City of Caldwell

Stormwater Management Program Plan

2021-2025

Written description in accordance with NPDES Permit No. IDS-028118

Version 1.0 / November 2021

City of Caldwell
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Definitions

Appropriate	Reasonably in intensity, duration, and magnitude
Authorized Enforcement Agent	The Public Works Director or City Engineer and/or any individual designated by the Public Works Director or City Engineer as an authorized enforcement agent.
Best Management Practices (BMP)	Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of "waters of the United States". BMPS also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. See 40 CFR 122.2 and 122.44(k).
Bioretention	Water quality and water quantity stormwater management practice using the chemical, biological, and physical properties of plants, microbes, and soils for the removal of pollution from stormwater runoff.
Bypass	The intentional diversion of waste streams from any portion of a treatment facility.
Caldwell Municipal Stormwater Management Manual	The most recently adopted version of the design standards manual prepared by the Caldwell public works department which provides design, performance, and review criteria for stormwater management practices at new development locations inside Caldwell city limits.
Code of Federal Regulations (CFR)	The official annual compilation of all regulations and rules promulgated during the previous year by the agencies of the United States government, combined with all the previously issued regulations and rules of those agencies that are still in effect.
Clean Water Act (CWA)	Federal water pollution control act enacted by public law 92-500 as amended by public laws 95-217, 95-576, 96-483, and 97-117; 33 USC 1251 et seq. [40 CFR §122.2].
Common Plan of Development	A contiguous construction project or projects where multiple separate and distinct construction activities may be taking place at different times on different schedules, but under one plan. The plan is broadly defined as any announcement or piece of documentation or physical demarcation indicating construction activities may occur on a specific plot; included in this definition are most subdivisions and industrial parks.
Comprehensive Drainage Plan	A stormwater management plan that covers all current and anticipated development of a site greater than 10 acres and sites planned for phased development.

Construction Activity	Includes, but is not limited to, clearing, grading, excavation, and other site preparation work related to the construction of residential buildings and non-residential buildings, and heavy construction (e.g. highways, streets, bridges, tunnels, pipelines, transmission lines, and industrial non-building structures).
Construction General Permit (CGP)	The current version of EPA's NPDES General Permit for Stormwater Discharges for Construction Activities EPA's CGP is posted on EPA's website at https://www.epa.gov/npdes/epas-2017-construction-general-permit-cgp-and-related-documents A new CGP is proposed for 2022, this document is posted on EPA's website at https://www.epa.gov/npdes/proposed-2022-construction-general-permit-cgp-and-related-documents . When this permit is finalized, the link will be updated.
Idaho Construction General Permit (Idaho CGP)	The current version of Idaho DEQ's IPDES General Permit for Stormwater Discharges for Construction in Idaho.
Control Measure	Any action, activity, Best Management Practice, or other method used to control the discharge of pollutants in MS4 discharges.
Deleterious Materials	Any nontoxic substance which may cause the tainting of edible species of fish, taste and odors in drinking water supplies, or the reduction in usability of water without causing physical injury to water users or aquatic and terrestrial organisms. See IDAPA 58.01.02.010.21.
Discharge	Any addition or introduction of any pollutant, stormwater, or any other substance into the municipal storm sewer system (MS4), Waters of the State, or into Waters of the United States (WOTUS).
Discharge of a Pollutant	Any addition of any "pollutant" or combination of pollutants to "Waters of the United States" from any "point source," or any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. This definition includes additions of pollutants into Waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. This term does not include an addition of pollutants by any "indirect discharger" [40 CFR §122.2].
Erosion	The process of carrying away soil particles by the action of water.
Effluent Limitation	Any restriction imposed by EPA or IDEQ on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into waters of the United States. The terms and

	conditions of the City of Caldwell's MS4 Permit are a type of effluent limitation and refer to actions designated to reduce pollutant discharges. See also 40 CFR 122.34 and 81 FR 89337.
Existing Permanent Controls	Post-construction or permanent stormwater management controls designed to treat or control runoff on a permanent basis and that were installed prior to the effective date of the Caldwell MS4 Permit (December 1, 2020).
Facility	Any IPDES point source or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the IPDES program.
Grab Sample	A single water sample or measurement of water quality taken at a specific time.
Green Infrastructure	The range of measures that use plant or soil systems, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to store, infiltrate, or evapotranspirate stormwater and reduce flows to storm sewer systems or to surface waters.
Hazardous Materials	A material or combination of materials which, when discharged in any quantity into state waters, presents a substantial present or potential hazard to human health, the public health, or the environment. Defined at IDAPA 58.01.02.010.47.
Illicit Connection	Any physical connection to a publicly maintained storm drain system composed of non-stormwater which has not been permitted by the public entity responsible for the operation and maintenance of the system. Includes, but is not limited to, pipes, drains, open channels, or other conveyances that have the potential to allow an illicit discharge to enter the MS4.
Illicit Discharge	Any discharge to a storm drain system that is not composed entirely of stormwater except discharges pursuant to an IPDES permit and discharges from firefighting activity. See 40 CFR 122.26(b)(2).
Impervious Surface	A surface which prevents or highly resists the infiltration of water into the ground, including, but not limited to, roofs, sidewalks, patios, driveways, parking lots, concrete and asphalt paving, gravel, compacted native surfaces and earthen materials, and oiled, asphalt, or other surfaces which similarly impede the natural infiltration of stormwater.
Impaired Waters	Any water body that does not meet applicable water quality standards for one or more beneficial uses by one or more pollutants. For the purposes of this Stormwater Management Program, impaired water includes any water body that IDEQ includes in its most current finalized Integrated Report, as a "Category 4a" water of the state for which a total maximum daily

	load had been completed and approved; as a "Category 4b" water of the state that have pollution control requirements in place other than a TMDL and are expected to meet standards; and/or as a "Category 5" water of the state where a TMDL is necessary.
Impairment Pollutant	Any pollutant identified by IDEQ as a cause of impairment of a water body in Idaho DEQ's most recent finalized Integrated Report.
Infiltration	The process by which stormwater penetrates into soil.
Interconnection	The point (excluding sheet flow over impervious surfaces) where an MS4 discharges to another MS4 or storm sewer system, through which the discharge is eventually conveyed to a Water of the United States. Interconnections to other MS4s shall be treated similarly to outfalls.
Low Impact Development (LID)	Stormwater management and land development techniques, controls and strategies applied at the parcel and subdivision scale that emphasize conservation and use of on-site natural features integrated with engineered, small scale hydrologic controls to more closely mimic pre-development hydrologic functions.
Major Modification	An alteration to an existing or planned stormwater drainage facility that does one or more of the following: changes the volume, surface area, depth, capacity, inflow rates, outflow rates or level of treatment by five percent (5%) or more; changes the treatment process; adds more than one thousand (1,000) square feet of impervious surface; or increases the tributary impervious drainage area to an individual drainage facility component by more than ten percent (10%).
Municipal NPDES Permit	An area-wide NPDES or IPDES permit that is issued to a government agency or agencies for the discharge of pollutants from any point source into the Waters of the United States.
Municipal Separate Storm Sewer	A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the CWA that discharges to Waters of the United States; (ii) Designed or used for collecting or conveying stormwater; (iii) Which is not a combined sewer; and

	(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR §122.2. Defined in 40 CFR §122.26(b)(8).
Municipal Separate Storm Sewer System (MS4)	"Small Municipal Separate Storm Sewer System" as defined in 40 CFR 122.26(b)(16) and (17): all separate storm sewers that are: (i) owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) not defined as "large" or "medium" municipal separate storm sewer systems pursuant to 40 CFR 122.26(b)(4) and (b)(7), or designated under paragraph 40 CFR 122.26(a)(1)(v); and (iii) includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.
National Pollutant Discharge Elimination System (NPDES) Permit	A permit issued by the U.S. EPA, region X, in compliance with the federal clean water act for the discharge of pollutants from any point source into the Waters of the United States.
Non-stormwater Discharge	Any discharge that is not entirely composed of stormwater.
Nuisance	Anything which is injurious to the public health or an obstruction to the free use, in the customary manner, of any waters of the State [IDAPA 58.01.02.010.67].
Outfall	A point source, where a municipal separate storm sewer discharges to Waters of the United States. It does not include open conveyances connecting two municipal separate storm sewers or pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the United States. Defined at 40 CFR §122.26(b)(9).
Owner or Operator	The owner or operator of any facility or activity subject to regulation under the federal NPDES program including operational and day to day control over facility activities.
Permanent Stormwater Controls	Structural and non-structural controls that are designed to treat or control pollutants in stormwater runoff on a permanent basis.

Permit Area	The decennial census data from Year 2000 and Year 2010. An urbanized area is the densely settled core of census tracts and/or census blocks that have a population of at least 50,000, along with adjacent territory containing non-residential urban land uses as well as territory with low population density included to link outlying densely settled territory with the densely settled core. It is a calculation used by the Bureau of the Census to determine the geographic boundaries of the most heavily developed and dense urban areas. Once a small MS4 is designated into the program based on the UA boundaries, it cannot be waived from the program if in a subsequent UA calculation the small MS4 is no longer within the UA boundaries.
Point Source	Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff. Defined at 40 CFR §122.2.
Pollutant	Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the atomic energy act of 1954, as amended [42 USC 2011 et seq.]), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water, and as otherwise defined in 40 CFR 122.2.
Pollutant of Concern	Any pollutant formally identified by IDEQ in their current Integrated Report as a cause of impairment of any water body that receives MS4 discharges authorized under the Caldwell MS4 Permit. See also “impaired water.”
Redevelopment	A project for which a building permit is required that proposes to add, replace and/or alter impervious surfaces affecting the existing drainage system, other than routine maintenance, resurfacing, or repair. A project which meets the criteria of a "major modification" as defined in this section shall be considered a redevelopment.
Source Control	Practices that control stormwater before pollutants have been introduced into stormwater.
Stormwater and Stormwater Runoff	Stormwater runoff, snow melt runoff, and surface runoff and drainage, and is defined at 40 CFR §122.26(b)(13). “Stormwater” means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, channels, or pipes into a defined surface water channel or a constructed infiltration facility.

Stormwater Management	The process of collection, conveyance, storage, treatment, and disposal of stormwater to ensure control of the magnitude and frequency of runoff and to minimize the hazards associated with flooding. Also includes implementing controls to reduce the discharge of pollutants including management practices, control techniques and systems, design and engineering methods.
Stormwater Management Plan	Details of the drainage system, structures, BMPs, concepts and techniques that will be used to control stormwater, including drawings, engineering calculations, computer analyses, maintenance and operations procedures, and all other supporting documentation.
Total Maximum Daily Load (TMDL)	The sum of the individual wasteload allocations for point sources, load allocations (LAs) for non-point sources, and natural background. Such load shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality [IDAPA 58.012.02.010.100].
Toxic Substance	Any substance, material or disease-causing agent, or a combination thereof, which after discharge to waters of the State and upon exposure, ingestion, inhalation or assimilation into any organism (including humans), either directly from the environment or indirectly by ingestion through food chains, will cause death, disease, behavioral abnormalities, malignancy, genetic mutation, physiological abnormalities (including malfunctions in reproduction) or physical deformations in affected organisms or their offspring. Toxic substances include, but are not limited to, the one hundred twenty-six (126) priority pollutants identified by EPA pursuant to Section 307(a) of the federal Clean Water Act. Defined at IDAPA 58.01.02.010.102.
Treatment	The reduction and removal of pollutants from stormwater.
Waters of the United States (WOTUS)	Waters as defined in 40 CFR 122.2.
Wetland	An area that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Acronyms

ACM	Alternate Control Measure
BMP	Best Management Practice
CCED	City of Caldwell Engineering Department
CCPW	City of Caldwell Public Works
CCSD	City of Caldwell Street Department
CFR	Code of Federal Regulations
CGP	Construction General Permit
CSDC	Construction Site Discharge Control
CWA	Clean Water Act
EPA	Environmental Protection Agency
ERP	Enforcement Response Policy
ESC	Erosion and Sediment Control
FR	Federal Register
GIS	Geographic Information System
GSI	Green Stormwater Infrastructure
IDAPA	Idaho Administrative Procedures Act
IDDE	Illicit Discharge Detection Elimination
IDEQ	Idaho Department of Environmental Quality
LA	Load Allocation
LID	Low Impact Development
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter
MEP	Maximum Extent Practicable
MSGP	Multi Sector General Permit
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
OVIP	Outfall Verification and Identification Program
PCSM	Post Construction Stormwater Management
PMEP	Program Monitoring and Evaluation Plan

PoC	Pollutant of Concern
POTW	Publically Owned Treatment Works
QAP	Quality Assurance Plan
QC	Quality Control
ROW	Right of Way
SOP	Standard Operating Procedure
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
UA	Urbanized Area
USACOE	United States Army Corps of Engineers
USGS	United States Geological Survey
WLA	Waste Load Allocation
WOTUS	Waters of the United States

Record of Revisions

The City of Caldwell Engineering Department may make minor edits or changes directly to this plan. The dates of any revision should be noted below.

Revision Date	**SWMP Year**	**Summary of Changes to SWPPP**
November 2021	2021	Finalized document for 2020 Permit compliance.

Implementation Schedule

Stormwater Management Program Document		
Post SWMP Document(s) on at least one publically accessible website	**December 1, 2021**	*Completed 11/30/21*
Update the SWMP Document to describe the implementation of relevant requirements for discharges to impaired waters	**December 1, 2022**	
Stormwater Management Program Control Measures		
Begin Education and Outreach Activities	**October 1, 2021**	*Completed 4/24/21*
Implement eight educational messages or activities	**April 3, 2025**	
Implement all IDDE control measures	**April 3, 2025**	
Implement all construction runoff control measures	**April 3, 2025**	
Implement all post construction control measures	**April 3, 2025**	
Implement all good housekeeping control measures	**April 3, 2025**	
Monitoring/Assessment Plan		
Submit a Monitoring/Assessment Plan	**October 1, 2022**	
Conduct Monitoring/Assessment Activity	**April 3, 2025**	
Pollutant Reduction Activities for Discharges to Impaired Waters		
Submit description of selected Pollutant Reduction Activities	**October 1, 2022**	*Completed 6/1/21*
Implement at least two pollutant reduction activities	**April 3, 2025**	
Annual Report		
Per requirements in Part 6.4 of Permit	**December 1, annually**	
Twenty-Four Hour Notice of Noncompliance		
Report certain noncompliance by phone (see Part 7.9 of Permit)	Within 24 hours of City becoming aware	
NPDES Permit Renewal Application		
Per requirements in Part 8.2 of Permit	**April 3, 2025**	

Section 1. Introduction

1.1 Purpose

The City of Caldwell, Idaho prides itself on being "The Treasure of the Valley." Over the last three decades, the City has grown and changed, experiencing a boom of economic development and unprecedented population growth. As the City expands, it is faced with the challenges and opportunities of meeting the needs of its current citizens and preparing for the future. The City of Caldwell is fortunate to contain portions of natural resources, including Indian Creek, Mason Creek, and the Boise River. With the understanding of the intrinsic value of such resources, the City has made a commitment to protect and preserve these resources, so that they can continue to benefit the community for generations to come.

Improving and preserving water quality in natural resources is a complex, interconnected undertaking. Stormwater management is one of many disciplines to examine when addressing surface water quality improvement within a municipality. The development of the Stormwater Management Program (SWMP) serves as a critical step in organizing and executing municipal stormwater management in the City of Caldwell effectively and efficiently.

Environmental Protection Agency (EPA), Region 10 first issued a National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit (No. DS-028118) to the City of Caldwell, Idaho, effective October 15, 2009. The Permit was reissued by EPA in 2020, and became effective December 1, 2020. This Permit authorizes the City of Caldwell to discharge stormwater from the City's MS4 outfalls to Waters of the United States in accordance with the conditions and requirements of the Permit. This Permit is due to expire on September 30, 2025. A copy of the current Permit is included as Appendix A of this document.

