

**The Municipal Separate Storm Sewer System
(MS4)
NPDES PERMIT
Phase I Permit IDS-027561**

Idaho Transportation Department District 3

**Annual Report:
November 2016 – October 2017**

**Prepared by Idaho Transportation Department,
District 3 Environmental Section
December 2017**

**Idaho Transportation Department
District Three**

NPDES Annual Report November 2016 through October 2017

Introduction

This report identifies the activities undertaken by District 3 (District) of the Idaho Transportation Department (ITD) during the current permit year of November 1, 2016 through October 31, 2017, in compliance with the National Pollutant Discharge Elimination System (NPDES) storm water permit issued by the Environmental Protection Agency (EPA), effective on February 1, 2013. This report addresses only updates to information contained in the Annual Reports between the years of 2001 through 2017 and the permit conditions that must be addressed in subsequent permit years that apply exclusively to the District's system. It does not address activities conducted on behalf of the District by another co-permittee, such as Boise City's public education program or the monitoring program conducted by the Ada County Highway District (ACHD). Each permit condition is listed and then followed by a summary of how ITD addressed that condition, in compliance with permit requirement, Part IV, E.1.a. Annual Report.

Storm Water Management Program (IV.C.3.c.i.)

In accordance with permits requirements ITD is required to implement and enforce a storm water management program to reduce the discharge of pollutants from the MS4 to the maximum extent possible to protect water quality in receiving waters. Submitted with year one of the new 2013 permit application.

Control Measures (IV.C.3.c.ii.)

Subwatershed Planning

The Permittees have selected the Americana and Main subwatersheds for this permit requirement. A map and additional information on Subwatershed Planning requirements is located in ACHD's Storm Water Management Plan (SWMP).

Construction Site Runoff Management

A general description of ITD's program is located in ITD's SWMP, submitted with the 2012-2013 permit.

Language addressing storm water control and Clean Water Act compliance is included in ITD construction project contracts. Specific information concerning contractor responsibility for the containment and management of storm water is included in the Special Provisions section of the construction contract.

The Department's Design Manual, ITD Standard Specifications for Highway Construction, the Contract Administration Manual, and the 2008 Erosion and Sediment Control-Best Management Practices Manual contain sections devoted to erosion and pollution control measures for application on active construction sites. These BMPs help to minimize the erosion and sedimentation generated during the construction phase of a project. All of these documents have been formally adopted.

ITD staff receives training in the application, design, installation and maintenance of BMPs to the extent necessitated by their respective responsibilities.

ITD maintains and updates the ITD Storm Water Pollution Prevention Plan (SWPPP) Template to account for any internal changes. The SWPPP Template was last updated in March of 2017. ITD uses a template format that follows a similar model to that of the EPA. This template is intended to help operators by incorporating ITD policies, NPDES Construction General Permit Requirements, and other local, state, and federal rules and regulations into a comprehensive template that functions to help in achieving compliance.

The Storm Water Pollution Prevention Plan (SWPPP) Template example can be accessed through the following link: <http://itd.idaho.gov/enviro/Stormwater/Design/default.htm>.

Stormwater Management for Areas of New Development and Redevelopment

ITD relies on ACHD, Garden City and City of Boise for this requirement using the appropriate ordinance or control.

Industrial and Commercial Stormwater Discharge Management

ITD relies on ACHD, Garden City and City of Boise for this requirement using the appropriate ordinance or control. ITD has mapped the majority of the industrial areas within ITD jurisdiction to identify any contribution from off-site/outside ITD right-of-way.

Stormwater Infrastructure and Road Management Storage Facilities for Sand and Salt.

An anti-icing database is utilized by the District to track the application of magnesium chloride and salt on roads within the District. A review of the individual reports indicates that approximately 600,000 gallons of magnesium chloride/ice slicer were applied by the District in the MS4/NPDES permit area. ITD did store approximately 100 tons of dry salt at the Orchard maintenance yard, however it was not used within the MS4/NPDES permit area (only stored at this site). ITD District 3 inventories for year 2016-2017, De-Icer Liquid Brown Mag Chloride 700 tons, untreated Sodium Chloride 1000 tons.

