



10th Annual Municipal Separate Storm Sewer (MS4) Report

NPDES Permit No. IDS-028118

December 2018 to December 2019

Submitted to

United States Environmental Protection Agency

Stormwater Program

Region 10, Seattle, Washington

Idaho Department of Environmental Quality

Boise Regional Office

Boise, Idaho

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Report 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."

Signature: 

Date: 1-6-20

Robb MacDonald, City Engineer, City of Caldwell

MS4 Permit Background

On September 4, 2009, the EPA Office of Water and Watersheds issued NPDES permit IDS-028118 to the City of Caldwell for their MS4. The permit became effective October 15, 2009, and the permit would also expire at midnight October 14, 2014. With the intent to continue to operate its municipal stormwater system, the Permittee City of Caldwell re-applied for a new permit in 2014, prior to the expiration of IDS-028118.

Please note that the annual report deadline in the permit was stated as “no later than March 15 of each year beginning in year 2011.” However, Pioneer Irrigation District (PID) filed a petition for review of the permit. After reviewing PID’s petition, EPA issued the November 18, 2009 notice which stated that the Permit would become fully effective and enforceable 33 days from the date of the notice. This notice changed the effective dates from October 15, 2009 to December 21, 2009. The permit dates have been adjusted to reflect this change in the start of the permit. Therefore, NPDES permit IDS-028118 actually expired December 21, 2014.

The City is presently still operating under NPDES permit IDS-028118, with the intent to do so until approximately October 2020. In November 2019, EPA supplied the City with an early draft of the anticipated October 2020 permit for review.

Introduction

The City of Caldwell has a population of nearly 60,000 citizens. It is part of the Canyon County developed area termed “Nampa Urbanized Area (UA)” by the EPA MS4 permitting program. To be clear, the City of Caldwell funds and operates its MS4 operations entirely separately from the City of Nampa. In addition to the City’s MS4 permit, the City of Caldwell also holds a multisector general permit (MSGP) for the publically-owned Caldwell Industrial Airport site. Since the first issuance of an MS4 Permit in 2009, the Stormwater Management Program and its compliance activities continue to be a feature of the Engineering Department.

The Stormwater Management Program (SWMP) is responsible for execution of the six areas of municipal stormwater management:

1. Public Education and Outreach
2. Public Involvement/participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Stormwater Runoff Control
5. Post-Construction Stormwater Management in New Development and Redevelopment
6. Pollution Prevention and Good Housekeeping for Municipal Operations

This annual report discusses the permit requirements, the status of each of the abovementioned responsibilities, and the monitoring requirements. The requirements were phased in over a four year period, and all requirements were completed prior to the end of the permit cycle.

Public Education and Outreach

Permit Requirements:

- a) *By December 21, 2011, the City must develop and implement an ongoing public education program to educate the community about the impacts of stormwater discharges on local water bodies and the steps that citizens and business can take to reduce pollutants in stormwater runoff.*
- b) *By December 21, 2011 and at least twice per year thereafter, the City must distribute appropriate stormwater educational materials to the target audience.*
- c) *By December 21, 2011 and at least once per year thereafter, the City must update its stormwater information webpage with appropriate educational information.*

Program Implementation

- a) Through the duration of 2019, the City remained a contributing member and participant in the Partners for Clean Water organization, which is led by the City of Boise. The Partners for Clean Water website provides a community calendar of clean water related events, as well as online newsletters, training videos, and public NPDES compliance documents. For more information on Partners for Clean Water, go to <https://www.partnersforcleanwater.org/>. During 2019, Partners for Clean Water sponsored multiple billboards and Radio advertisements to inform the public of the importance of minimizing yard waste to keep the Boise River clean.
- b) The City continues to house two Eddy-the-Trout display carts at public locations. The Partners for Clean Water's Eddy-the-Trout public information displays are located in the City's Development Services Building and the Caldwell Public Library. Both of these municipal facilities make environmental best practices information easily accessible to the public. The Eddy-the-Trout display features natural pest control methods, rather than the use of potentially harmful chemicals.

