components of the program include:

- Discharge of storm water from construction sites is prohibited into the MS4. If a property is discharging storm water off-site, or into the MS4, the responsible party must mitigate as applicable and as needed.
- The City of Middleton requires storm water management plans and comprehensive drainage plans to be submitted along with development/construction plans and/or building plans. The plans are submitted to the City's public works department as part of the building permit application package or the plat application.
- Projects disturbing one acre or greater are required to submit a Storm Water Pollution Prevention Plan and file a Notice of Intent with the EPA prior to construction activities. Projects disturbing less than one acre require a Storm Water Runoff Control Plan or Erosion and Sediment Control Plan be submitted to the City for review and approval.
- Providing information associated with storm water discharges for new development and redevelopment construction projects. This is accomplished through the construction plan review and approval process and the Storm Water Pollution Prevention Plan submittal requirement by EPA.
- Distributing requirements throughout the review process of the Storm Water Pollution Prevention Plan to inform operators of BMPs and waste controls.

#### **MCM 5. Post-Construction Storm Water Management in New Development and Redevelopment**

The City of Middleton adopted an ordinance specific to storm water runoff, storm water quality, storm water management plans, and post construction runoff from new development and redevelopment projects. The ordinance strengthened, revised, and amended requirements intended to meet the water quality objectives of the City and the community. Additionally, the City of Middleton's current development policy does not allow new development to discharge storm water to the MS4 in excess of predevelopment flows.

The City currently provides onsite observation of the installation of storm water facilities to ensure installation meets plans and specifications. The contractor or developer, as a condition of City acceptance of improvements, will warrant the storm water infrastructure for one year. At the end of one year, the City performs an on-site inspection to identify BMPS needing

remediation or other items that may affect long-term maintenance and operation of storm water controls prior to the City releasing warranty obligations of the development.

For a new development that discharges to the MS4 and is greater than one acre in size, the City requires a maintenance plan that includes regularly cleaning of components included in the City's storm drain system.

#### **MCM 6. Pollution Prevention and Good Housekeeping for Municipal Operations**

The City purchased a vacuum truck in 2014 which is utilized to clean inlets and sediment traps in post construction areas. The schedule for cleaning has been reviewed and updated.

The City conducted Water Quality BMP Training for public works maintenance staff in July 2015. This training focuses on the NPDES MS4 permit requirements and best maintenance practices for the protection of water quality (see Attachment MCM 6).

For city parks and open space, the City is transitioning to reduce the use of phosphorous fertilizers where soil conditions and plant requirements allow. To better understand fertilizer requirements, staff collected soil samples for an analysis of city park areas to assess fertilizer needs.

The City completed the construction of a concrete pad for the City's sand storage area in 2015. In 2016, the City plans to complete the cover over the sand storage area to reduce the potential for water quality impacts from municipal activities.

#### **Discharges to Water Quality-Impaired Receiving Waters**

Monitoring of storm water discharge was initiated in 2012 and was continued in 2015 (See Attachment - 2015 Storm Water Monitoring Report). Based on these results, it appears that the discharge of storm water contributes Pollutants of Concern (TSS, phosphorus and bacteria) to Section 303 (d) listed water bodies. The minimum control measures and other activities are targeted by the permittee to control the discharge of the pollutants of concern (Table 1). As discussed in the "Monitoring Report" section to follow, the City will continue to focus efforts on control of bacteria, and further assess the actions that can reduce levels of phosphorus in stormwater runoff and receiving waters.

Table 1. Summary of MCM and pollutants of concern that are the focus of the stormwater management activities.

Number	Activities	1	2	3	4	5	6	Notes/Comments
		Public Education	Public Involvement	Illicit Discharge	Const. Runoff Control	Post-Construction	Prevention / Housekeeping	
All	<b>Activities for all PoC</b>							<b>Focused on all PoCs</b>
1	Maintenance of basins					X	X	SmW Ord Revised Jan 2013
2	Site design measures					X		SmW Ord Revised Jan 2013
3	LBR Watershed Council	X	X					Supports and Tracks activities
4	Storm Water Ordinance			X	X	X	X	SmW Ord Revised Jan 2013
TP	<b>Phosphorus Activities</b>							<b>Focused on phosphorus reduction</b>
1	Fertilizer management	X					X	review letters
2	Dry weather discharges	X	X					new letters
3	Clean up days	X	X					Spring clean up
TSS	<b>Sediment Activities</b>							<b>Focused on TSS Reduction</b>
1	Street sweeping						X	New vac truck
2	Catch basin cleanout						X	New vac truck
3	Plans and field inspections			X	X			
E.Coli	<b>Bacteria Activities</b>							<b>Focused on E coil reduction</b>
1	Pet waste management	X	X				X	New letters and web



### **III. Schedule**

This section outlines the activities planned for Year 7. In general the City will continue actions implemented under the existing permit, including storm water monitoring and annual report submissions under the exiting schedule. Some of the activities planned for Year 7 are outlined below.