Records are kept for maintenance in regards to both sanding and de-icing activities. The magnesium chloride materials used within the NPDES permit area are located within and out of the permit area. Staging and storage areas for magnesium chloride and dry salt within the NPDES permit area have all had modifications to minimize pollutants that could enter into storm drainage facilities. The Boise stockpile is stored under a covered shed to protect materials from precipitation. Storm water that does contact the stockpile is retained and treated on site through a shallow sand swale located adjacent to the stockpile. In 2015 a structure was built to cover the Orchard stockpile. The area continues to utilize a retention pond to capture materials.

Sweeping Effectiveness

The co-permittees have ensured that the streets for which they have maintenance authority and responsibility are swept as needed to reduce the discharge of pollutants to the maximum extent practicable (MEP).

Sweeping of designated ITD roads within the permit area except I-84 is completed by ACHD through a cooperative agreement attached with the first EPA Permit. Sweeping activity conducted under this agreement is tracked by ACHD. An evaluation of the adequacy of the level of effort on state highways within the permit area has been done by ACHD as part of the overall evaluation of their sweeping activities. Sweeping activity on I-84, by the District, is conducted as needed. ITD no longer uses sand for winter maintenance within the MS4.

Illicit Discharge Management

The ITD District 3 MS4 permit area is shown in figure 1 with the 16 outfalls in the MS4 permit area that are maintained. These outfalls receive discharges and connections from multiple jurisdictions. District roadways within the NPDES permit include I-84; I-184; US 20/26; SH 21; SH 44; and SH 55. The District has entered into a cooperative maintenance agreement with ACHD for portions of the state highways included in the MS4 permit area, with the exception of the interstate highway, I-84. The maintenance agreement includes but is not limited to routine maintenance and inspections, sweeping and cleaning of roadways, snow removal, upkeep and repair of culverts, repair of damage after storms and traffic accidents.

Complaint investigation procedures are in place and are described in the Complaint Response Manual, which was included in the first EPA Permit Year 2 annual report. The District also coordinates with the co-permittees in receiving and responding to citizen complaints. The District has also entered into cooperative agreements with Boise City and Garden City that gives Boise City and/or Garden City the authority to enforce illegal actions within ITD jurisdiction as requested. A copy of the cooperative agreement with Boise City was included in the Year 2 annual report. A copy of the cooperative agreement with Garden City was included in the EPA Permit, Year 3 annual report. Both agreements have been renewed.

ITD has in place an Emergency Response Program and a Hazardous Materials/Hazardous Waste Program to deal with the prevention, response, and containment of any spills that occur on ITD right-of-way. During the last year ITD had no incidents concerning the need to contain any spills. Several other agencies also participate in the State Response System. Spill records are kept by the Idaho State Police. In Ada County, Ada County Emergency Management coordinates these activities and the District has participated in their meetings. A copy of the relevant portions of the Idaho Transportation Department Maintenance Manual pertaining to Hazardous Material/ Incidents or Spills and a copy of The Idaho Hazardous Materials Response Plan was included in the EPA Permit, Year 2 annual report.

Education, Outreach and Public Involvement

The objective of the Education, Outreach, and Public Involvement Program is to proactively engage the public in stormwater management and protection by raising awareness about activities and practices that contribute to increased pollutant loading in stormwater runoff. A general description of activities and associated action are located in the SWMP, submitted year 1 of the current permit. For more information on this task

refer to Boise City's annual report, as they are the lead agency for Public Education as designated in the Intergovernmental Agreement. ITD Participates in the Public Education Program through the Intergovernmental agreement and cost sharing with the City of Boise.

The District makes available at all project preconstruction conferences an educational brochure titled, "Storm Water Pollution Prevention Plan Questions & Answers That Relate to Ensuring Compliance." This brochure provides answers and information to operators on some of the most commonly asked questions relating to Storm Water Pollution Prevention Plan requirements and compliance.

ITD Environmental has developed and maintains an online web site that contains information and links to NPDES, Construction General Permit and Stormwater information. This site and corresponding information can be accessed through the following link: <http://itd.idaho.gov/enviro/Stormwater/default.htm>

Discharges to Water Quality Impaired Waters

The permit requires all Permittees "to implement and enforce a SWMP designed to reduce the discharge of pollutants from their MS4 to the MEP, and to protect the water quality of receiving waters." ITD serves in conjunction with the other Permittees' SWMP plans and agreements.

Dry Weather Outfall Inspections

ITD performed visual inspections on active outfalls owned by ITD that discharge to either a tributary or to the lower Boise River in August. One outfall had observed flow from irrigation overflow and ground water infiltration, no evidence of an illicit connection at the outfalls was observed. The other outfall had no discharge.