This document is written representation of the City of Caldwell's Stormwater Management Program (SWMP). The NPDES MS4 Permit requires the City of Caldwell (the City) "to implement and enforce a stormwater management program designed to reduce the discharge of pollutants from their MS4 to the maximum extent practicable (MEP), and to protect the water quality of the receiving waters." This document was developed by the City to describe the activities and control measures implemented to meet the terms and conditions of NPDES Permit IDS-028118. This SWMP establishes the foundation on which the City will continue to build as best management practices are identified and implemented, and will be updated annually as required by the Permit. The City will annually assess and

report the effectiveness of the program activities and implement changes as necessary to ensure continued permit compliance.

1.2 Scope and Document Organization

This SWMP inventories and describes the procedures and practices currently implemented by the City of Caldwell throughout planning, design, construction, operation, and maintenance of developments and facilities within the City.

The Stormwater Management Plan consists of the following components:

- Introduction (Section 1)
- Program Management (Section 2)
- Description of City's MS4 System (Section 3)
- General Requirements (Section 4)
- Minimum Control Measures and Activities (Section 5)
- Pollution Reduction Activities (Section 6)
- Monitoring Program (Section 7)
- Required Response to Excursions above Idaho Water Quality Standards (Section 8)
- Recordkeeping and Reporting (Section 9)

Section 5 contains a discussion of each of the minimum control measures under the Permit, supported by multiple activities currently taking place or scheduled to be implemented during the Permit cycle. The measures addressed include:

- Public Education, Outreach and Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff
- Post-Construction Runoff

- Good Housekeeping / Pollution Prevention

All SWMP activities are defined by the overall objective, specific required actions, timeframe for implementation, and the expected measurable goals. Some activities will be implemented for the purpose of addressing a single element of the Permit, while others will be set to target multiple permit elements. Discussion of Permit elements and corresponding activities are organized to allow cohesive assessment and reporting of the overall SWMP and the plan's execution in the annual report to the EPA on the status of SWMP implementation.

1.3 Regulations and Regulatory History

1.3.1 Clean Water Act

The Clean Water Act was enacted in 1972, in response to increasing public concern for the environment and the condition of the nation's waters. Minimal regulation or enforcement of pollutant discharge over decades of booming industrial production left surface waters polluted, unsafe for recreation, and threatened to compromise an increasing number of drinking water supplies. The Cuyahoga River fire of 1969, the thirteenth time on record the river caught fire, served as a national catalyst, a rallying point around which citizens and legislators pushed for regulation of pollutant discharge and protection of surface waters.

The 1972 Clean Water Act set the objective "to restore and maintain the physical, chemical, and biological integrity of the Nation's waters." In meeting this objective, the Act:

- Established a system to regulate pollutant discharges into waters of the U.S.,
- Granted EPA the authority to implement pollution control programs,
- Retained existing requirements to set water quality standards for all contaminants in surface waters,
- Prohibited the discharge of pollutants from a point source into navigable waters unless the person obtained a permit under the law's provisions,
- Funded the construction of wastewater treatment plants, and
- Recognized the importance of planning when tacking critical issues caused by non-point source pollution.

The Clean Water Act prohibits the discharge of any pollutants from a point source into Waters of the United States without a National Pollutant Discharge Elimination System (NPDES) Permit. Subsequent amendments to the Act have provided additional regulation and clarification, adapting to meet evolving needs and technologies.

1.3.2 Beneficial Use and Total Maximum Daily Loads

The Clean Water Act directs states to establish water quality standards and goals for individual Waters of the United States (WOTUS). Idaho Administrative Code (IDAPA 58.01.02.100) establishes the beneficial use categories and standards for Idaho's waters; Table 1 summarizes these beneficial uses.

Table 1. *Idaho beneficial uses of water for Clean Water Act purposes (from IDAPA 58.01.02.100 and IDEQ WBAG)*

Beneficial Use Category	Subcategory	Water Quality Standards Abbreviation
Aquatic Life	Cold Water Salmonid Spawning[1] Seasonal Cold Water Warm Water Modified	COLD SS SC WARM MOD
Recreation	Primary Contact Secondary Contact	PCR SCR
Water Supply	Domestic Agricultural[2] Industrial[2]	DWS --- ---
Wildlife Habitats[2]	---	---
Aesthetics[2]	---	---

[1] SS is considered a subcategory of COLD.
[2] These uses are designated for all Idaho water bodies.

To achieve the designated beneficial uses, the Clean Water Act requires the implementation of both technology-based and water quality-based approaches. Technology-based approaches are standardized across the relevant industries: publicly owned treatment works (POTWs) and non-POTWs (i.e. industrial dischargers). Technology-based effluent limits are the minimum level of effluent quality attainable using demonstrated technologies for reducing discharges of pollutants into WOTUS; they are developed independently of the existing quality of receiving WOTUS and potential impacts of discharge to water quality of the WOTUS.

As technology-based effluent limits are not always sufficient to restore or maintain beneficial use, states must also implement water quality-based approaches. The water quality-based approach addresses the reality that the degradation of waterbodies varies vastly across the

country. To assess existing conditions and determine requirements of water quality-based approaches, IDEQ categorizes the status of Idaho's surface waters relative to their designated beneficial uses, placing all state waters into one of five categories based on the amount of information known about their water quality, whether or not beneficial uses are supported, and the types of impairments preventing beneficial use support. Figure 1 is IDEQ's category descriptions from *Idaho's 2018/2020 Integrated Report*.

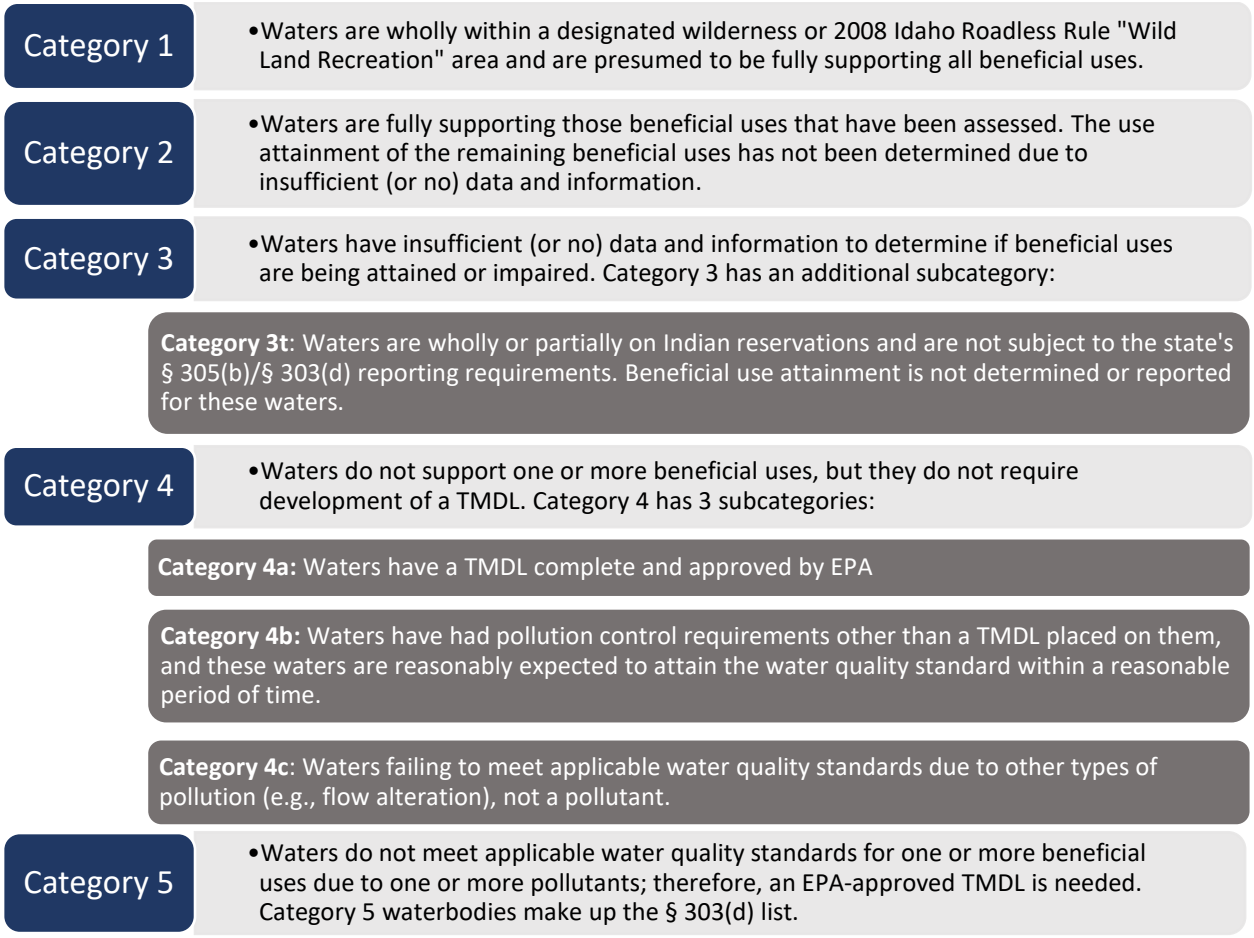


Figure 1. *IDEQ surface water category summary (from IDEQ Idaho's 2018/2020 Integrated Report)*

Section 303(d) of the Clean Waters Act requires all states to list and prioritize water bodies that are impaired. Surface waters listed by IDEQ as Category 4 or 5 – approximately 36% of total stream miles and 53% of total lake acres in the state – are not supporting their beneficial uses and are added to the 303(d) Impaired Waters list. Therefore, additional water quality-based standards and controls are necessary to restore and maintain the water quality, such that the waters can support their beneficial uses and ultimately be de-listed, removed from the 303(d) list.

Total Maximum Daily Loads (TMDL) are the water quality improvement plans developed to establish water quality-based standards to meet the needs of an 303(d) list impaired water body. In Idaho, IDEQ is the entity required by Section 303(d) of the CWA to develop TMDLs for impaired waters of the state. IDEQ has chosen to develop TMDLs on a subbasin (or watershed) level; addressing all waterbodies, pollutants, and impairments within a designated USGS fourth-field, eight-digit hydrologic unit code (HUC-8). Following the approval of the TMDL by the EPA, IDEQ drafts implementation plans for the impaired subbasins; the implementation plan serves as a roadmap to achieve the load reductions established in the TMDL, establishing needed action steps, timelines of implementation, and necessary monitoring and documentation.

The City of Caldwell is located within the Boise River (Lower) Subbasin; the Lower Boise River has been assessed by IDEQ and determined to not be supporting all beneficial uses, requiring listing as a 303(d) impaired water. The subbasin's original TMDL for sediment and bacteria was approved by EPA in 2000. IDEQ then completed subbasin assessments for the Lower Boise River and 6 tributaries (Blacks Creek, Indian Creek, Fivemile Creek, Tenmile Creek, Mason Creek, and Sand Hollow Creek) in 2001. These assessments informed the determination of the impairment causing pollutants for the impaired waters in the Lower Boise River Subbasin. Three of the subbasins assessed include reaches that extend through the City of Caldwell; Table 2 shows these impaired reaches and their corresponding impairment pollutants.

Table 2. *Receiving Water Impairments (from City of Caldwell MS4 Permit, NPDES Permit #IDS028118)*

Waterbody / Assessment Unit / Description	Impairment Pollutants
Boise River ID17050114SW005_06b *Boise River – Middleton to Indian Creek*	Temperature; Fecal Coliform; Sedimentation/Siltation; Total Phosphorus
Indian Creek ID17050114SW002_04 *Indian Creek – Sugar Ave. to Boise River*	Temperature; *E.coli*; Sedimentation/Siltation; Cause unknown, nutrients suspected
Mason Creek ID17050114SW006_02 *Mason Creek – entire watershed*	Temperature; *E. coli*; Sedimentation/Siltation; Cause unknown, nutrients suspected; Malathion Chlopyrifos

1.3.3 NPDES Permit Program

The Clean Water Act prohibits the discharge of any pollutants through a "point source" unless the discharger has an NPDES permit. NPDES permits establish pollutant limitations for discharge, delineate monitoring and reporting requirements, and implements additional

controls as necessary to prevent discharges that could harm people's health or the environment.

NPDES permits authorize a facility, municipality, or site to discharge a specified amount of a pollutant into a receiving water under certain conditions. Permits are issued as either individual or general permits. The permitting authority prepares individual permits specifically for a facility, developed based on information provided by the facility applying for coverage, including type of activity at the facility, nature of the discharge, and quality of the receiving water(s). A general permit covers a group of dischargers with similar qualities within a given geographical location.

The NPDES Permit Program can be administered by the EPA, or by the individual states. To administer and enforce the NPDES Program, states must apply to EPA, presenting a proposal for how the state's designated agency will implement the program and enforce compliance. Idaho applied for primacy in 2017, and on June 5, 2018 EPA approved Idaho's application to administer and enforce the Idaho Pollutant Discharge Elimination System (IPDES) Program. The transitioning permitting authority from EPA to IDEQ utilized a phased approach, as shown in Table 3. EPA retains the authority to issue NPDES permits for facilities located on tribal lands and/or discharging to tribal waters.

***Table 3**. Schedule of Transfer of Permitting Authority to Idaho (from EPA's Idaho NPDES Program Authorization)*

Phase	Transferred Permit Authority	Transfer Date
Phase I	Individual Municipal Permits and Pretreatment	July 1, 2018
Phase II	Individual Industrial Permits	July 1, 2019
Phase III	General Permits (Aquaculture, Pesticide, CAFP, Suction Dredge, Remediation)	July 1, 2020
Phase IV	Federal Facilities, General and Individual Stormwater Permits, and Biosolids	July 1, 2021

IDEQ took primacy of the City of Caldwell's stormwater permits beginning July 1, 2021.

1.3.4 NPDES Municipal Separate Storm Sewer System (MS4) Permits

The NPDES Municipal Separate Storm Sewer System (MS4) Permit is issued to a municipality or similar agency to allow stormwater discharges to WOTUS. Polluted stormwater runoff is a threat to water quality, because the runoff is commonly transported through municipal separate storm sewer systems (MS4s) and discharged directly into local surface waters, with minimal to no treatment. An MS4 is a system of conveyances that is owned by a state, city, town, or other public water that discharges to public WOTUS. They are designed or used to collect and convey stormwater (e.g. storm drains, pipes, ditches), not a combined sewer, and not part of a sewage treatment plant or publically owned treatment works (POTW). The

regulated entities must reduce pollutants in stormwater to the maximum extent practicable (MEP) to protect water quality.

The Municipal Source Stormwater Program was first implemented by the EPA in 1990, covering Phase I MS4s, i.e. medium and large cities with populations of 100,000 or more, and requiring the MS4 owner to obtain NPDES permit coverage for their stormwater discharges. In 1999, the program was expanded to incorporate small MS4s in US Census Bureau defined urbanized areas.

The City of Caldwell is located within the Nampa Urbanized Area, and therefore is required to retain coverage under an NPDES program for municipal stormwater discharge. The City's first MS4 Authorization to Discharge Under the National Pollutant Discharge Elimination System became effective October 15, 2009. EPA issued the City an updated MS4 permit, effective December 1, 2021. This individual permit, and the City's authority to discharge, is scheduled to expire at midnight on September 30, 2025.

Section 2. Program Management

2.1 Stormwater Management Responsibilities

The City of Caldwell's Stormwater Management team is housed within the City's Engineering Department, a department within the overarching Public Works department. The stormwater management team is responsible for the execution of the City's primary stormwater permits, including the Caldwell MS4 permit. The members of the stormwater management team are responsible for implementing and overseeing all compliance activities and other requirements of the City's permit. The most current stormwater management team is shown in Table 4, the primary members of the team are indicated with bold text. The primary members are most actively involved in compliance activities.

Table 4. *Stormwater Management Team*

Ashley Newbry — **Assistant City Engineer**

- Engineer supervising compliance activity of the City of Caldwell stormwater programs, oversees all stormwater programs. Coordinates with regulating agencies, stormwater staff, and City supervisory staff.

Emily Johnson — **Environmental Engineer**

- Engineer supporting compliance activity of the City of Caldwell stormwater programs. Primary staff member responsible for inspections (construction, dry weather flow, illicit discharge, etc.) and inspection reporting. Drafts stormwater management program documents.

Robb MacDonald — City Engineer

- Oversees the City Engineering Department, provides support and institutuional knowledge to primary stormwater team members.