In addition, the City stormwater personnel use opportune events to distribute information on the need to keep contaminated water away from and out of storm drains. Annual events include community cleanups and professional discussions at local schools, such as STEAM Night at Skyway Elementary, Boise River Watershed Watch, and Caldwell Waterway Cleanup Day.

The City's Parks Department maintains multiple dog cleanup stations at most of the City parks and along the greenbelt. These stations with a message about preventing pollution make it easier for the public to clean up after their pets. There is a total of 18 dog cleanup stations in the City.

- c) The webpage for stormwater was implemented on December 20, 2011. To inspect the site go to www.cityofcaldwell.org. Then choose Departments > Engineering > Stormwater. This webpage displays information on public involvement in cleaning up the community, public education on stormwater issues, City stormwater ordinances, and a contact number for reporting illicit discharges. This webpage is updated annually to include each new annual report and annual activity photos.

Reference Appendix A: Public education

Public Involvement/Participation

Permit Requirements:

- a) *The City must comply with applicable State and local public notice requirements when implementing a public involvement/participation program.*
- b) *The City must make all relevant SWMP documents and all Annual Reports required by this permit available to the public. By December 21, 2012, all SWMP documentation and Annual Reports must be posted online through its regularly maintained website.*
- c) *The City must involve interested stakeholders in the development of the City's construction site runoff control program. The meeting schedule must be made known to the public, EPA and IDEQ through direct mail, email notification, and/or other locally appropriate means.*
- d) *By December 21, 2011, and at least once a year thereafter, the City shall host a public meeting regarding the SWMP and progress to date.*
- e) *At least once a year starting by December 21, 2009, the City shall organize, promote and participate in community Clean up Day(s)*
- f) *By December 21, 2011, the City must organize and conduct a storm drain stenciling program. Within four years (by 12/21/13) of the effective date of the permit, at least 75% of storm drains throughout the City's jurisdiction must be stenciled.*

Program Implementation

- a) The City presently complies and will continue to comply with the public notice requirement when implementing a public involvement/participation program.

- b) The City's Stormwater Public Involvement webpage includes contact information for the Caldwell Engineering Department Stormwater Program, as well as each of the annual reports associated with NPDES permit IDS-028118 since 2009.
- c) The City of Caldwell works to meet this requirement by collaborating with and participating in the Partners for Clean Water organization, which is led by the City of Boise. We utilize and support their responsible person (RP) training program. The City of Caldwell's Engineering Department did not independently hold any public meeting specifically to receive public comment on changes proposed to the City of Caldwell construction site runoff control program. Any interested residents within the City of Caldwell are able to obtain and provide comment on the City's stormwater management practice and policy using the contact information on the Stormwater webpage or by submitting a formal public records request.
- d) The City's Municipal Stormwater Management Manual was issued in 2009. During the past year, the City received no formally proposed changes to the Manual. Therefore, the City of Caldwell's Engineering Department did not hold a public meeting to address the development of or any proposed changes to the City of Caldwell Stormwater Management Plan this year.

As a side note, development and plan review activity have greatly ramped up within the past few years in Caldwell. Engineering department staff receive a great deal of pressure from the development engineering community to allow for variances due to site constraints such as size, groundwater elevation, and quantity of sand-and-grease traps required per policy. Department wide, we see a need to revise and update our stormwater design manual. Preliminary preparations, such as data gathering, are being made at present to align the revised manual with conditions outlined within our 2020 draft MS4 permit.

Reference Appendix B: Caldwell Municipal Stormwater Management Manual

- e) On May 11, 2019, the City of Caldwell teamed with a representative from Fish & Wildlife Service (out of Deer Flat National Wildlife Refuge) and Caldwell's Syringa Middle School to put on a community cleanup for 7th graders and their families at Rotary Pond Park in Caldwell. The crew focused their trash removal efforts along Rotary Pond and the Greenbelt, which is adjacent to the Boise River. In addition, the City provided promotional giveaways from Partners for Clean Water for pet waste cleanup.

Reference Appendix C: Community Cleanup

- f) A total of 2,254 storm drains have been marked since the beginning of the permit. The City's storm drain marking program marked an *additional* 88 storm drains this year, in combination with other events.