Complaint Response, Inspection and Enforcement

The District has entered into a cooperative agreement with the ACHD for portions of the state highways included in the NPDES permit area, with the exception of the interstate highway, I-84.

Complaint investigation procedures are in place and are described in the Complaint Response Manual, which was included in the EPA Permit, Year 2 annual report. The District also coordinates with the co-permittees in receiving and responding to citizen complaints. The District has also entered into cooperative agreements with Boise City and Garden City that gives Boise City and/or Garden City the authority to enforce illegal actions within ITD jurisdiction as requested. A copy of the cooperative agreement with Boise City was included in the Year 2 annual report. A copy of the cooperative agreement with Garden City was included in the EPA Permit, Year 3 annual report. Both agreements have been renewed. No complaints were received for the current permit year.

Erosion and Sediment Control Inspections

Inspections related to construction site erosion control were performed during the reporting period. A total of eleven SWPPP's were reviewed and approximately between

60 and 120 inspections per SWPPP performed for contractor compliance within the permit area.

Industrial and Commercial Inspections

ITD does not perform inspections for Industrial or commercial facilities and defers to the respective agency with appropriate jurisdictional authority to inspect and enforce ordinances for industrial and commercial discharges.

New Guidance Material Developed or Updated

ITD updated a draft SWPPP for maintenance yards within the MS4 in 2017. The ITD Maintenance Operations Procedures Manual provides guidelines and policies for maintaining the state highway system and performance standards for ITD maintenance activities. The 2011 Erosion and Sediment Control-Best Management Practices Manual includes temporary and permanent erosion and sediment controls. Maintenance guidelines are included in the Erosion Sediment Control Plan (ESCP) for these controls. Structural controls are inspected annually by ITD maintenance crews. ITD continues to update a tracking data base which tracks inspection and maintenance activities, by highway segment, for ITD's Storm Drain Inventory. ITD is currently using GIS mapping and much of the mapping is completed and is available on the ITD Stormwater Information web site. New mapping has been developed for 2017 and is attached (figure 1). An interactive Map Book is also included on the disk.

<http://www.itd.idaho.gov/enviro/Stormwater/Overview/MS4/default.htm>.

ITD incorporates stormwater management into its in-house inspection certification and training courses. Courses include information on inspections to ensure proper BMP installation, maintenance and use. In addition, federal and state laws as well as local ordinances are used as guides for ITD maintenance operations.

Outfall Inventory

ITD in conjunction with ACHD is currently continuing to identify outfalls within co-permittees individual jurisdictions. The Map Book, developed 2017, helps to identify outfalls for the ITD District 3 and the co-permittees. The District is responsible for structural controls that include roadways and associated drainage facilities, bridges, roadsides, and traffic control devices. Drainage facilities include gutters, culverts, ditches, swales, pipes, poly drains, French drains, catch basins/inlets, sand and grease traps, edge drains, transverse drains, and retention/detention ponds. Criteria for the design, operation and maintenance of the structural controls that collect, convey, store, treat, or discharge storm water runoff are contained in the Department's Design Manual, 2012 ITD Standard Specifications for Highway Construction, ITD Maintenance Operations Procedures Manual, ITD Maintenance Manual, and the 2011 Erosion and Sediment Control-Best Management Practices Manual. The aforementioned documents have been formally adopted. ITD annually revises portions of the BMP Manual and the Erosion and Sediment Control Manual to include updated drawings and updated BMP applications.

Permittees continue to develop and implement operations and maintenance programs, to include the following:

- ☐ Definitive inspection and maintenance schedules for all co-permittee-owned structural controls which include the frequency of routine inspections.
- ☐ Guidelines and criteria for maintenance activities that are to be implemented for co-permittee-owned structural controls, as well as a description of the maintenance activities required such as “disposal of sediment” and “removal of debris.”
- ☐ A description of the inspection, operation, and maintenance of storm water retention facilities owned or operated by co-permittees.

Additional Controls and Practices Implemented

No additional controls or practices identified this year.

Notice of Implementation with Outside Entities

ITD shares implementation with no outside entities other than ACHD, Boise City, Garden City, Ada County Drainage District 3 and Boise State University, Phase I Permittees.