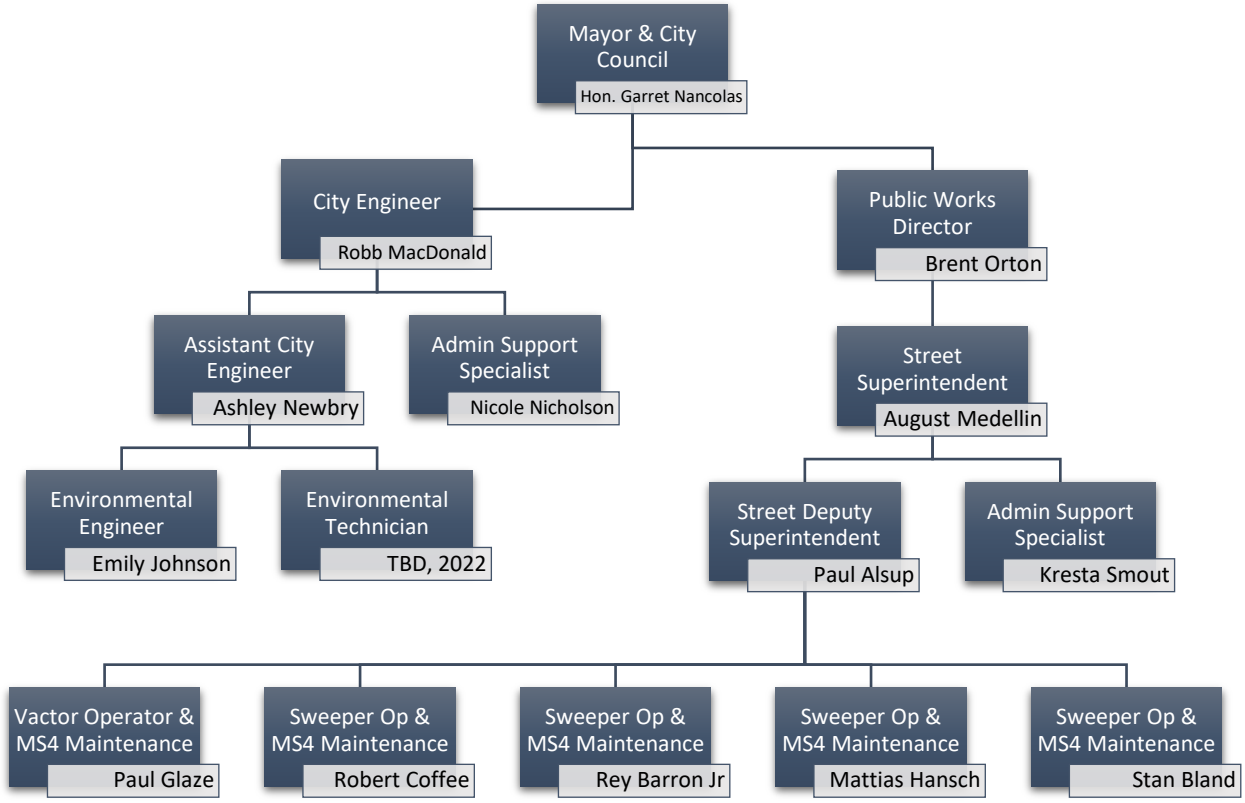
August Medellin — Street Superintendent

- Oversees the Street Department, responsible for MS4 maintenance activities including street sweeping, catch basin and storm drain cleaning. Street Department also handles maintenace and restoration of stormwater management infrastructure.

Brent Orton — Public Works Director

- Oversees Public Works departments. Provides support and institutional knowledge to primary stormwater team members. Directs other Public Works departments to support stormwater management activities.

***Table 5**. MS4 Staff*



As additional members are added to the stormwater management team, this document will be updated to reflect the change.

2.2 Legal Authority

The City of Caldwell must maintain relevant ordinances and/or regulatory mechanisms to control discharges into and from its MS4 and to comply with the Permit. The City must have the legal authorities that address the six criteria listed in section 2.5.2 of the Permit, no later than April 3, 2025. The criteria to be addressed, and the City's corresponding legal authority are provided below:

Criteria: Prohibit and eliminate, through statute, ordinance, policy, permit, contract, court or administrative order, or other similar means, illicit discharge to the MS4.
City's Legal Authority: City of Caldwell Ordinance 13-01-03: Discharge Regulations and Requirements, City of Caldwell Ordinance 13-01-07: Inspection and Enforcement

Criteria: Control, through statute, ordinance, policy, permit, contract, court or administrative order, or other similar means, the discharge to the MS4 of spills, dumping or disposal of materials other than stormwater, pursuant to Permit Part 3.2.3 (Illicit Discharge Detection and Elimination –ordinance)
City's Legal Authority: City of Caldwell Ordinance 13-01-03: Discharge Regulations and Requirements, City of Caldwell Ordinance 13-01-07: Inspection and Enforcement

Criteria: Control the discharge of stormwater and pollutants from land disturbance and development, both during the construction phase and after site stabilization has been achieved, consistent with Permit Parts 3.3 (Construction Site Runoff Control Program) and 3.4 (Stormwater Management for Areas of New Development and Redevelopment)
City's Legal Authority: City of Caldwell Ordinance 13-01-03: Discharge Regulations and Requirements, City of Caldwell Ordinance 13-01-05: Stormwater Management Plans and Comprehensive Drainage Plans, City of Caldwell Ordinance 13-01-07: Inspection and Enforcement

Criteria: Control through interagency agreements as necessary or appropriate, the contribution of pollutants from one MS4 to another interconnected MS4.
City's Legal Authority: This criteria is not applicable at this time, as the City of Caldwell's MS4 is not interconnected to any other MS4. Should this criteria become relevant and necessary, the City will draft the necessary license agreement within the required time frame.

Criteria: Require compliance with conditions in ordinances, permits, contracts, or orders.
City's Legal Authority: City of Caldwell Ordinance 13-01-03: Discharge Regulations and Requirements, City of Caldwell Ordinance 13-01-07: Inspection and Enforcement

Criteria: Carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with these Permit conditions, including the prohibition of illicit discharges to the MS4.
City's Legal Authority: City of Caldwell Ordinance 13-01-07: Inspection and Enforcement

2.3 Staff and Fiscal Resources

The City of Caldwell will provide adequate finances, staff, equipment, and other support capabilities to implement the control measures and other requirements outlined in the Permit. Annually, the staff involved in executing the City's stormwater management program will assess the adequacy of available resources, and address with supervisory staff. As the

City continues to expand, additional stormwater team members will be added to effectively manage the compliance activities for the growing city.

An additional staff position has been added to the 2022 Fiscal Year, this technician position will work on stormwater infrastructure recordkeeping, maintenance, conducting inspections, and assisting the other members of the stormwater management team, as needed.

Table 6. *Caldwell annual MS4 budget throughout permit term.*

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Personnel Training	7,000	30,000	30,000	30,000	30,000
Partners for Clean Water and other Education	20,000	20,000	20,000	20,000	20,000
Professional Services	7,500	57,797	19,297	21,797	19,297
R & M Storm Drains	315,000	410,500	409,500	409,500	409,500
Minor Equipment	7,540	7,540	7,540	7,540	7,540
Construction in Progress	400,000	360,000	300,000	300,000	200,000
Total	**757,040**	**885,837**	**786,337**	**788,837**	**686,337**

As budget values are updated annually, Table 6 will be updated correspondingly to accurately reflect projected spending by the City on MS4 compliance activities.

Section 3. Description of the City's MS4

3.1 Description of Permit Area

The City of Caldwell's MS4 permit covers all areas within the Nampa Urbanized Area served by the municipal separate storm sewer system (MS4) owned and/or operated by the City of Caldwell.

3.1.1 Physical Setting and Climate

The City of Caldwell is located in southwest Idaho, twenty-five miles west of Idaho's capital City of Boise. The City covers an area of approximately twenty-three square miles located within the Boise River Valley and is part of the greater geographic region commonly known as the Treasure Valley. The community's prolific growth was due, in large part, to its proximity to the Boise River and the Oregon Short Line Railroad, the construction of which established the City in 1883. The City of Caldwell has served as the county seat of Canyon County since the county's establishment in 1892.

In modern times, the City has continued to develop along Interstate 84 and the Boise River. The City is neighbored by the City of Nampa to the southeast and the City of Middleton to the northeast, and bounded to the south by Lake Lowell. The heart of the City is bisected by Indian Creek, and a segment of Mason Creek flows through the eastern side of the City; both creeks are tributary to the Boise River. The topography is nearly level to gentle sloping with the city center at an elevation of 2,428 feet above sea level.

The City is within a transition area between steppe and desert, consequently the climate is semi-arid to arid. Summers are hot and dry and winters are relatively mild. Figures 2-4 show the comparison of monthly normals for the 30-year record periods, as compiled by the National Centers for Environmental Information (NCEI, formerly known as the National Climatic Data Center).

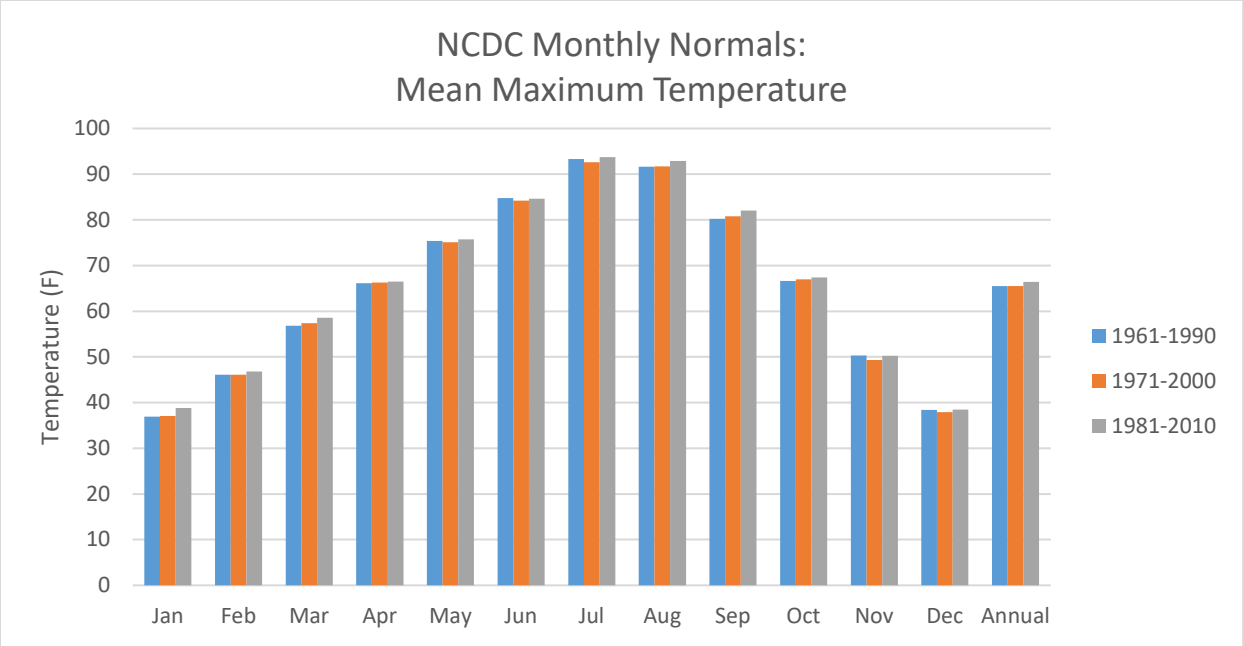


Figure 2. *NCDC Monthly Normals: Mean Maximum Temperature (Western Regional Climate Center, NCDC)*

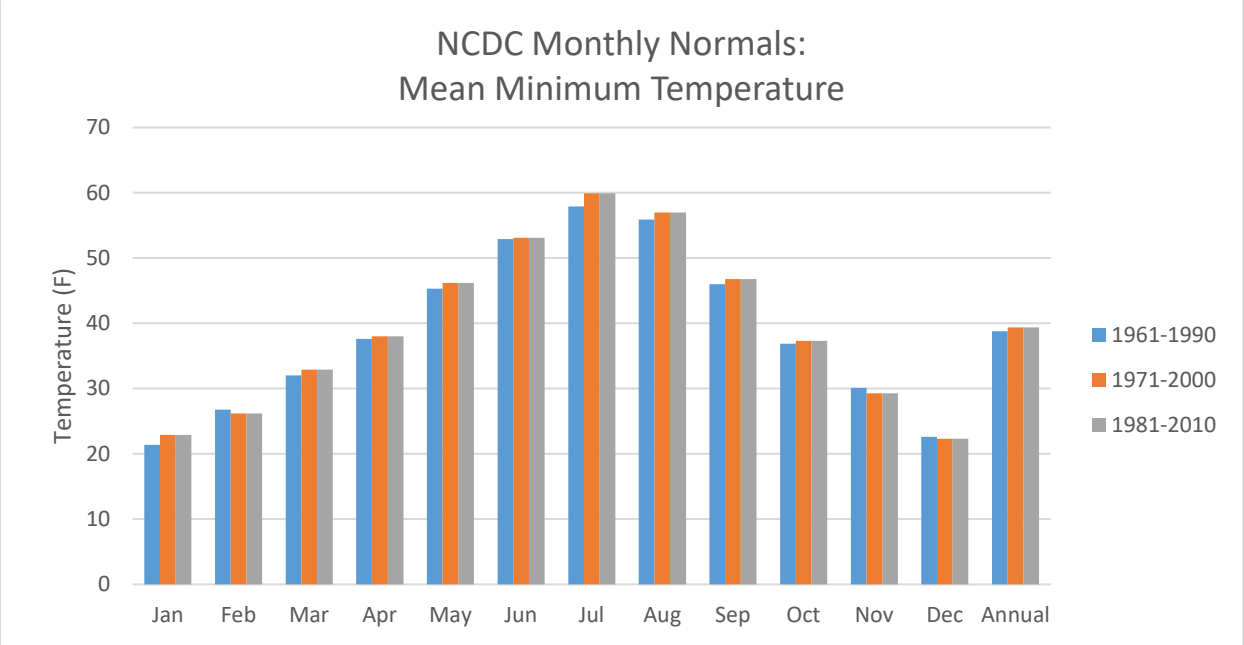


Figure 3. *NCDC Monthly Normals: Mean Minimum Temperature (Western Regional Climate Center, NCDC)*

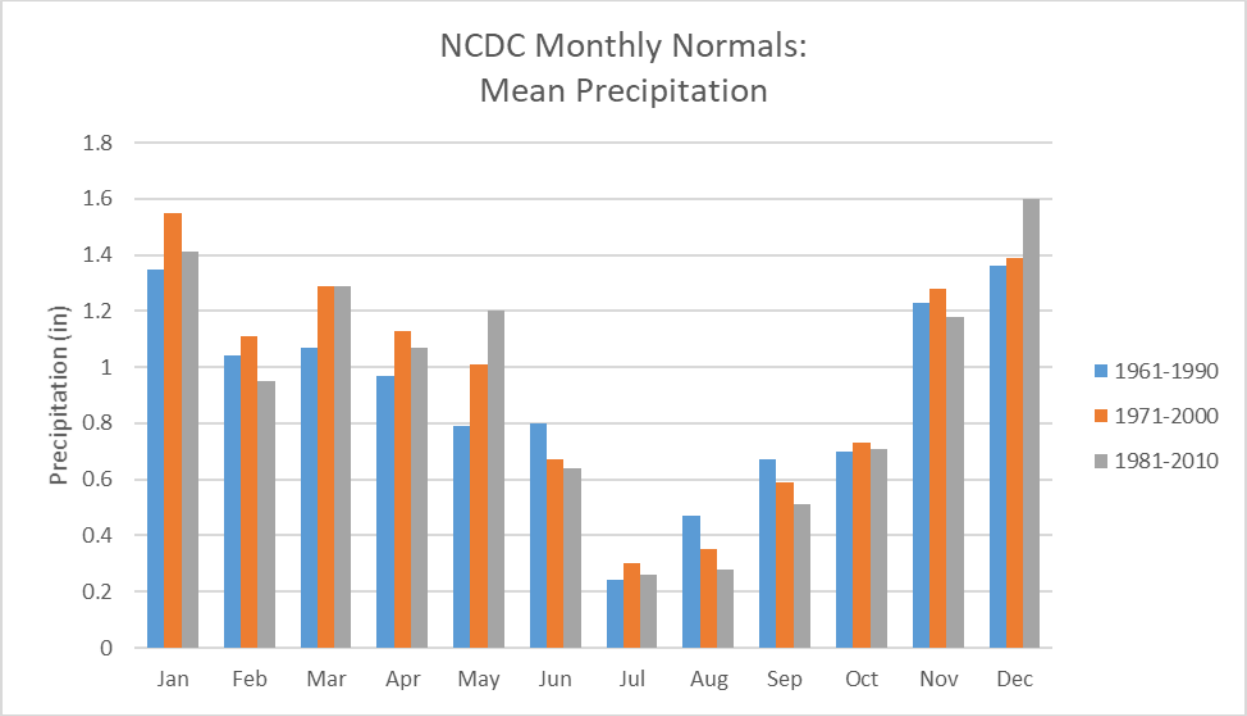


Figure 4. *NCDC Monthly Normals: Mean Precipitation (Western Regional Climate Center, NCDC)*

Table 7 summarizes the annual mean precipitation for the last three record period intervals, the annual summary of the data shown in Figure 4.