#### **Public Education/Outreach Program**

The City will continue to develop educational and public outreach materials. The City plans to include this information in water bills, City newsletters, and on the City website. The City will maintain and update the storm water webpage where educational material and SWMP documents will be available to the public. The City will also continue training City staff to help educate residents. Storm water and other water quality information will continue to be presented at City Council meetings.

#### **Public Involvement/Participation**

The City will continue marking new storm drain inlets as they are constructed. In addition, the City will organize and conduct annual events that focus on public education and participation to promote storm water quality improvement. For example,

- An annual Rake-the-town event, in which volunteers and city staff gather to clean-up trash and debris along streets, sidewalks, and storm gutters.
- The City may organize and sponsor an annual community street and gutter clean-up day.
- A summary of water quality monitoring may be presented to City Council.

#### **Illicit Discharge Detection and Elimination**

The City will continue to implement the Illicit Discharge Detection and Elimination plan. This plan includes ongoing updates to an MS4 GIS database and map system, inventory of industrial facilities that discharge directly to the MS4 (to be reviewed and revised), and a spill response plan.

The City also plans to continue the process to identify general areas where relatively high dry-weather flows occur, and assess the level of concern (i.e., potential for Illicit discharges); and continue dry weather screening of about 10-15 outlets per year over the next few years until all outlets are screened.

#### **Construction Site Storm Water Runoff Control**

The City plans to continue to develop and implement procedures for the review of Storm Water Pollution Prevention Plans and site inspections. For example,

storm water management during construction of land development projects will be provided early in the development review and approval process so that appropriate controls can be incorporated.

### **Post-Construction Storm Water Management in New Development and Redevelopment**

The City will continue to distribute information regarding design and long term operations of facilities with the building permit applications. The City also plans to compile and review BMPs that have been used and develop recommendations that can be provided to developers to promote designs consistent with the City's storm water management objectives.

### **Pollution Prevention and Good Housekeeping for Municipal Operations**

The City will continue to develop and provide Water Quality BMP training for employees in Year 7. Additionally, the City plans to complete construction of a covered road sand storage in 2016.

## **IV. Monitoring, Recordkeeping and Reporting**

### **Monitoring Report**

A monitoring report was prepared to meet the reporting requirements as specified in the City of Middleton NPDES Stormwater Permit No. IDS-028100. The Permit requires storm sewer system (MS4) outfall monitoring and dry weather screening. The City's primary goal for meeting conditions of the Permit is to demonstrate a good faith effort by documenting substantial progress with the City's NPDES requirements for the period up to and including Year 5 of the permit which ended on October 15, 2014.

There are two components of MS4 water quality monitoring: (1) outfall monitoring and (2) dry weather screening. The monitoring and screening locations are shown in the report. The primary focus of the water quality sampling was on total suspended solids (TSS), phosphorus (TP), and bacteria (E Coli), which were identified in the Phase II NPDES MS4 Permit (EPA 2009) as the "Pollutants of Concern".

Based on the results of monitoring and screening efforts, the following recommendations should help to focus implementation of storm water management actions and address the pollutants of concern:

- (1) Land uses and management activities upstream of the outfalls will continue to be assessed along with options for implementation of new or improved stormwater control measures. Because of occasionally elevated E coli and generally elevated phosphorus, sources of bacteria and phosphorus should be the focus, and actions to reduce levels in storm water should be identified and implemented consistent with the City's management objectives.

- (2) The Willow Creek Outfall sampling location is being assessed to determine sources of runoff water (see Monitoring Report). While an alternative sampling location may be justified in the future, sampling will continue at the Willow Creek Outfall until a new permit is issued and any changes to storm water monitoring have been assessed.

## Quality Assurance Plan

As required by the permit, the City completed a Quality Assurance Plan and Monitoring Plan for the storm water monitoring requirements of the permit. EPA and IDEQ were both notified of the completion of these reports on October 15, 2010. The updates to the monitoring plan are provided in the Monitoring Reports.

## V. Compliance Responsibilities

### Inspections and Formal Enforcement Actions

The City has not inspected, or had any formal enforcement actions associated with any construction activities during the reporting period.

### Enforcement Actions from Regulatory Agencies

The City has not received any water quality related enforcement actions from any regulatory agencies during the reporting period.

### BMPs Necessary Due to Monitoring

The City began monitoring in Year 3 (see Attachment - 2014 Monitoring Report). Recommendations provided in the 2014 Monitoring Report include focus on BMP implementation.

### Change in Responsibility for Permit Obligations

There are no changes in responsibility for any tasks outlined in the approved permit. The City of Middleton and Canyon Highway District No. 4 have an exchange Maintenance Agreement that stipulates maintenance responsibilities for road sections that are located within both jurisdictions.

### New MS4 Outfalls

Newly constructed outfalls and changes to the inventory of known outfalls are documented below:

#### New Outfalls:

- 1) None

#### Existing Outfalls Not Previously Identified, Added to List in 2015:

- 1) None.

## VI. General Provision

### Certification

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

Darwin Jaylos  
Mayor, City of Middleton

1-11-2016  
Date

## VII. Attachments

Available as a separate document.