Annual Expenditures and Estimated Budget

The District pays for the program cost share out of General Operating Expenses. ITD has paid approximately \$11,000.00 towards their share of program costs for 2016/2017 and have budgeted approximately \$20,000 for their share of the program costs for 2018/2019.

Legal Authority

The Idaho Transportation Department (ITD) is an executive branch agency of the State of Idaho. ITD’s duties include, but are not limited to, proper planning, construction, maintenance, operation and protection of the state highway system. As an executive branch state agency, ITD has very broad rule making authority. Additionally, ITD has broad intergovernmental contracting authority.

The powers and authorities of ITD are contained in the Idaho Code, Title 40, Chapter 3 (Idaho Transportation Board), Chapter 4 (Idaho Turnpike Authority), Chapter 5 (Idaho Transportation Department), and Chapter 6 (County Commissioners and Highway Officers). Copies can be found in Appendix A of the Part 2 NPDES Municipal Storm Water Permit Application, submitted by the co-permittees.

The Idaho Transportation Board is vested with authority, control, supervision and administration of the Department. Pursuant to Section 40-310 (3), the Board shall “locate, design, construct, reconstruct, alter, extend, repair and maintain state highways, and plan, design and develop statewide transportation systems”.

The District controls third-party activities on District rights-of-way through the conditions associated with encroachment permits. IDAPA 39.03.42, “Rules Governing Highway Right-of-Way Encroachments on State Rights-of-Way,” provides ITD with access control through a permitting process. The rule defines an encroachment as “any

authorized or unauthorized use of highway right-of-way or easements or air space immediately above the highway right-of-way.” (IDAPA 39.03.42, 010.30). Encroachment permit conditions require compliance with Federal and State of Idaho standard plans and specifications. Encroachment permits are also conditioned to require environmental compliance, including implementation of applicable BMPs comparable to those required of ITD.

The rule contains specific provisions controlling drainage and storm water. When border area work is permitted, the rule requires “that adequate sight distance, proper drainage, desirable slopes for maintenance operations, and a pleasing appearance are provided.” (IDAPA 39.03.42, 400.12). The rule provides ITD with additional drainage control through the requirement that “All approaches shall be graded so that private properties abutting the highway right-of-way do not drain onto the traveled way, do not impair the drainage within the right-of way, alter the stability of the roadway subgrade or materially alter the drainage of areas adjacent to the right-of-way. Post-development drainage flows shall not exceed predevelopment drainage flows.” (IDAPA 39.03.42, 400.13.a.). ITD’s addition of a Development Services Section provides a formal opportunity to review and provide comments from ITD to land use agencies and developers with input from the Environmental Section.

An approved right-of-way encroachment permit is required for irrigation or drainage within state highway right-of-way (IDAPA 39.03.42,600.01) and Best Management Practices (BMPs) are required to temporarily control for erosion and sediment (IDAPA 39.03.42, 600.04).

Unauthorized and nonstandard encroachments are prohibited and they may be removed or their use may be suspended (IDAPA 39.03.42, 800.02). It is this provision that gives ITD the authority to control illicit discharges and illegal connections to their MS4.

The District coordinates with other permittees on storm water management responsibilities, especially when discharges from one permittees system flow to storm water systems owned and operated by another permittee. Coordination is implemented through formal and informal discussions, meetings, agreements and procedures. This coordination includes attending meetings, participating in special studies, identifying storm water run-on issues, reporting spills, etc.

The Idaho Transportation Department District 3 (ITD) has jurisdiction of the Municipal Separate Storm Sewer System (MS4) on the Interstate and State Highways within the Boise City Limits for the Phase I MS4 Permit. ITD facilities within the Phase I Permit area are I-84, I-184, US 20/26, State Highway 44, State Highway 55, and State Highway 21.