Table 7. *NCDC Monthly Normals, Annual Mean Precipitation comparison (Western Regional Climate Center, NCDC)*

Record Period	Annual Mean Precipitation (inches)
1961-1990	10.69
1971-2000	11.4
1981-2010	11.1

Climate data will be updated as more current data becomes available. Consideration will be given to the impacts of climate change on climate forecasts and the accuracy and relevancy of historical averages.

3.1.2 Description of Permit Area

The City of Caldwell is located within the Nampa Urbanized Area, a delineated urban area, as defined by the US Census Bureau, most recently updated in 2010. The City covers an area of approximately twenty-three square miles. The City impact area – the adjacent unincorporated areas of Canyon County the City reasonably expects to annex in the future

constitutes an additional twenty-four square miles beyond the City boundary (a total area of 47 square miles, including the City).

Approximately 230 miles of streets are owned and maintained by the City, with the number consistently increasing as the City expands. Some streets remain without curb, gutter, or sidewalk, but as developments are constructed, they complete the necessary upgrades to the frontages.

There are four impaired surface waters within and around the City of Caldwell and its impact area: the Boise River flows westerly from the City of Boise, along the northern edge of Caldwell, and continues until it reaches its confluence with the Snake River at the Oregon state line. Indian Creek runs northwest, from the New York Canal in Kuna until it reaches the Boise River in Caldwell. The Creek bisects downtown Caldwell; this section was covered in the 1960's, but was day-lighted in 2008. Mason Creek also flows northwesterly along the east side of Caldwell, where it meets the Boise River. Lake Lowell is a man-made reservoir, approximately 14.5 acres in size, the reservoir is located south of the City and provides irrigation water used by a few residents of the City and many farmers outside of the City.

The area's soils predominantly consist of loam (including clay loam and silt loam) soil types overlaying bedrock-type confining layers. This soil stratification is due, in large part, to the prehistoric Lake Idaho that covered the Treasure Valley from 9 to 2 million years ago, depositing a layer of fine sediment and decomposing organic matter. The soils around Caldwell remain nutrient dense and support a vibrant agricultural community. Additional fine sediment could have been deposited during the flush of floodwaters from the Lake Bonneville flood, around 14,500 years ago.

Along with the soils, beneath Caldwell lies a system of groundwater aquifers of varying depths. Shallow aquifers often supply water to rural, domestic and some irrigation water users. Intermediate aquifers supply water for domestic, irrigation, and municipal users. Municipal, industrial, and some irrigation wells typically draw water from deeper aquifers. Shallow aquifers are often contained in the Pleistocene-age (2 million years ago) Snake River Group sediment with depths generally less than 75 meters below ground surface. Groundwater in shallow aquifers generally originates at ground surface, fed by infiltration of precipitation, irrigation, rivers, and canals. Approximately 50% of the Treasure Valley's land area is flood or sprinkler irrigated, which accounts for approximately 95% of recharge to shallow aquifers. Seasonal irrigation can have significant impacts to groundwater levels.

3.1.3 Jurisdiction of Drainage Systems

The City of Caldwell owns, operates, and maintains its MS4 system. Stormwater management facilities installed by developments to meet the stormwater management requirement established in the City's ordinance are under the sole ownership of the property owner or, in the case of a residential development where the facility is located within a shared common lot, the homeowner's association. Operation and maintenance of the stormwater management facility is the sole responsibility of the private owner of the property. This includes facilities that overflow or otherwise connect with the City's MS4.

Irrigation systems are managed by either the City's Caldwell Municipal Irrigation District or Pioneer Irrigation District. Table 16. Receiving surface waters: canals, ditches, drains, laterals includes ownership information of surface waters within the City's Impact Area, for reference.

3.1.4 Population

The City of Caldwell, like all of the Treasure Valley, has seen exceptional population growth over the last decades. The population boom provides extensive opportunities and challenges, as the City adjusts to serving a large population base.

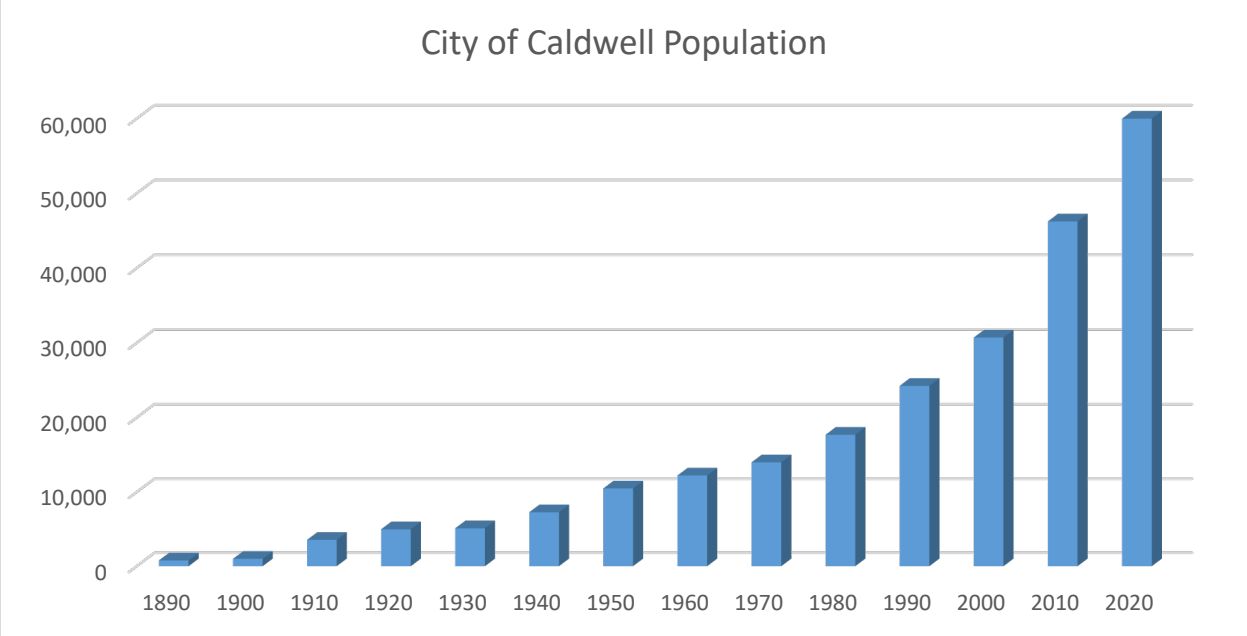


Figure 5. *Population growth from 1890-Present (from US Census Bureau)*

As the population and area continue to expand, the City will continue to enforce its ordinance to ensure that the growth does not cause negative environmental impacts.

Table 8. *Population statistics (from City of Caldwell 2040 Comprehensive Plan)*

GENERAL POPULATION	
Population estimate (COMPASS 2020)	61,420
AGE & GENDER	
Persons under 5 years	9.8%
Persons under 18 years	31.6%
Persons 65 years & over	10.3%
Female persons	50.6%
RACE & HISPANIC ORIGIN	
White alone	78.3%
Black or African American alone	0.3%
American Indian & Alaskan Native alone	1.9%
Asian alone	0.8%
Native Hawaiian & other Pacific Islander alone	0.2%
Two or more races	4.4%
Hispanic or Latino	37.3%

3.1.5 Land Use

As with so many rapidly developing communities, the rapid population boom has rapidly reshaped the landscape and landuse of the City. Paving roadways, building homes, and pouring concrete has increased the percentage of impervious surface area in the community, reducing area available for natural infiltration. Additions of surface drains and piped storm drains, in addition to the increased impervious areas significantly decreases stormwater's time of concentration. These factors can result in increasing peak runoff flows and flooding, as well as reduced nutrient/pollutant attenuation from infiltration and vegetative uptake.

Still, considerable amounts of area are devoted to agriculture, which has the potential to increase nutrient and pollutant loading to waters, especially during the growing season when fertilizers and pesticides are actively being applied.

As land uses change going forward, the City will enforce and carefully consider its ordinance to ensure that sufficient protection is in place to protect and preserve natural resources and human property and safety.

See the City of Caldwell Comprehensive Plan 2040 for detailed land use maps.

3.1.6 Economic Base

The City of Caldwell's 2040 Comprehensive Plan provides great detail on both the City's current economic base, and projections of future growth and development.

Table 9. *Economic statistics (City of Caldwell 2040 Comprehensive Plan)*

ECONOMY	
In civilian labor force, 16 yrs+, 2014-2018	64.4%
In civilian labor force, female, 16 yrs+, 2014-2018	57.4%
Unemployment rate 2020 (Gem State Prospector)	5.7%
Total accommodation & food service sales 2012 (thousands)	46,582
Total healthcare & social assistance 2012 (thousands)	187,182
Total manufacturing shipments 2012 (thousands)	579,093
Total merchant wholesale sales 2012 (thousands)	130,359
Total retail sales 2012 (thousands)	430,024
Total retail sales per capita 2012	$9,021
HOUSING	
Housing units 2020 (esri)	19,323
Owner occupied housing unit rate, 2014-2018	63.8%
Median value of owner-occupied housing units, 2020 (esri)	$173,520
Median gross rent, 2014-2018	$845
TRANSPORTATION	
Mean travel time to work, 2014-2018	23.5
BUSINESSES	
Total employer establishments 2014-2018	2,881
Men-owned firms, 2012	1,327
Women-owned firms, 2012	945
Minority-owned firms, 2012	626

3.1.7 Environmental Justice

Environmental Justice is a topic of growing concern to the EPA and local governments alike. EPA defines Environmental Justice as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies." This means that no group of people should be a disproportionate share of negative environmental consequences resulting from industrial, governmental, and commercial operations or policies.

The City of Caldwell cares deeply for its citizens, and wants to ensure that as the City rapidly grows and develops, that consideration is made that no citizens disproportionately bear the burden of negative environmental impacts.

Executive Order 12898 directed federal agencies to develop environmental justice strategies to help federal agencies address disproportionately high and adverse human health or environmental effects of their programs on minority and low-income populations. In response, EPA has developed an Environmental Justice Screening and Mapping Tool, which provides EPA and the public a nationally consistent data set that combines environmental and demographic indicators in maps and reports.

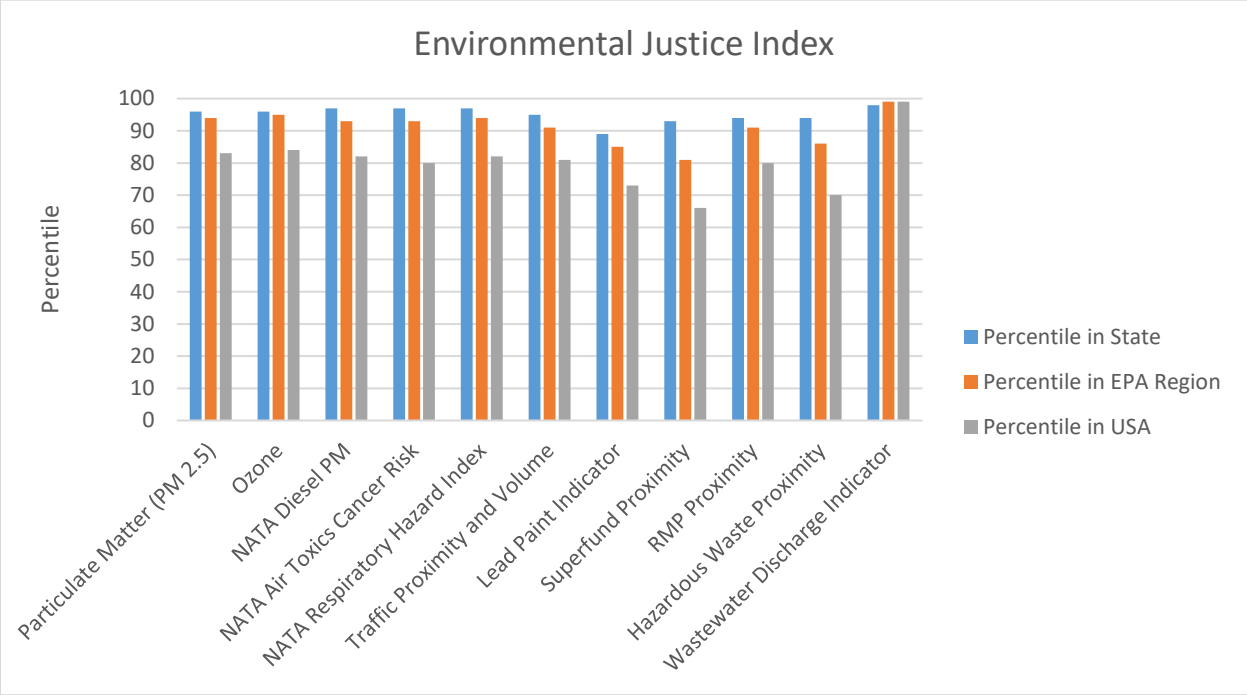


Figure 6. *Environmental Justice Indexes for the City of Caldwell compared to all people's block groups in the State/Region/US (EPA EJSCREEN Mapper)*

As shown in Figure 6 and Table 10, the City of Caldwell ranks in the upper percentile for all Environmental Justice Index factors.