Reference Appendix D: Storm Drain marking

Illicit Discharge Detection and Elimination (IDDE)

Permit Requirements:

- a) *By December 21, 2012, the City must develop and implement a plan to detect and eliminate illicit discharges into their MS4, including roadways and associated drainage facilities, ditches, pipes, culverts, catch basins, and retention ponds in the permit area. This plan must include written spill response procedures for detection, identification of the source, and removal of non-stormwater discharges from the MS4. This plan must address illegal dumping into the MS4, and include training for City staff on how to respond to reports of illicit discharges. The City must develop an information management database system to track the activities and actions of the program.*
- b) *By December 21, 2012, the City must effectively prohibit non-stormwater discharges into the MS4 through an ordinance. The City must implement appropriate enforcement procedures and actions, including a written policy of enforcement escalation procedures for recalcitrant or repeat offenders.*
- c) *Through the ordinance set forth in the above section b), the City must prohibit any of the non-stormwater flows not meeting the requirements in the permit. The City must document to EPA in the Annual Report any existing local controls or conditions placed on the types of non-stormwater discharges in the permit.*
- d) *By December 21, 2012, the City must update and complete its comprehensive MS4 map. At a minimum, the map(s) must show jurisdictional boundaries: the location of all City-owned or operated storm sewers, culverts, ditches, and other conveyances: the location of all inlets and outfalls: points at which the City's MS4 is interconnected with other MS4s: names and locations of all waters that receive discharges from those outfalls: locations of all city-owned or operated facilities, including all maintenance/storage facilities, and city-owned or private snow disposal sites. Location of all outfalls must also be provided in latitude and longitude, and the diameter of all outfalls must be provided with the map. The map must be available in electronic or digital format as appropriate. A copy of the completed map (s), as both a report and as an electronic file via Arc GIS format, must be submitted to EPA and IDEQ as part of the corresponding Annual Report.*
- e) *By December 21, 2012, the City must begin an ongoing education program to inform users of the MS4, especially public employees, businesses, and the general public of*

hazards associated with illegal discharges and improper disposal of waste. This program must be conducted in concert with the public education requirement.

- f) By December 21, 2012, the City must begin dry weather field screening for non-stormwater flows from all stormwater outfalls. By December 21, 2014, at least 20% of the City's outfalls within the City Limits must be screened for dry weather flows. The screening should include field tests of selected parameters as indicators of discharge sources. The City must investigate any illicit discharge within fifteen days of its detection, and must take action to eliminate the source of the discharge within 45 days of the detection.*
- g) By December 21, 2012, the City must inventory all industrial facilities that discharge directly to the City's MS4 within the permit area and submit this inventory as part of the corresponding Annual Report. This inventory must include the names and address of the facility and the location of its outfall.*

Program Implementation

- a) The City of Caldwell IDDE program is managed by the Stormwater Program Engineer (SWPE). The SWPE has trained the City's Engineering, Parks, Police, Street, Water, and Wastewater Department staff to recognize and report suspected illicit discharges to the Engineering Department for investigation. This allows an additional set of on-the-ground City employees to be alert to the condition of the MS4 throughout the year and in multiple locations at any given time. In addition, members of the City of Caldwell community may contact the SWPE to report suspected illicit discharges (hotline information is on the Stormwater webpage of City website). Each suspected illicit discharge is investigated within 2 business days of discovery. The SWPE will fill out an Illicit Discharge Incident Tracking Sheet and/or an Inspection Report with photos for recording purposes and take necessary action to end the discharge. In addition, the SWPE has developed a Stormwater Pollution Prevention & Spill Response Plan for specific use by the City's Street Department. Note: In 2018, the Caldwell Fire Department was removed from the IDDE training program. The personnel only find themselves in the field to respond to emergencies and life-threatening situations. Furthermore, these employees are separately trained on how to respond to emergency spill situations via programs outside the scope of the MS4 training.

Reference Appendix E: Citizen Stormwater Hotline; Stormwater Pollution Prevention & Spill Response Plan

- b) The City has passed the Stormwater Management and Discharge Control Ordinance (City Code Chapter 13 Article 1) to make discharges to the City's stormwater systems

that are not covered in our MS4 a violation. The City utilizes this ordinance as well as EPA's CGP system to manage construction related stormwater control. Other illicit discharges to the MS4 can be enforced using the same ordinance.