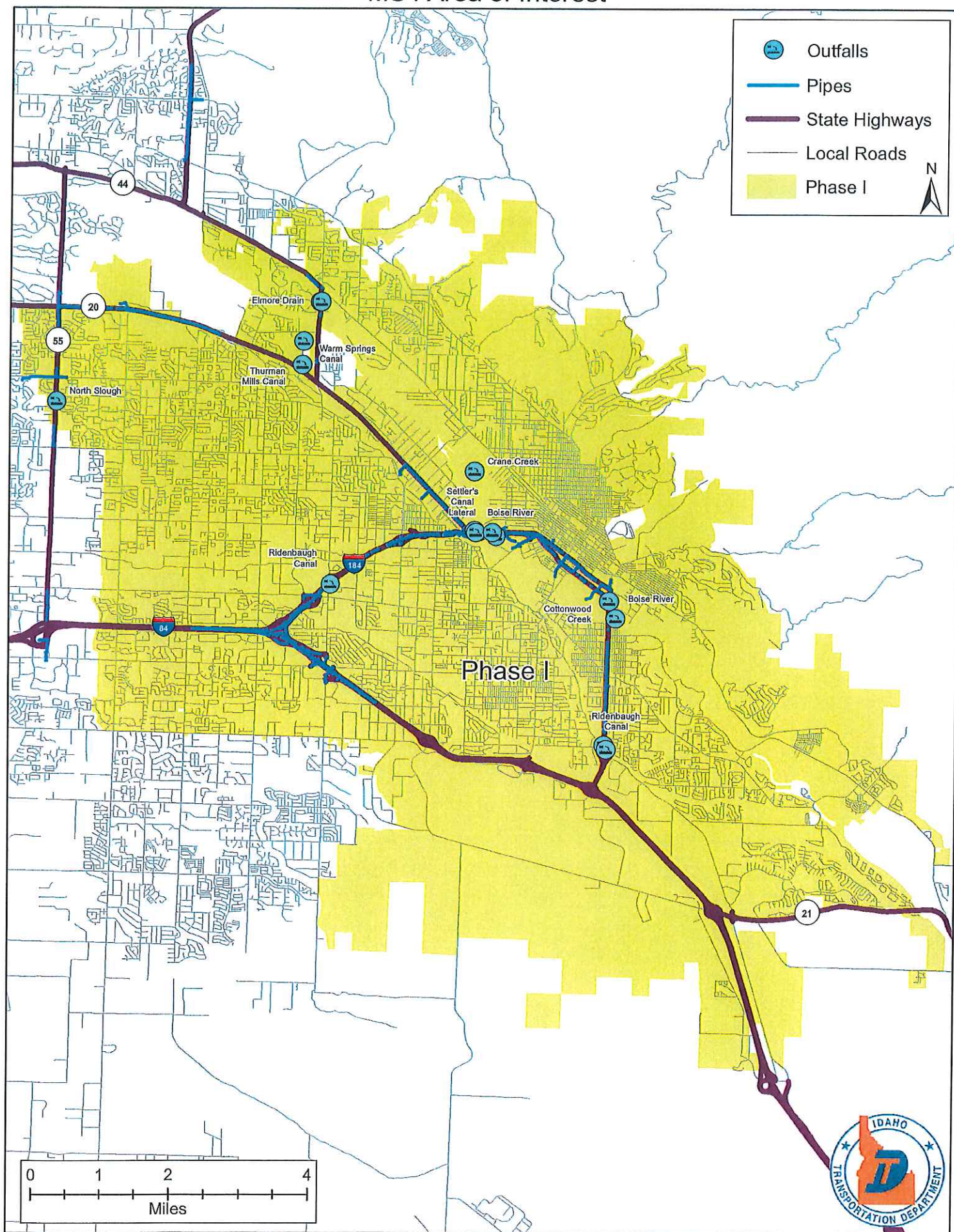
The storm sewer system inventory map of the Idaho Transportation Department District 3 (ITD) (Figure 1) is an overview of ITD's storm sewer system facilities including those areas ITD is responsible for within the MS4 Phase I permit area. Table 1 below provides characteristics of the ITD MS4 system. For detail please refer to the geographic information system map book provided in Appendix C. The map book indicates locations where ITD's system is physically connected to another entity's system, names the receiving waters, identifies subwatersheds, and locates our maintenance facilities.

TABLE 1: ITD's MS4 Characteristics:

Structures	Quantities
Pipe	28 miles
Inlets	939
Outfalls	16
Structural Treatment Devices/Ponds	3
Maintenance Facilities	2

FIGURE 1

MS4 Area of Interest



Annual Report Certification

Idaho Transportation Department NPDES Municipal Separate Storm Sewer System Annual Report FOR Permit Year 2016-2017

***Boise City and Garden City, Idaho Area
NPDES Stormwater Phase I MS4 Permit IDS-027561***

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.



Name/Title

Caleb Lakey, Engineering Manager
Idaho Department of Transportation



Date