Table 10. *Environmental Justice Indexes for the City of Caldwell compared to all people's block groups in the State/Region/US (EPA EJSCREEN Mapper)*

	Percentile in Idaho	Percentile in EPA Region 10	Percentile in USA
Particulate Matter (PM 2.5)	96	94	83
Ozone	96	95	84
NATA Diesel PM	97	93	82
NATA Air Toxics Cancer Risk	97	93	80
NATA Respiratory Hazard Index	97	94	82
Traffic Proximity and Volume	95	91	81
Lead Paint Indicator	89	85	73
Superfund Proximity	93	81	66
RMP Proximity	94	91	80
Hazardous Waste Proximity	94	86	70
Wastewater Discharge Indicator	98	99	99

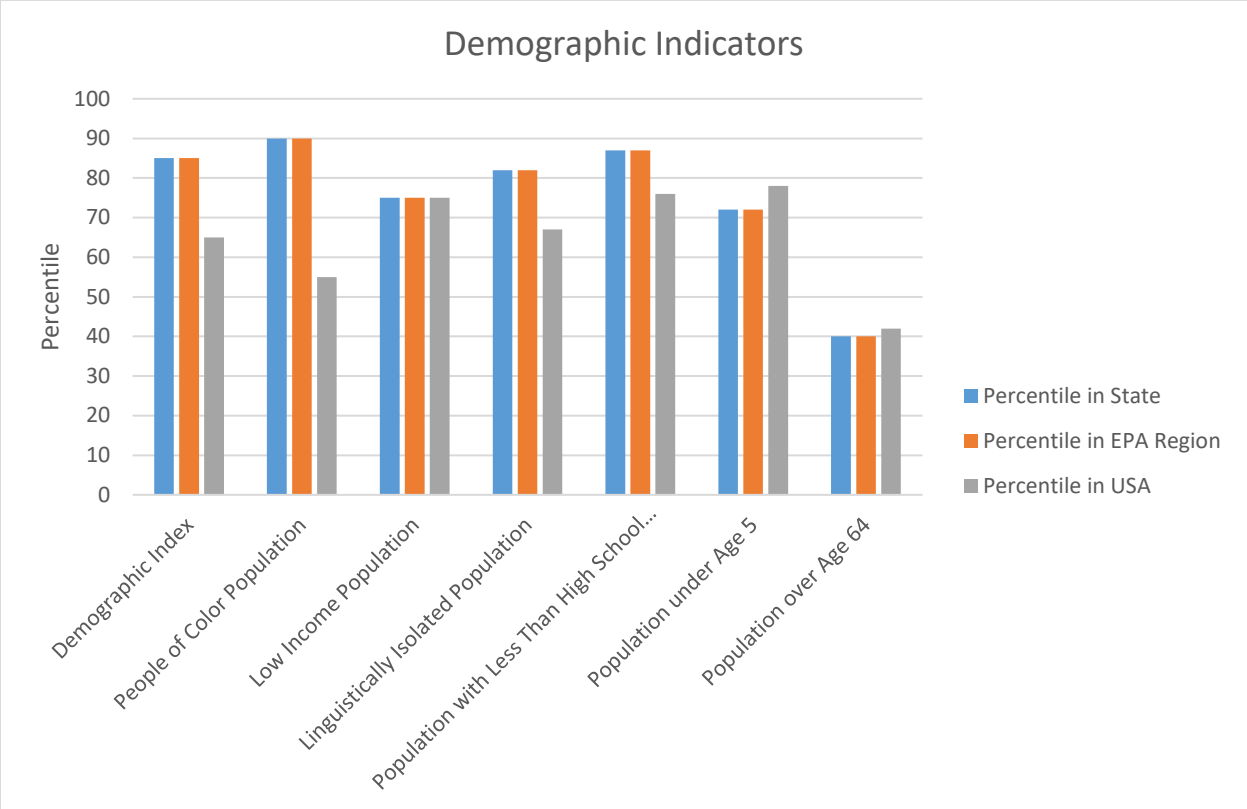


Figure 7. *Demographic Indicators for the City of Caldwell compared to all people's block groups in the State/Region/US (EPA EJSCREEN Mapper)*

Table 11. *Demographic Indicators for the City of Caldwell compared to all people's block groups in the State/Region/US (EPA EJSCREEN Mapper)*

	Percentile in Idaho	Percentile in EPA Region 10	Percentile in USA
Demographic Index	85	85	65
People of Color Population	90	90	55
Low Income Population	75	75	75
Linguistically Isolated Population	82	82	67
Population with Less Than High School Education	87	87	76
Population under Age 5	72	72	78
Population over Age 64	40	40	42
Demographic Index	85	85	65

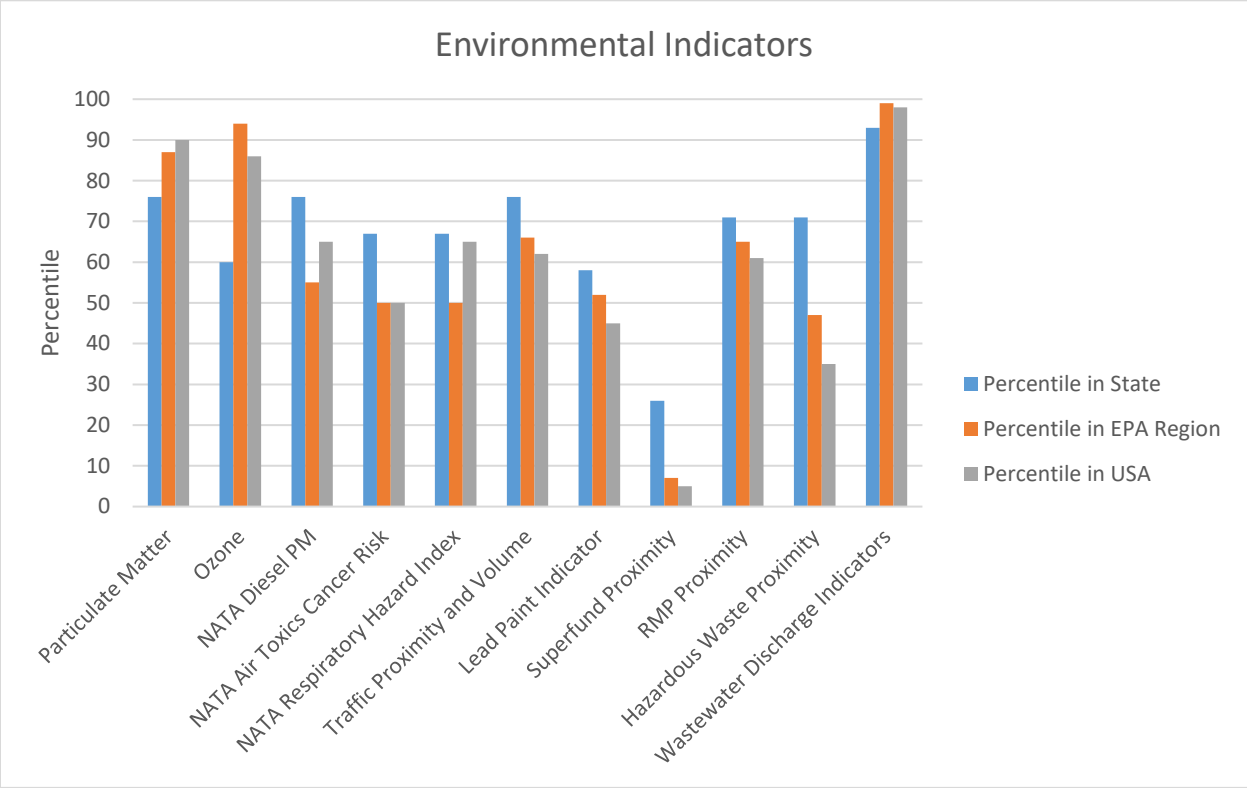


Figure 8. *Environmental Indicators for the City of Caldwell compared to all people's block groups in the State/Region/US (EPA EJSCREEN Mapper)*

Table 12. *Environmental Indicators for the City of Caldwell compared to all people's block groups in the State/Region/US (EPA EJSCREEN Mapper)*

	Percentile in Idaho	Percentile in EPA Region 10	Percentile in USA
Particulate Matter (PM 2.5 in ug/m3)	76	87	90
Ozone (ppb)	60	94	86
NATA Diesel PM (ug/m3)	76	50-60th	60-70th
NATA Air Toxics Cancer Risk (risk per MM)	67	<50th	<50th
NATA Respiratory Hazard Index	67	<50th	60-70th
Traffic Proximity and Volume (daily traffic count/distance to road)	76	66	62
Lead Paint Indicator (% pre-1960s housing)	58	52	45
Superfund Proximity (site count/km distance)	26	7	5
RMP Proximity (facility count/km distance)	71	65	61
Hazardous Waste Proximity (facility count/km distance)	71	47	35
Wastewater Discharge Indicators (toxicity-weighted concentration/m distance)	93	99	98

Because the City ranks in the upper percentiles of the Environmental Justice indices, additional consideration must be made when it comes to development, industry, and investment in natural resources, to ensure that at-risk communities are not disproportionately bearing the brunt of negative environmental impacts within the community.

3.2 Narrative Description of City's MS4 Contributing Area

The City is nestled within the Treasure Valley, and—with the exception of Canyon Hill—the topography is generally more level than other communities in the Valley, as the City is approximately 20 miles west from the Boise foothills, firmly in the valley plain. The majority of topographic relief comes from the elevation differences between the alluvial terraces of the Boise River upon which the City has been built.

The soils on which the City was built are predominantly loam soils, an ideal soil type for farming, consisting of a combination of sand, silt, and clay soil particles. The USGS Web Soil Survey (WSS) was used to obtain soil information and maps. Hydrologic soil groups (HSG), wind erodibility index, and depth to groundwater table were assessed for the range of soils within the City's impact area because these conditions produce significant potential to negatively impact stormwater runoff and sediment pollution.

USGS provides the following definition for hydrologic soil group classifications: "Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms. The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

- Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

- Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

- Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

- Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

- If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes."

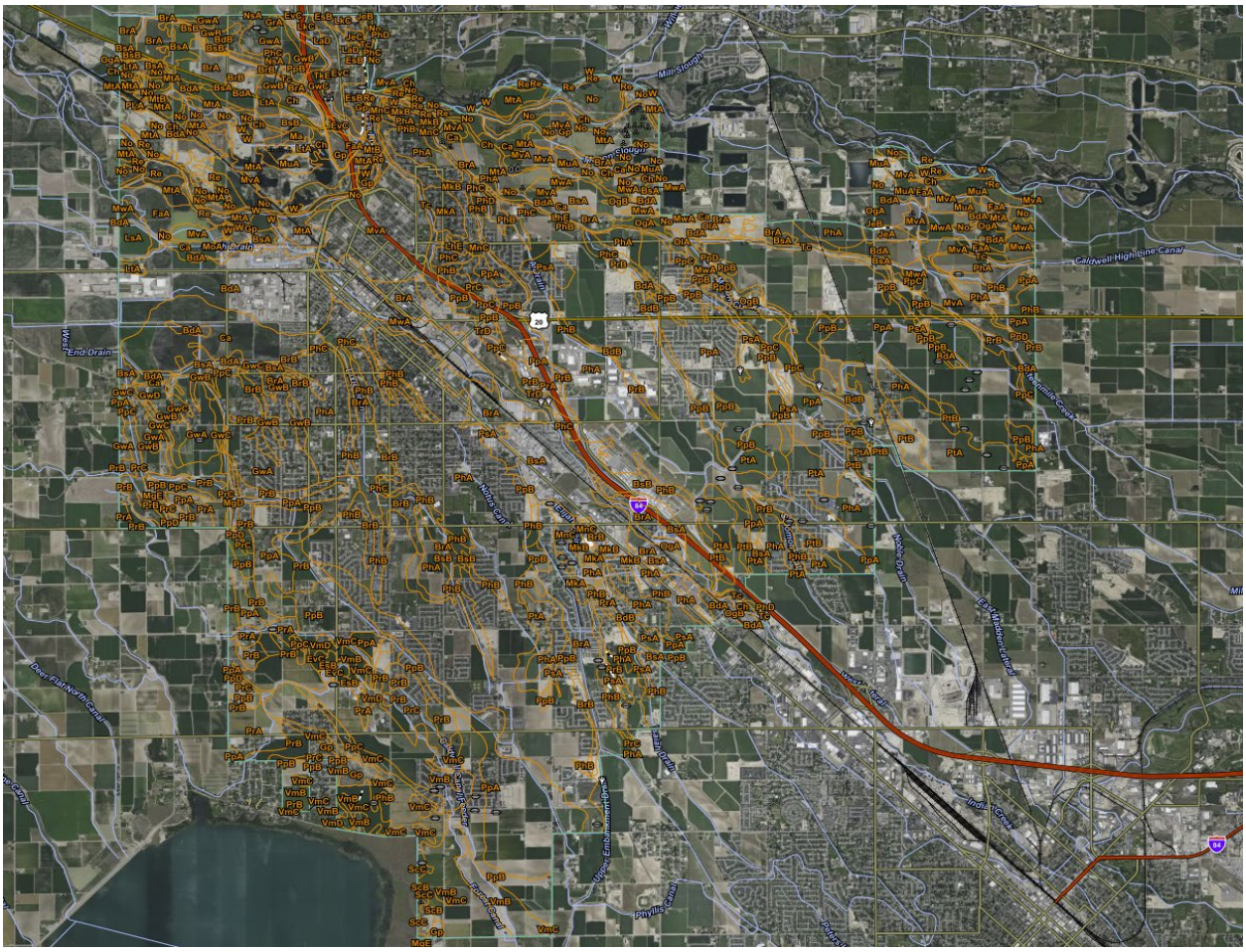


Figure 9. *Soil Map of City of Caldwell Impact Area (USGS Web Soil Survey)*

Figure 9 illustrates the distribution of soil types across the City of Caldwell impact area. Table 13 identifies the soil types within the City of Caldwell Impact Area shown in Figure 9, as well as the corresponding slopes, Hydrologic Soil Group, Wind Erodibility Index, Depth to Water Table, and the area and percent of total area of the soil type. Approximately 86 percent of the City of Caldwell impact area contains soils classified as HSG C, these soils have a slower rate of infiltration when thoroughly wet, and a higher water runoff potential.

The wind erodibility index, per USGS, is: "a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion." As the climate of the City is relatively dry, particularly during the summer months, it is important to consider the erosive factor of wind on exposed soils. The wind-eroded particulates have the potential to become mobile by entering the air, or possibly nearby surface waters, which may have TMDL's for sediment.

The depth to water table refers to the depth at which the saturated zone in the soil is found during specified months. The City is situated at a location and elevation in the Treasure Valley, along the Boise River, in such a way that in many areas around the City, the groundwater elevation can be relatively close (less than 10 feet) from the ground surface. This is due to a combination of factors, predominately from perched groundwater tables contained by confining underlying soil layers (i.e. Pleistocene-era Snake River Group sediments) and close proximity to surface waters. The City also overlays intermediate and deep groundwater layers, which are used for domestic water supply.

Table 13. *Summary of soil information*

Soil Type	Slopes	Abbr.	HSG	Depth to Water Table[i]	Wind Erodibility Index[ii]	Area	Percent of City[iii]
Baldock loam	0-1%	BdA	C	76	86	1,223.7	4.1%
Baldock loam	1-3%	BdB	C	76	86	294.5	1.0%
Bram silt loam	0-1%	BrA	C	137	56	1494	5.0%
Bram silt loam	1-3%	BrB	C	137	56	254.5	0.8%
Bram silt loam, saline-alkali	0-1%	BsA	C	137	56	1,006.5	3.3%
Bram silt loam, saline-alkali	1-3%	BsB	C	137	56	284.9	0.9%
Catherine silt loam		Ca	C	84	48	557.5	1.8%
Chance fine sandy loam		Ch	A/D	15	86	379.1	1.3%
Elijah-Chilcott silt loams	1-3%	EsB	C	>200	56	83	0.3%
Elijah-Vickery silt loams	3-7%	EvC	C	>200	56	174.1	0.6%
Falk fine sandy loam	0-2%	FaA	A	122	86	238.4	0.8%
Gravel pit		Gp		>200		164.8	0.5%
Greenleaf silty clay loam	0-1%	GrA	C	>200	48	7.7	0.0%
Greenleaf-Owyhee silt loam	0-1%	GwA	C	>200	56	707.4	2.3%
Greenleaf-Owyhee silt loam	1-3%	GwB	C	>200	56	376.9	1.2%
Greenleaf-Owyhee silt loam	3-7%	GwC	C	>200	56	107.9	0.4%
Greenleaf-Owyhee silt loam	7-12%	GwD	C	>200	56	6.6	0.0%
Jenness loam	0-1%	JeA	B	>200	56	35.9	0.1%
Jenness loam	1-3%	JeB	B	>200	56	9.1	0.0%
Jenness loam	3-7%	JeC	B	>200	56	13.3	0.0%
Lankbush sandy loam	7-12%	LaD	C	>200	86	6.1	0.0%
Lankbush-Power complex	12-30%	LhE	C	>200	86	39.9	0.1%
Lankbush-Elijah-Vickery silt loam	3-7%	LkC	C	>200	56	48.2	0.2%
Lankbush-Elijah-Vickery silt loam	7-12%	LkD	C	>200	56	0.5	0.0%
Letha fine sandy loam	0-1%	LsA	B	107	86	74.1	0.2%
Letha fine sandy loam	0-1%	LtA	B	107	86	79.9	0.3%
Marsh		Ma		46		29.5	0.1%