- c) The City has passed the Stormwater Management and Discharge Control Ordinance (City Code Chapter 13 Article 1) to make discharges to the City's stormwater systems that are not covered in our MS4 a violation. City crews have been trained to recognize and report any illicit discharge that they observe to the SWPE. The City Engineering Department has an inspection or incident reporting form to be filled out on all reported illicit discharges and the SWPE investigates any reported activity and recommends action.
- d) The City has developed a current ArcGIS storm drain map of the City of Caldwell. This map is continually being upgraded to reflect the additional requirements under the permit. The outfall diameters are being verified when they are inspected for dry weather flows. Since the permit went into effect the City has incorporated over 568 additional acres (257 acres added in the last year). A DVD copy of the current City's stormwater map is attached to this report.

Reference Appendix F: Stormwater Map

- e) The City joined Partners for Clean Water for a regional approach to public education. The Partners for Clean Water website provides information to the public awareness of the effects of stormwater pollution. This method is able to expand the volume of publicity available to inform the public about stormwater.
- f) Each year the Stormwater Program Engineer coordinates inspection of 20% or more of the MS4 outfalls by performing dry weather monitoring. The City staff used to use software called Enterprise as a recording form and a tracking system for dry weather screening of stormwater outfalls. Because this software is no longer supported by the parent company, it is no longer in use by City personnel. They utilize a simple folder structure to organize inspections. They completed 110 outfall site visits within the 2018 calendar year for the purposes of DWF monitoring. This equals 33% of the outfalls.
- g) The City has a working inventory of all industrial facilities that discharge directly to the Caldwell's MS4.

Reference Appendix G: List of Industries connected to the City of Caldwell MS4

Construction Site Stormwater Runoff Control

Permit Requirements:

- a) *By December 21, 2012, the City must implement and enforce a program to reduce pollutants in any stormwater runoff to the MS4 from construction activities resulting in land disturbance of greater than or equal to one acre. This program must also include controls for pollutants in such stormwater discharges from activities disturbing less than one acre, if that construction activity is part of a larger common plan of development or sale that disturbs one acre or more.*
- b) *The City must provide appropriate information to representatives of proposed new development and redevelopment construction projects concerning the NPDES General Permit for Stormwater Discharges for Construction Activity in Idaho.*
- c) *By December 21, 2012, the City must adopt an ordinance or other regulatory mechanism to the extent allowable under state or local law that requires all construction site operators to practice appropriate erosion, sediment and waste control. This ordinance or regulatory mechanism must include sanctions to ensure compliance.*
- d) *By December 21, 2012, the City must publish and distribute requirements for construction site operators to implement appropriate erosion and sediment controls BMPs and to control waste (such as discharged building supplies, concrete truck washout, chemicals, litter and sanitary waste at a construction site) that may cause adverse impacts to water quality.*
- e) *By December 21, 2012, the City must develop procedures for reviewing all pre-construction site plans for potential water quality impacts, including erosion and sediment controls, control of other wastes, and any other impacts according to the requirements of the law, ordinance, or other enforceable mechanism created to comply with adopted stormwater runoff ordinances. These procedures must include provisions for receipt and consideration of information submitted by the public.*
- f) *By December 21, 2012, the City must implement a program to receive, track, and review information submitted by the public regarding construction site erosion and sediment control complaints.*
- g) *By December 21, 2012, the City must develop and implement procedures for site inspection and enforcement of control measures established as required by ordinances and including a written policy of enforcement escalation procedures for recalcitrant or repeat offenders. By December 21, 2012, the City must inspect all construction sites in the permit area disturbing five acres or more for appropriate erosion/sediment/waste control practices at least once per construction season. By December 21, 2012, the City must also develop a written policy identifying how construction sites disturbing less than five acres will be prioritized for inspection.*

h) The City must comply with the Construction General Permit and all relevant local requirements for erosion, sediment and onsite materials control on public construction projects. The City must ensure that all contractors working on behalf of the City are complying with the Construction General Permit and all relevant local requirements for erosion, sediment, and onsite materials control on construction projects. The City must incorporate specific language in all contracts ensuring appropriate stormwater management on all public construction projects.