Soil Type	Slopes	Abbr.	HSG	Depth to Water Table[i]	Wind Erodibility Index[ii]	Area	Percent of City[iii]
Marsing loam	7-12%	MgD	B	>200	56	19.8	0.1%
Marsing loam	12-20%	MgE	B	>200	56	12.9	0.0%
Minidoka silt loam	0-1%	MkA	C	>200	86	122.4	0.4%
Minidoka silt loam	1-3%	MkB	C	>200	86	209.6	0.7%
Minidoka-Scism silt loam	3-7%	MnC	C	>200	86	105.3	0.3%
Moulton loamy sand	0-1%	MoA	B	69	134	33	0.1%
Moulton fine sandy loam	0-1%	MtA	B	69	86	1,155.2	3.8%
Moulton fine sandy loam	1-3%	MtB	B	69	86	40.2	0.1%
Moulton fine sandy loam, saline	0-1%	MuA	B	69	86	241	0.8%
Moulton loam	0-1%	MvA	C	69	56	957.4	3.2%
Moulton loam, saline	0-1%	MwA	C	69	56	601.5	2.0%
Notus soils		No	A	122	86	745.5	2.5%
Nyssaton silt loam	0-1%	NsA	C	>200	86	6.2	0.0%
Oliaga loam	0-1%	OgA	B	107	86	150.8	0.5%
Oliaga loam	1-3%	OgB	B	107	86	87.4	0.3%
Oliaga loam, saline-alkali	0-1%	OlA	B	107	86	60.3	0.2%
Power silt loam	0-1%	PhA	C	>200	48	5,986.8	19.8%
Power silt loam	1-3%	PhB	C	>200	48	967.8	3.2%
Power silt loam	3-7%	PhC	C	>200	48	127.6	0.4%
Power silt loam	7-12%	PhD	C	>200	48	26	0.1%
Playas		PLA		0	86	1.7	0.0%
Power-Purdam silt loam	0-1%	PpA	C	>200	48	3,822.3	12.7%
Power-Purdam silt loam	1-3%	PpB	C	>200	48	1,579.5	5.2%
Power-Purdam silt loam	3-7%	PpC	C	>200	48	256.4	0.8%
Power-Purdam silt loam	7-12%	PpD	C	>200	48	36.4	0.1%
Purdam silt loam	0-1%	PrA	C	>200	48	312.3	1.0%
Purdam silt loam	1-3%	PrB	C	>200	48	1,075.5	3.6%
Purdam silt loam	3-7%	PrC	C	>200	48	343.6	1.1%
Purdam silt loam, water table	0-1%	PsA	C	114	48	174.2	0.6%
Purdam-Sebree silt loam	0-1%	PtA	C	>200	48	908.5	3.0%
Purdam-Sebree silt loam	1-3%	PtB	C	>200	48	221	0.7%
Riverwash		Re		30	220	254.8	0.8%
Scism silt loam	1-3%	ScB	C	>200	86	4.2	0.0%
Scism silt loam	3-7%	ScC	C	>200	86	10.5	0.0%
Terrace escarpments		Tc		>200	86	260.9	0.9%
Trevino-Rock outcrop complex	0-20%	TkE	D	>200	56	46.8	0.2%
Trevino silt loam	3-12%	TrD	D	>200	56	38	0.1%
Vickery-Marsing silt loams	1-3%	VmB	C	>200	56	647.6	2.1%
Vickery-Marsing silt loams	3-7%	VmC	C	>200	56	582.4	1.9%

Soil Type	Slopes	Abbr.	HSG	Depth to Water Table[i]	Wind Erodibility Index[ii]	Area	Percent of City[iii]
Vickery-Marsing silt loams	7-12%	VmD	C	>200	56	80	0.3%
Water		W				157.8	0.5%
Total						**30,169.1**	**100%**

i. Depth at which the saturated zone in the soil is found during specified months, measured in centimeters

ii. The susceptibility of soil to wind erosion, in tons per acre per year, that can be expected to be lost to wind erosion

iii. Percentage of total City of Caldwell Impact Area consisting of designated soil type

The City contains areas of FEMA-mapped Special Flood Hazard Areas (SFHAs) (flood AE and A zones), predominantly along the Boise River, as well as along Indian Creek and Mason Creek. Areas within the floodplain and floodway have additional development restrictions per City Ordinance 12-15-01 (Flood Damage Prevention). Figure 10 shows the floodplain as it was mapped by FEMA is 2010, Figure 11 shows updated mapping along the Boise River and the portion of Indian Creek that flows through downtown Caldwell, as mapped by FEMA in 2019. Robust management of stormwater has the simultaneous benefit of alleviating strain on flood management systems. Maintaining or increasing time of concentration of stormwater moving across the developing landscape, promoting pervious over impervious surfaces, and requiring routing surface water to groundwater through infiltration facilities leaves less stormwater in the system to runoff and accumulate in the floodplain during storm events.

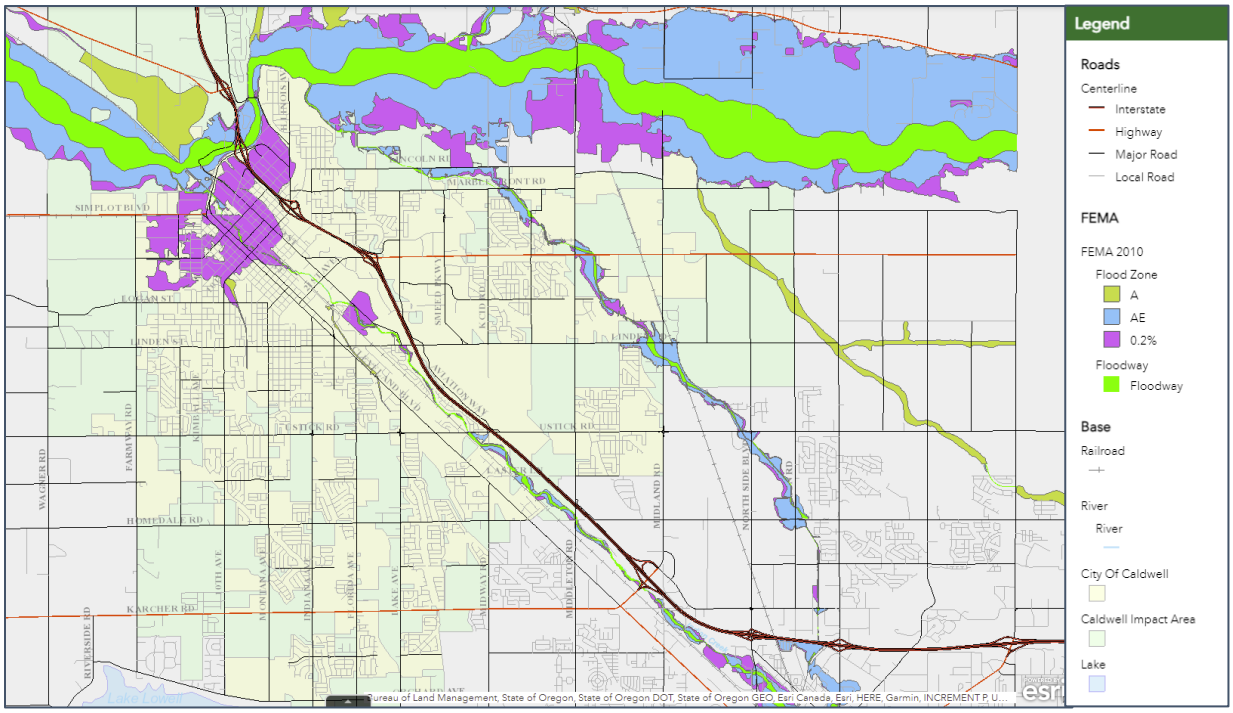


Figure 10. *FEMA Floodplain Map 2010*

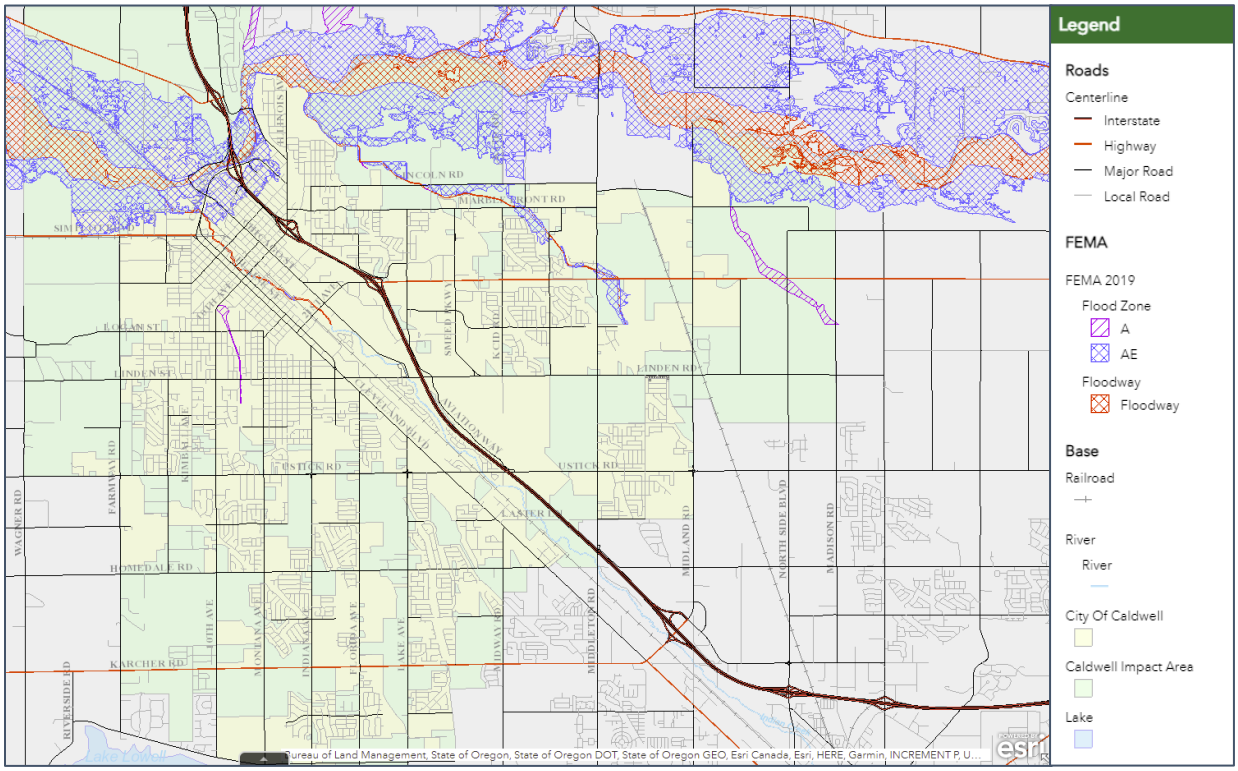


Figure 11. *Updated FEMA Floodplain Map 2019*

The City of Caldwell is located entirely within the Lower Boise watershed, HUC8 17050114. This 1,290 square mile area contains the lower Boise River, a 64-mile reach that flows from Lucky Peak Dam east of Boise to its confluence with the Snake River near Parma. Figure 12 shows the location of the Lower Boise Watershed, as well as the City's location within the watershed. The Lower Boise Watershed is divided into HUC12 subwatersheds, 8 of which are partially located within the City's impact area. Figure 13 shows the subwatersheds within the Lower Boise Watershed, **Table 14** describes the drainage areas, their corresponding HUC12 codes, the area of the subwatershed that is located within the City's impact area, and its percentage of the total subwatershed area.

Table 14. *Lower Boise Watersheds subwatersheds within the City's Impact Area*

Subwatershed	HUC 12	Area in Impact Area (acres)	Percent of Subwatershed
Fifteen Mile Creek	170501140205	2385.20	11%
Mason Creek	170501140407	6444.03	16%
Mill Slough-Boise River	170501140410	2592.43	6%
East Hartley Gulch	170501140410	97.01	1%
Lower Indian Creek	170501140507	7397.69	19%
Coulee Drain-Lake Lowell	170501140801	361.73	1%
Dixie Slough	170501140802	8223.08	32%
Outlet Boise River	170501150102	2668.51	7%