Program Implementation

a) On December 3, 2012, Caldwell City Council passed a construction activities ordinance for projects disturbing greater or equal to one acre (See City Code Chapter 4 Article 19: Erosion and Sediment Control/Grading). Construction activities are monitored until the Notice of Termination (NOT) has been filed on a project.

In past years, the City has hired a consulting firm to present a training session on the duties of an inspector on a SWPPP inspection. In 2019, we hired a City of Boise/Partners for Clean Water Responsible Person class trainer to provide emphasis on site inspections and BMP's, with less guidance on how to compose a SWPPP. This class was attended by the City's Engineering, Water, and Street Departments.

The City of Caldwell SWPPP inspectors inspected a variety of projects within the last year. They are trained to report violations to the SWPE. A summary of their annual inspections is shown here.

Inspector	Total Sites Inspected 2019	Total Inspections 2019
TJ	2	100-125
Mike	25	1700
Steve	31	372
Ky	14	525

b) The City maintains a web site that allows developers to view and print the current construction activities ordinance.

c) The abovementioned construction activity ordinance (City Code Chapter 4 Article 19: Erosion and Sediment Control/Grading) requires operators to implement appropriate erosion, sediment and waste control. This ordinance also contains penalties for non-compliance. The Caldwell Street Department and the SWPE actively utilizes the ordinance language to enforce stormwater policy for lots one acre and smaller throughout the City. (For lots one acre and larger, we use the online CGP and SWPPP program requirements as enforcement tools.)

- d) Rather than the City publishing and distributing a set of BMPs, the City adopted as part of their construction activity ordinance, The Idaho Construction Site Erosion and Sediment Control Field Guide. This guide is a product of a partnership of many organizations coordinated by the Idaho Small Business Development Center. This will allow a more uniform approach for the developers in the Treasure Valley. Field guides are available at the Caldwell Engineering Department office and in any City-produced SWPPP.
- e) The City requires that any project that files a Notice of Intent (NOI) must submit a copy of the SWPPP for review by the Engineering Department. A City inspector is then assigned to the project until a NOT is issued.
- f) The City's Stormwater webpage includes a hotline to report illicit discharges as well as construction site erosion and sediment control complaints, as the hotline is a direct contact to the SWPE. The SWPE makes written record of the call or email and files it to the correct electronic folder for inspection follow up. Following this, a site inspection is scheduled. The property owner may or may not be contacted during the visit. The SWPE completes the record with a brief inspection summary and photos of the location in question.
- g) The present new-construction activity pace is such that City personnel can allow the inspectors to conduct site visits to all the current projects. This includes projects which are greater than 1 acre in size. City personnel utilize the procedures outlined in our ESC ordinance for enforcement activity with repeat offenders. (City Code Chapter 4 Article 19: Erosion and Sediment Control/Grading)
- h) The City requires that the contractors file a NOI with EPA on all projects that meet the requirements of projects which will disturb more than one acre of land.

Reference Appendix H: Construction Site Stormwater Runoff Control

Post-Construction Stormwater Management in New Development and Redevelopment

Permit Requirements:

- a) *By December 21, 2013, the City must implement and enforce a program to address post-construction stormwater runoff from new development and redevelopment projects that disturb one acre and that result in discharge into the City's MS4 system. The program must ensure that controls are enacted that will prevent or minimize water quality impacts from newly developed or redeveloped areas.*
- b) *By December 21, 2013, the City must adopt an ordinance to address post-construction runoff from new development or redevelopment projects.*

- c) *By December 20, 2014 the City must ensure proper long term operation and maintenance of all permanent stormwater management controls for newly developed project areas greater than one acre discharging into its MS4 area.*
- d) *By December 20, 2014 the City must develop and implement a process for pre-construction plan review and inspection of permanent storm management control to ensure proper installation and appropriate long-term operation and maintenance.*
- e) *By December 21, 2013, and at least once per year thereafter, the City must educate the development community about appropriate design, operation, and maintenance of storm retention facilities and vegetative practices to address post-construction stormwater runoff from new development and redevelopment within the City's jurisdiction.*

Program Implementation

- a) The Caldwell Municipal Stormwater Management Manual was first adopted in 1996. The Caldwell Municipal Stormwater Management Manual addresses stormwater discharge on any project that adds over 1,000 square feet of impervious surface.
- b) The Caldwell Municipal Stormwater Management Manual was first adopted in 1996. The latest version was adopted in July 2009. This manual addresses the stormwater discharge from new development and redevelopment.

Reference Appendix B - Caldwell Municipal Stormwater Management Manual

- c) At this time, the long term operation and maintenance of the newer developments are the responsibility of the private developers. The City's Street Department has a policy and procedure for inspecting and cleaning out catch basins in the older sections of town. A total of 347 catch basins were inspected and cleaned last year. The City's street sweepers have swept 5887.5 miles of city streets last year. The Street Department spent 0 man hours on snow removal and 442.5 man-hours on spreading 336 yards of sand.

Reference Appendix I - Catch Basin Cleaning Record

- d) Prior to obtaining building permit, the developer must submit stormwater plans and calculations for approval to the Building Department. City inspectors ensure that site construction matches the approved plans for construction. Builders on individual lots in an approved subdivision are not required to submit a stormwater calculation if the original subdivision stormwater plans includes runoff from individual lots.

- e) City staff continue to work with Partners for Clean Water to create educational opportunities on design, operation, and maintenance of storm retention facilities and vegetative practices for the development community.

Pollution Prevention and Good Housekeeping for Municipal Operations

Permit Requirements:

- a) *By December 21, 2013 the City must develop and implement an operation and maintenance program intended to prevent or reduce pollutant runoff from municipal operations. This program must address municipal activities occurring within the permit area with the potential for negative stormwater related water quality impacts, including: the use of sand and road deicers, fleet maintenance and vehicle washing operations, street cleaning and maintenance, grounds/park and open space maintenance operations, building maintenance, solid waste transfer activities, water treatment plant operations, storm sewer system maintenance, municipal golf course maintenance, and snow disposal site operations and maintenance.*
- b) *By December 21, 2013 and once a year thereafter, the City must develop and conduct appropriate training for municipal employees relative to best maintenance practices for protection of water quality. This training must be conducted at least once per year and address the activities in item a) above.*
- c) *By December 21, 2013 the City must prepare and implement stormwater pollution prevention plans for the City fleet maintenance/street department site and waste water treatment plant.*

Program Implementation

- a) The City owns and operates a municipal street sweeper cleanout station, with the addition of a second bay in 2013. This station will allow the City's street sweepers to discharge their loads. All waste water from cleanup is conveyed to the municipal sanitary sewer system. All of the solid waste collected is drained and transported to an approved landfill site. This station also has a 26 x 60 foot pressure wash bay for cleaning even the largest city vehicles. The Street Department operates one vactor truck to clean catch basins throughout the City and 7 sweeper trucks for gutter cleaning.
- b) In 2019, the SWPE held a series of trainings for City staff with primary duties which require working outdoors. The training covered background information on stormwater runoff. Trainees watched the educational video: *Stormwater to Drinking Water (by North Central Texas Council of Governments Environment & Development)* and engaged in questions and discussion afterward. A total of 138 City employees participated.

Reference Appendix J: Municipal Stormwater Training

- c) A new Street department maintenance building was erected in 2012. The new maintenance building site has on site retention facilities that do not connect to the City's stormwater system. An addition to the Street Department maintenance building was constructed in 2019. To accommodate the new impermeable surfaces, an additional sand-and-grease trap with a below-grade infiltration bed was also added to the site. This new facility does not discharge to the MS4 either. Fleet maintenance activities are not performed onsite (typically taken to a private mechanic shop). The City of Caldwell Waste Water Treatment Plant was previously operated by a private company under contract with the City. The contract was terminated in September 2012 and the City has assumed responsibility for the treatment plant operation. The Waste Water Treatment Plant stormwater facilities presently operate with on-site retention facilities that do not connect to the City's separate stormwater system. Contractors working at the City WWTP are each responsible for their jobsite stormwater control.