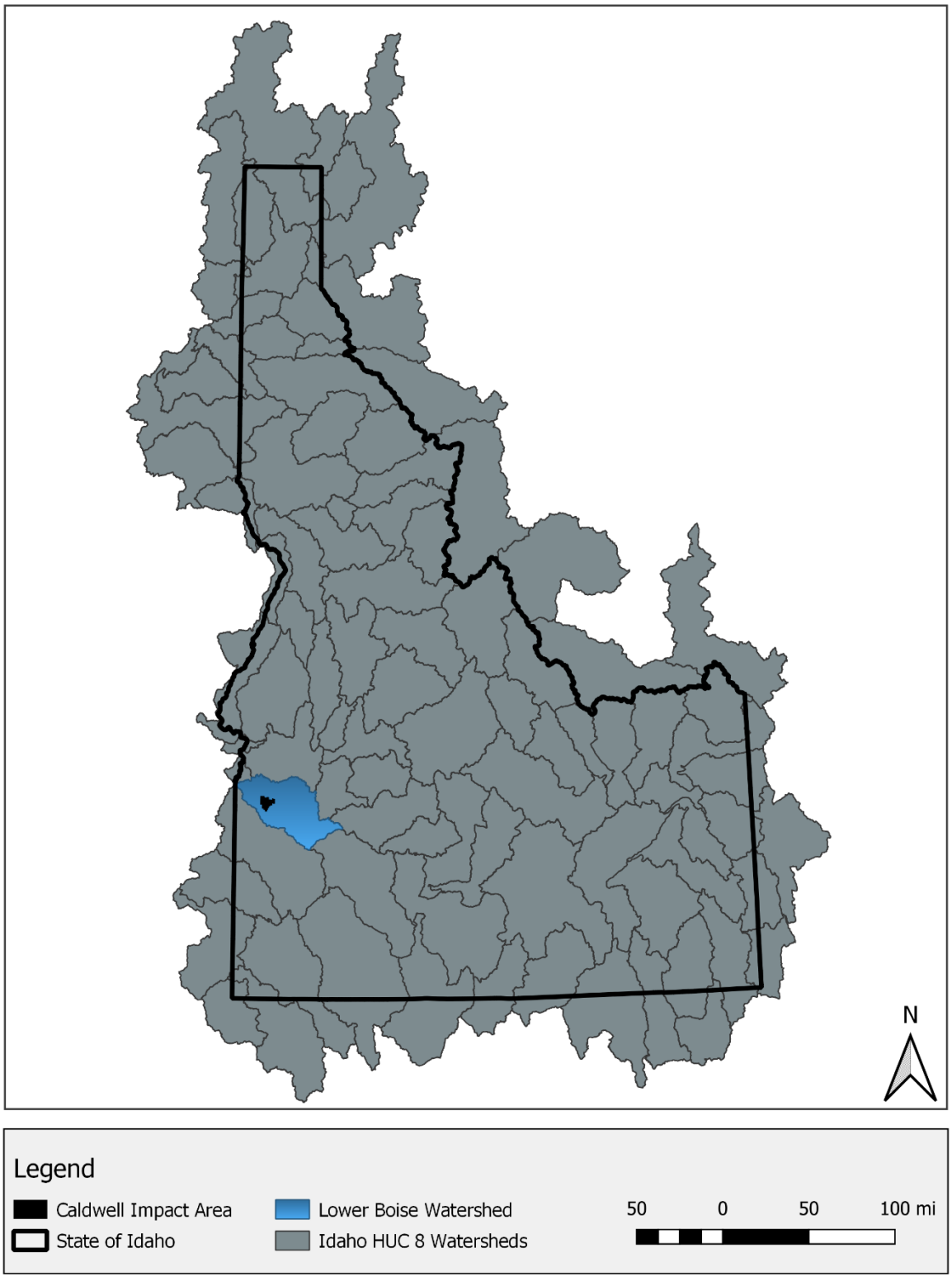


Figure 12. *Lower Boise Watershed*

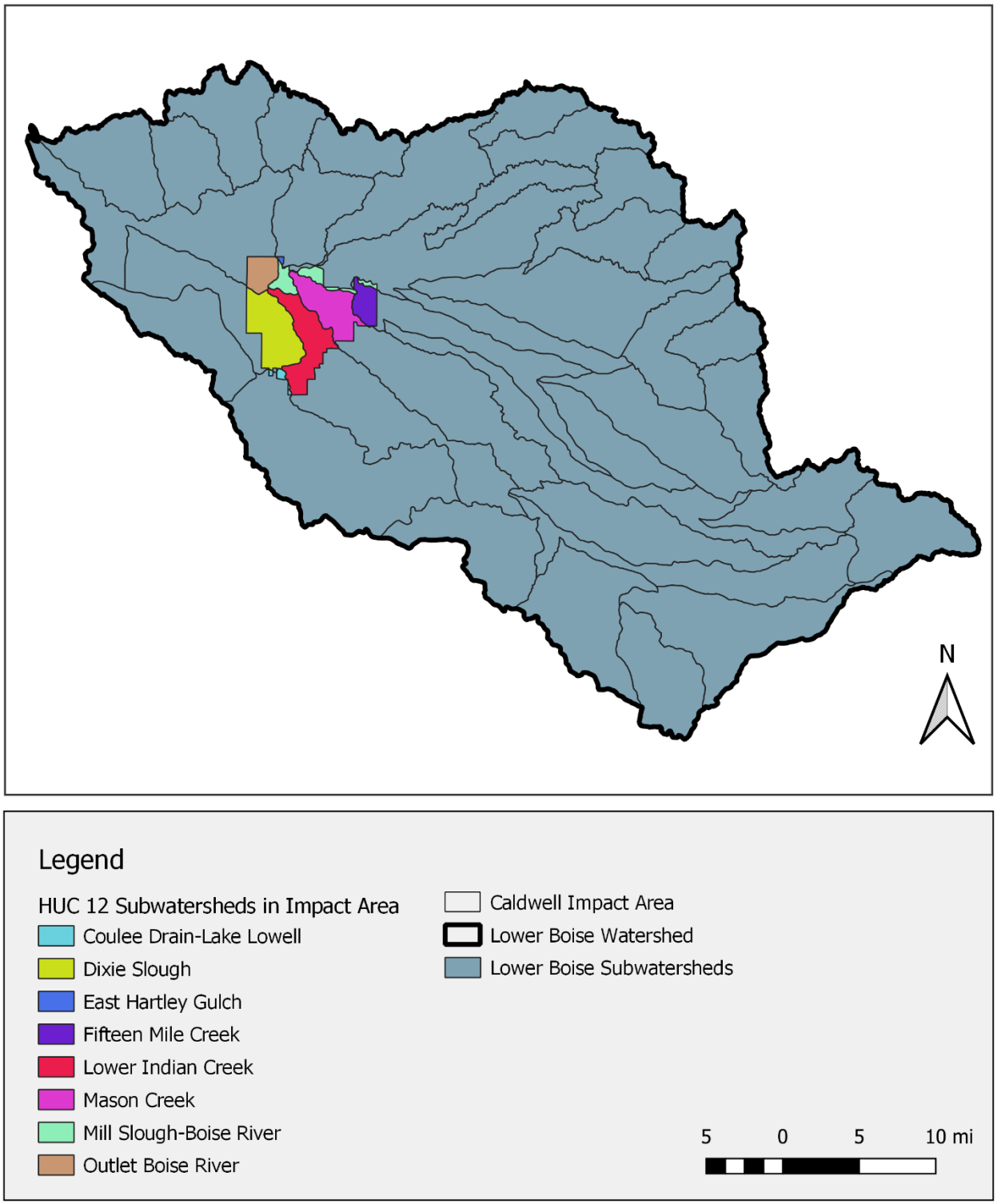


Figure 13. *HUC 12 Subwatersheds in the Lower Boise Watershed*

3.3 Receiving Waters

The City of Caldwell MS4 system has 272 outfalls that discharge to surface waters. These receiving surface waters range from major rivers to irrigation ditches. Figure 14 shows the surface waters located within the City's Impact Area.

Three significant waterways in the Lower Boise Watershed flow, in part, through the City of Caldwell: Indian Creek flows northwesterly, bisecting the City and cutting directly through the heart of the downtown area. Mason Creek also flows northeasterly, moving across the northeast quadrant of the City. The lower Boise River itself flows west along the northern border of the City, dipping in and out of the boundary of the Impact Area before cutting across the northwest quadrant of the City. Table 15 is a list of the rivers and creeks that intersect with the City and the total number of miles of the surface water that are located within the City's Impact Area.

These surface waters have been assessed by IDEQ, and have been found to not support their designated beneficial uses of: cold water aquatic life, salmonid spawning, domestic and agricultural water supply, and primary and secondary contact recreation. As a result, all entities that discharge to these receiving waters must adhere to the requirements established in the water's TMDL.

Table 15. *Receiving surface waters: rivers and creeks*

Name	Miles*
Boise River	5.30
Indian Creek	7.17
Mason Creek	7.44

*Miles of reach located within City Impact Area

As a community whose development was historically driven by agriculture, there is extensive water conveyance infrastructure in place across the City, installed with the intent of aiding irrigation of crops. Many of these channels and conveyances continue to be utilized for extensive irrigation, but also as conveyances of stormwater runoff. Table 16 is a complete list of receiving surface waters within the City's boundary that are classified as any conveyance type other than a natural river or creek.

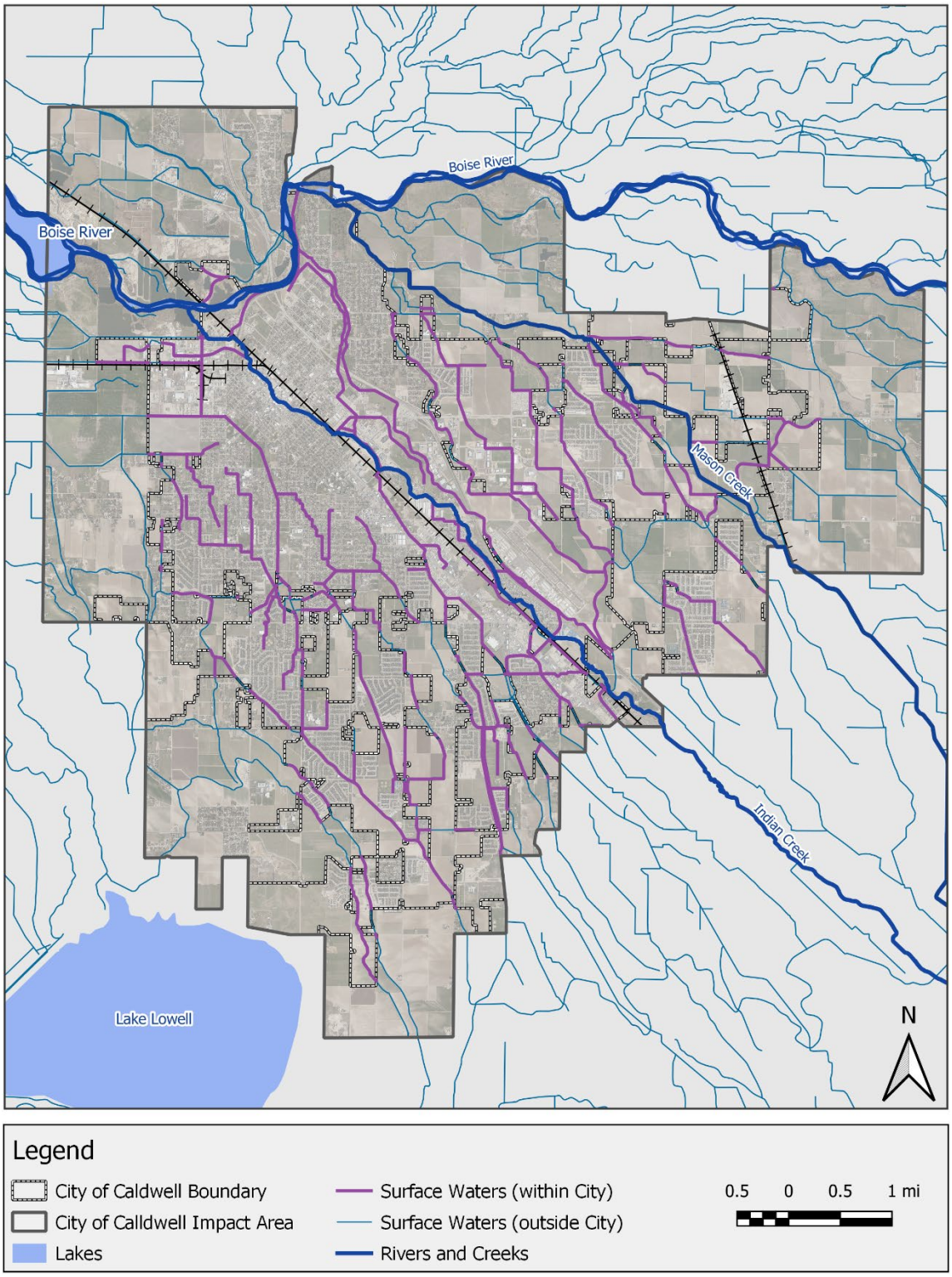


Figure 14. *City of Caldwell surface waters*

Table 16. *Receiving surface waters: canals, ditches, drains, laterals*

Name	GIS ID	Type	Ownership	Miles*
10th St Lateral	7061	Lateral	Pioneer Irr Dist	1.07
13.3 Center Lateral	7106	Lateral	Pioneer Irr Dist	3.34
15.0 North Branch	7083	Lateral	Pioneer Irr Dist	1.63
15.0 South Branch	7084	Lateral	Pioneer Irr Dist	2.06
200 Lateral	7028	Lateral	Pioneer Irr Dist	1.69
25.1 Lateral	7053	Lateral	Pioneer Irr Dist	3.59
A Drain	6986	Drain	Caldwell	1.35
A Drain	6987	Drain		0.01
A Drain	7008	Drain	Caldwell	1.50
A Drain	7160	Drain	Caldwell	1.35
A Drain	7162	Drain	Caldwell	0.00
A Drain (old)	7161	Drain	Caldwell	1.35
B Drain	7062	Drain	Caldwell	0.51
Bolton/300 Lateral	7142	Lateral	Pioneer Irr Dist	0.24
Bolton/300 Lateral	7143	Lateral	Pioneer Irr Dist	0.15
Bolton/300 Lateral	7029	Lateral	Pioneer Irr Dist	1.89
Caldwell Canal Feeder	3049	Feeder	Bureau of Reclamation	0.99
Caldwell Canal Feeder	7070	Feeder	Bureau of Reclamation	0.02
Caldwell Highline Canal	7137	Canal	Pioneer Irr Dist	1.18
Caldwell Highline Canal	7026	Canal	Pioneer Irr Dist	1.64
Caldwell Highline Canal	449	Canal	Pioneer Irr Dist	8.62
Caldwell Lowline Canal	7001	Canal	Pioneer Irr Dist	1.98
Caldwell Lowline Canal	7059	Canal	Pioneer Irr Dist	1.17
Caldwell Lowline Canal	3109	Canal	Pioneer Irr Dist	0.17
Caldwell Lowline Canal	3110	Canal	Pioneer Irr Dist	0.25
Caldwell Lowline Canal	2904	Canal	Pioneer Irr Dist	1.62
Canyon Hill/500 Lateral	2794	Lateral	Pioneer Irr Dist	3.98
Carnahan Pump Line	7065	Lateral	Pioneer Irr Dist	0.09
College Lateral	7066	Lateral	Pioneer Irr Dist	0.62
Deer Flat Caldwell Canal	7159			3.73
Dixie Drain	7075	Drain	Bureau of Reclamation	0.18
Dixie Drain	7157	Drain	Bureau of Reclamation	2.51
Dixie Drain	7158	Drain	Bureau of Reclamation	2.51
Dixie Drain	7076	Drain	Bureau of Reclamation	0.40
Dixie Drain	7077	Drain	Bureau of Reclamation	1.37
Dixie Drain	7078	Drain	Bureau of Reclamation	1.42
East Caldwell Drain	7067	Drain	Bureau of Reclamation	1.50
East Messler Lateral	7056	Lateral	Pioneer Irr Dist	0.50
Elijah Canal Feeder	3050	Feeder	Bureau of Reclamation	0.78
Elijah Drain	3736	Drain	Bureau of Reclamation	1.81

Name	GIS ID	Type	Ownership	Miles*
Elijah Drain	1944	Drain	Bureau of Reclamation	0.50
Elijah Drain	1951	Drain	Bureau of Reclamation	0.24
Fenton Lateral	7054	Lateral	Pioneer Irr Dist	0.54
Forest Canal	2756			1.83
Forest Canal	7068			1.81
Golden Gate Canal	3776	Lateral	Pioneer Irr Dist	0.47
Golden Gate Canal	3777	Lateral	Pioneer Irr Dist	0.14
Golden Gate Canal	3778	Lateral	Pioneer Irr Dist	0.07
Golden Gate Canal	1432	Lateral	Pioneer Irr Dist	0.16
Golden Gate Canal	1433	Lateral	Pioneer Irr Dist	0.11
Golden Gate Canal	1434	Lateral	Pioneer Irr Dist	0.29
Golden Gate Canal	1589	Lateral	Pioneer Irr Dist	0.08
Golden Gate Canal	1428	Lateral	Pioneer Irr Dist	0.21
Golden Gate Canal	1429	Lateral	Pioneer Irr Dist	0.07
Golden Gate Canal	1430	Lateral	Pioneer Irr Dist	0.07
Golden Gate Canal	1431	Lateral	Pioneer Irr Dist	0.09
Golden Gate Canal	1590	Lateral	Pioneer Irr Dist	0.06
Golden Gate Canal	1591	Lateral	Pioneer Irr Dist	0.21
Golden Gate Canal	1592	Lateral	Pioneer Irr Dist	0.16
Golden Gate Canal	2306	Lateral	Pioneer Irr Dist	0.57
Golden Gate Canal	2307	Lateral	Pioneer Irr Dist	0.01
Golden Gate Canal	2308	Lateral	Pioneer Irr Dist	0.13
Horton/400 Lateral	7140	Lateral	Pioneer Irr Dist	3.69
Hoshaw/C-Drain	1594	Drain	Caldwell	0.97
Isaiah Drain	1612	Drain	Bureau of Reclamation	1.74
Jester 3.5	7052	Lateral	Private	0.59
Jester Lateral	7049	Lateral	Pioneer Irr Dist	0.53
Kimball Lateral	7060	Lateral	Pioneer Irr Dist	0.37
King Lateral	7050	Lateral	Pioneer Irr Dist	0.55
King Lateral	7051	Lateral	Private	0.12
Lower Fivemile Drain	4233	Drain	Bureau of Reclamation	2.35
Maddens Spur Drain	2902	Drain	Bureau of Reclamation	1.39
Maddens Spur Drain	3048	Drain	Bureau of Reclamation	0.87
Mason Creek Drain	7010	Drain	Bureau of Reclamation	0.80
Mason Creek Drain	7011	Drain	Bureau of Reclamation	0.30
Mason Creek Drain	7003	Drain	Bureau of Reclamation	1.23
Mason Creek Drain	7004	Drain	Bureau of Reclamation	0.37
Mason Creek Drain	4248	Drain	Bureau of Reclamation	1.00
Midway Drain	3196	Drain	Bureau of Reclamation	0.93
Moses Drain	2903	Drain	Bureau of Reclamation	1.44

Name	GIS ID	Type	Ownership	Miles*
Noble Drain	7005	Drain	Bureau of Reclamation	5.16
Notus Canal	40	Canal		5.59
Notus Canal	44	Canal		2.62
Notus Canal	1822	Canal		0.62
Parker Drain	4411	Drain	Bureau of Reclamation	0.79
Peterson Lateral	7055	Lateral	Pioneer Irr Dist	0.65
Phyllis Canal	7099	Canal	Pioneer Irr Dist	3.85
Phyllis Canal	7096	Canal	Pioneer Irr Dist	0.48
Phyllis Canal	7097	Canal	Pioneer Irr Dist	0.67
Phyllis Canal	7098	Canal	Pioneer Irr Dist	1.86
Phyllis Canal	3184	Canal	Pioneer Irr Dist	0.69
Railroad Lateral	7027	Lateral	Pioneer Irr Dist	1.30
Riverside Canal	2439			1.13
Riverside Canal	2305			1.85
Roedel Ditch	2540			0.73
Roedel Ditch	2537			0.43
Roedel Ditch	2538			0.14
Roedel Ditch	2539			0.12
Siebenberg Canal	4634			1.41
Solomon Drain	7141	Drain	Bureau of Reclamation	0.91
Solomon Drain	4231	Drain	Bureau of Reclamation	2.54
Solomon Drain	4232	Drain	Bureau of Reclamation	1.46
Spoil Bank Drain	7009			0.24
Steelman Lateral	7064	Lateral	Pioneer Irr Dist	0.10
Steelman Well Pipe	7063	Lateral	Pioneer Irr Dist	0.62
Stockyard Lateral	7135	Lateral	Pioneer Irr Dist	1.27
Stone Lateral	593	Lateral	Pioneer Irr Dist	3.06
Unnamed Ditch	104			1.25
Unnamed94	3161			0.29
Upper Embankment Drain	1378			0.73
Ustick Drain	91			0.27
Villanue Lateral	7113	Lateral	Pioneer Irr Dist	1.09
Webber Lateral	7109	Lateral	Pioneer Irr Dist	0.24
West End Drain	7072	Drain	Bureau of Reclamation	1.84
West Messler Lateral	7057	Lateral	Pioneer Irr Dist	0.88
Weymouth/100 Lateral	7002	Lateral	Pioneer Irr Dist	2.13
Wilson Drain	7150	Drain	Bureau of Reclamation	0.80
Wilson Drain	7151	Drain	Bureau of Reclamation	0.57
Wilson Drain	7145	Drain	Bureau of Reclamation	0.18
Wilson Drain	7147	Drain	Bureau of Reclamation	0.59

Name	GIS ID	Type	Ownership	Miles*
Wilson Drain	7148	Drain	Bureau of Reclamation	0.39
Wilson Drain	7149	Drain	Bureau of Reclamation	1.50
Yonkee Drain	4255	Drain	Bureau of Reclamation	0.98

*Miles of reach located within City boundary

3.4 MS4 Map

The MS4 map is included as Appendix C. Because the City's MS4 continually expands as the City grows, this map will continue to be updated as the City's Street, Mapping, and Engineering departments collect and input additional data. A final electronic copy of the map and GIS data will be submitted to IDEQ and EPA no later than April 3, 2025.