Discharges to Water Quality-Impaired Receiving Waters

Permit Requirements:

- a) *The City must conduct stormwater discharge monitoring starting December 21, 2012.*
- b) *The City must determine whether stormwater discharges from any part of the MS4 contribute pollutants of concern, either directly or indirectly, to the Boise River and associated tributaries. Pollutants of concern are total phosphorus, sediment, and E. coli.*
- c) *The City's Annual Report must include a description of how the activities of each of the minimum control measures are targeted by the City to control the discharge of pollutants of concern, and ensure to the maximum extent practice that the MS4 discharges will not cause or contribute to the excursion above the applicable Idaho water quality standards. This discussion must specifically identify how the City will evaluate and measure the effectiveness of the SWMP to control the discharge of pollutants of concern. For those activities identified requiring multiple years to develop and implement, the City must provide updates on progress to date. The City must submit this description of the SWMP implementation to EPA and IDEQ as part of the first Annual Report and update it annually in subsequent Annual Reports.*

Program Implementation

- a) The City of Caldwell submitted a Monitoring Plan and Quality Assurance Plan in December 2010. Stormwater discharge monitoring began on June 6, 2011. The current monitoring locations for the MS4 permit are:

1. Boise River - sampling site is the storm drain manhole at 10th Ave and the east bound freeway entrance
2. Indian Creek - sampling site is the outfall pipe on 12th Ave Indian Creek Bridge
3. Mason Creek - sampling site is a pond 0.3 mile west of Ward Road on Skyway Drive.

A fourth site also for Mason Creek is located at the corner of Tamworth Drive and Wilderness Drive and is a detention pond. The results of monitoring for the pollutions of concerns are listed in the annual report appendix.

Reference Appendix K: Monitoring Plan and Quality Assurance Plan, Monitoring Results

- b) The City is a member of the Lower Boise Watershed Council. The Council holds monthly meetings with Idaho Department of Environmental Quality (DEQ). These meetings are to work on TMDLs for the Lower Boise River on the pollutions of concern. The City is actively involved in the Council and City of Caldwell personnel have served in leadership roles on the Council at various times throughout the lifetime of NPDES Permit IDS-028118.
- c) The City of Caldwell staff searched for methods to expand the Public Education and Outreach segment of its permit by joining with Partners for Clean Water. This increase in funding has helped increase the number of people the message will reach. Also, the City of Caldwell staff across Public Works is trained on illicit discharge detection. The outfall monitoring conducted by the SWPE and Engineering Department staff has not uncovered any new illicit discharges during 2018. The City continues to promote public awareness through its activities with Partners for Clean Water. Besides this, the City of Caldwell staff has implemented a construction site stormwater runoff control program and the City's trained staff conducts inspections as required under the ordinance. Finally, City engineering staff continues to inspect Post-Construction stormwater management facilities at new development and re-development sites. Furthermore, the SWPE continues to work cooperatively with EPA R10 Labs and the Boise EPA office on a separate, but related MST Study to determine the source of the high e-coli sample results. Interestingly, we have noticed a seasonality to the magnitude of e-coli which appears our stormwater. We now suspect that it could be due to locally elevated groundwater, increased agricultural activity/traffic through the City, or perhaps another source that is seasonal in routine. We will begin Phase II of the study in spring of 2020 to narrow the focus to Indian Creek.

Appendices

Appendix A – Public Education

Appendix B – Caldwell Municipal Stormwater Management Manual

Appendix C – Community Cleanup

Appendix D – Storm Drain Marking

Appendix E – Discharge Incident Tracking Sheet; Stormwater Pollution Prevention & Spill Response Plan

Appendix F – Stormwater Map

Appendix G – List of Industries Connected to City of Caldwell MS4

Appendix H – Construction Site Stormwater Runoff Control

Appendix I - Catch Basin Cleanout Record

Appendix J - Municipal Stormwater Training

Appendix K - Monitoring Plan and Quality Assurance Plan - Monitoring Results

Region 10 Submittal to:	Local Submittal to:
United States Environmental Protection Agency Attention: Stormwater Program NPDES Compliance Unit 1200 6 th Avenue, Suite 900 (OCE-133) Seattle, WA 98101	Idaho Department of Environmental Quality Boise Regional Office 1445 N. Orchard Boise, ID 83720