Section 4. General Requirements

4.1 SMWP Document

The City will maintain this written SWMP document, which describes in detail how the City will comply with the required stormwater management control measures of the City's MS4 Permit. As necessary, the City will update the SWMP document and describe the City's interim schedule for the implantation of any SWMP control measure components to be developed during the term of the Permit. No later than December 1, 2021, the City's SWMP document will be completed and made available through the City's website.

The City will maintain a method of gathering, tracking, and using SWMP information to set priorities and assess Permit compliance. The City will track activities and document program outcomes to illustrate progress on the respective SWMP control measure (e.g., the number of inspections, official enforcement actions, and/or types of public education actions, etc.), and cite relevant information and statistics, reflecting the specific reporting period, in each Annual Report.

The City will submit an updated SWMP Document to EPA and IDEQ with the Permit Renewal Application, by April 3, 2025.

4.2 Shared Implementation with Outside Entities

Throughout the permit term, the City retains sole responsibility for the implementation of all the stormwater management control measures required by the Permit. The City may, as it chooses, share or delegate implementation of one or more of the stormwater management control measures to another entity if:

- The other entity implements the stormwater management control measure, or component thereof;
- The particular stormwater management control measure, or component thereof, is at least as stringent as the corresponding Permit requirement; and
- The other entity agrees to implement the stormwater management control measure, or component thereof, on the City's behalf.

For instances of shared implementation, the City and the outside entity must maintain a written and binding agreement between the parties, describing each organization's

respective roles and responsibilities related to the Permit, and identify all aspects of stormwater management where the entities will share or delegate implementation responsibility. Any agreements signed before the issuance of the Permit may be updated, as necessary to comply with this requirement.

The City of Caldwell has annually entered into an agreement with the Partners for Clean Water, the stormwater management coalition of the cities of Boise and Garden City, Boise State University, ACHD, Drainage District #3, and ITD #3, to implement a portion of the required Minimum Control Measure of Public Education, Outreach, and Involvement. The signed agreement is updated annually, and is available as a public record, upon request. Under this agreement, the City of Caldwell contributes funds to the Partners for Clean Water, to be used to run informational campaigns about water quality to citizens in the Treasure Valley, more information can be found in Section 6.1.2.

Ultimate responsibility for implementing the stormwater management required under the City of Caldwell MS4 Permit lies with the City.

4.3 Transfer of SWMP Implementation Authority

The City will implement the required SWMP control measures from the Permit in all new areas added or transferred to the City's MS4 (or for which the City becomes responsible for implementation of SWMP control measures) as expeditiously as practicable, but not later than one year from addition of new areas. The City will present in each Annual Report any additions or changes, and schedules for implementation in new areas, and will update this SWMP document accordingly.

Section 5. Minimum Control Measures and Activities

5.1 Public Education, Outreach, and Involvement Program

5.1.1 Regulatory Requirements

City of Caldwell MS4 Permit No. IDS-028118 Section 3.1 reads "The Permittee must continue to conduct, or contract with other entities to conduct, an ongoing public education, outreach, and involvement program based on stormwater issues of significance in the Permittee's jurisdictions. When applicable, the Permittee must comply with State and local public notice requirements when conducting public involvement activities."

The City was required by the Permit to begin implementation of Public Education and Outreach activities before October 1, 2021. This goal was met in the spring of 2021, when the City held a Community Pride Day on April 24, which included trash pickup around surface waters throughout the City, and again when the City of Caldwell along with Partners for Clean Water began their annual stormwater education campaign throughout the Treasure Valley. By the end of the Permit term, April 3, 2025, the City must distribute and/or offer at least eight educational messages or activities to selected audiences.

5.1.2 Public Education, Outreach, and Involvement Activities

The City is a member of the Partners for Clean Water organization, which runs education campaigns throughout the Treasure Valley, including in the City of Caldwell. The City donates 15,000 dollars annually to the education and outreach program, which goes to fund billboards, bus wraps, radio ads for both public and internet radio stations. The City also collaborates with the Partners for Clean Water to develop new messages and campaigns, selecting topics most relevant to concerns and challenges within the MS4, as well as suggesting media methods to maximize efficacy and extent of the outreach (e.g., expanding the program to include social media advertisements). Since the City of Caldwell is the only Canyon County participant, we always request that each campaign span both Ada and Canyon Counties.

Since 2010, the City has partnered with the City of Boise's annual Watershed Watch team to collect vital data on water quality in the Boise River. This event engages young citizen scientists in the community, allowing volunteers, including staff members from the City of Caldwell, to teach the citizen scientists about data collection, the interconnection of water, and the importance of stormwater management. The City will continue to participate in this annual event, through the duration of the permit term.

The City of Caldwell also hosts community events, engaging with the general public to clean up the community, including activities such as picking up trash along the Boise River, Indian Creek, and Rotary Pond.

Stormwater management team staff, after completing the annual report, will have an internal meeting to discuss the areas of concern with the community's involvement and understanding of stormwater management and protecting water resources. This meeting will inform the educational message(s) produced during the following year, to ensure that

the targeted messages are effectively addressing the most pressing concerns within the community.

As youth are often some of the most environmentally-conscious, and socially engaged members of the community, they are a critical target audience for conveying educational stormwater messages. The City intends to continue to collaborate with local schools to provide information to the students about the interconnectedness of stormwater and water resources, why picking up trash can help protect water, the importance of environmental stewardship (and how they can be environmental stewards at any age). To further engage the general public, the stormwater team can have educational booths at community events, and post newsletters on the City website with seasonal reminders of good stewardship practices (e.g., raking leaves and properly disposing of them, cleaning up pet waste, not blowing grass clippings into the gutter, benefits of rain gardens and simple ways to design them, benefits of low-water lawns, don't over-irrigate, only clean (potable/drinking or irrigation overflow) water and stormwater runoff can go into the storm drain, reminder of how the storm drains don't get treated – they just go to nearby surface waters). As over one-third of the City is Hispanic or Latino, the newsletters will also be published in Spanish, to increase accessibility for the entire community.

The City makes best management practices for construction sites booklets available to the public and for construction site inspections. Site work inspection staff keep copies of the booklets in their City vehicle, to provide to construction site personnel that need additional support and information to keep their site in acceptable condition.

The City is also considering preparing media that can be distributed to targeted groups within the community to address industry-specific concerns. See the following list for primary target groups and their primary messages:

Table 17. *Applicable educational messages and target groups.*

Target Group	Message Topic	Importance to Caldwell MS4
Homeowner's Associations	HOA's responsibility to maintain private stormwater facilities	HOA's are often unaware of their responsibilities to maintain their stormwater facilities. These facilities often connect to the City's MS4.
Homeowner's Associations	Water conservation and reducing over-irrigation	Frequent over-irrigation observed in new developments, reduces stormwater system capacity and can flush pollutants into the MS4.
Businesses	Appropriate maintenance of landscaping features and proper	Businesses and landscaping companies often flow clipped grass and leaves into the City's streets and gutters, instead of

Target Group	Message Topic	Importance to Caldwell MS4
	disposal of landscaping materials (e.g. grass clippings, leaves, etc.)	bagging the materials. Not only can these materials potentially block the storm drain infrastructure and lead to flooding, they can pollute the receiving waters.
Developers and Engineers	The benefits of implementing Low Impact Development/green infrastructure techniques	The City is growing rapidly, implementing LID and green infrastructure techniques can reduce the strain the development places on the environment.

In addition to disseminating the media, the messages will also be posted on the City's website for easy access.

5.1.3 Reporting and Quantifying Education and Outreach Efforts

Not only is it important to conduct Education and Outreach activities, but it is equally important to record and assess the impact of these activities, to the maximum extent practicable, to determine which activities are most beneficial. This allows the City to continually hone and refine the program, optimizing the efficiency with which the messages are delivered.

For wide-spread media campaigns: report the number of media messages produced (radio/internet ads, bus wraps, etc.).

For in-person educational events: the total number of attendees is reported. For more formal events (i.e. classroom visits, lectures, and conferences) a pre- and post-lesson self-assessment can be given, assessing participants' general knowledge on the topic and if/to what extent it changed from the lesson. For more informal events (i.e., educational booths, trash clean-up events) a verbal assessment will be given, and will record how the group as a whole responds to questions before and after they are given information.

For informational newsletters: record the number of informational newsletters and mailers sent out and/or posted to the City's website. Set up the webpage to record the number of people viewing the newsletters. As the City has the resources available, to encourage citizen engagement, the City may hold a raffle where people can read the newsletter and fill out an engagement survey about the topic, to be entered into a drawing to win a gift card.

All data collected throughout the year will be compiled, analyzed, and reported on in the Annual Report. The Annual Report will specify how many of the eight educational messages

have been delivered, the target audience of the completed message, and the applicable topic(s).

5.2 Illicit Discharge Detection and Elimination

5.2.1 Regulatory Requirements

City of Caldwell MS4 Permit No. IDS-028118 Section 3.2 reads "The Permittee must implement and enforce a program to detect and eliminate illicit discharges into the MS4, to the extent allowable pursuant to authority granted the individual Permittee under Idaho state law. An illicit discharge is any discharge to an MS4 that is not composed entirely of stormwater. Any exceptions are conditional as identified in Permit Part 2.4 (Non-stormwater Discharges)"

No later than April 3, 2025, the City must revise and update the illicit discharge management program as necessary to meet the required components of the Permit (Parts 3.2.2 through 3.2.9).

5.2.2 MS4 Map and Outfall Inventory

To accurately assess and protect the MS4, the City must maintain comprehensive records of the system, including a comprehensive MS4 map and inventory of MS4 outfalls. The purpose of the inventory is to identify each outfall discharging from the City's MS4, record its location (by latitude and longitude), and overall physical condition. This provides a framework for the City to track outfall inspections, dry weather discharge screenings, maintenance, and other activities required under the Permit.

The City's Mapping Department maintains and updates the City's infrastructure inventory, including MS4 facilities (i.e. storm drain lines, catch basins, inlets, outfalls, retention basins, etc.). In September 2021, the Mapping Department and stormwater management team began to implement an effort to update and revise the City's MS4 map. This effort will include ongoing work by the mapping department to capture data on new stormwater management infrastructure being installed, collecting additional data on existing structures, and incorporating data from previous outfall inspections.

No later than April 3, 2025, the City will submit an electronic GIS version of the MS4 Map and accompanying Outfall Inventory to the EPA and IDEQ. Prior to this date, EPA and/or IDEQ

may request all available GIS layers. The final MS4 Map and Outfall Inventory will contain the following information:

- Location of all inlets, catch basins, and outfalls owned/operated by the City, including a unique identifier for each outfall, spatial location (latitude and longitude, with a minimum accuracy of +/-30 feet), and general information regarding dimensions, shape, material (concrete, polyvinyl chloride, etc.);

    - As a part of this permit's 401 Certification in 2019, the City provided a list of known outfalls (unique ID, latitude, longitude, etc.) to DEQ staff in December 2019. City staff will continue to update our MS4 data set as the City develops and/or our GIS data set is revised.

- Location of all MS4 collection system pipes, open channel conveyances, (laterals, mains, etc.) owned/operated by the City, including locations where the MS4 is physically interconnected to the MS4 of another operator;

- Location of structural flood control devices, if different from the characteristics listed above;

    - The City does not own or maintain any flood control devices as a part of the MS4. We are a participating member of FEMA's National Flood Insurance Program (NFIP).

- Waterbody Assessment Unit names and locations of waters of the U.S. that receive discharges from the inventoried MS4 outfalls, including an indication of all use impairments as identified by IDEQ in the most recent Integrated Report;

- Location of all existing permanent stormwater controls which are part of the public MS4 owned and/or operated by the City, including structural or treatment controls (e.g., detention and retention basins, infiltration systems, bioretention areas, swales, oil/water separators and/or other proprietary systems);

- Location and characteristics of any MS4 outfalls with ongoing dry weather flows identified by the City as being caused by irrigation return flows and/or groundwater seepage; and

    - City staff began tracking outfalls with dry weather flows during dry weather inspections in 2020. Not all outfalls were inspected in 2020, but inspectors

will continue to observe and document those outfalls with dry weather flows through the permit term.

- The City's GIS/locate team has also historically commingled locations of the storm drain/irrigation system. Beginning in November 2021, Engineering staff are reviewing and revising our drainage "outlets" and our stormwater "outfalls" layers. (At present, pipe material is only tracked on the drainage "outlets" layer, but we're working to revise this.) We anticipate this "sorting" effort to be completed by the end of 2021, but it may take GIS staff longer to execute the actual revision of the database.

- Location of City-owned vehicle maintenance facilities, material storage facilities, heavy equipment storage areas, maintenance yards, and snow disposal sites; City-owned or operated parking lots and roads in areas served by the MS4.

  - Street Department & Shop: 1311 N 3rd Ave & 304 E Madison St
  - Street Department Gravel Pit: 21109 Chicago Street
  - Street Department Wash Rack: 308 W Chicago Street
  - Street Department Crown St & Aviation Way (Chip Stockpile):

    No address (43.653640, -116.652432)
  - Parks Department & Shop: 618 Irving Street & 816/822 Grant Street
  - Snow Disposal Sites: None
  - City-Owned Parking Lots: 602 Cleveland Blvd; 611 Blaine St (TVCC); 120 N Kimball Ave; 0 S 10th Ave & Railroad frontage; 0 Main Street

5.2.3 Ordinance and/or other Regulatory Mechanisms

The City of Caldwell prohibits non-stormwater discharges into the MS4 (except those conditionally allowed by Permit Part 2.4) through enforcement of City of Caldwell Ordinance to the extent allowable under Idaho state law. In this document, the City establishes the necessary enforcement procedures and actions, including a written policy of enforcement escalation procedures for recalcitrant or repeat offenders, to ensure compliance.

Table 18 delineates the required contents that must be contained within the City's ordinance or regulatory mechanisms, as well as the corresponding section of the City's ordinance that addresses the requirement.

Table 18. *IDDE Ordinance Requirements under Permit*

Permit Requirement	City Ordinance	Ordinance Language
Ordinance must authorize the Permittee to control and respond to the discharge of spills into the MS4 to the extent allowable pursuant to authority granted the individual Permittee under Idaho state law	13-01-07	Whenever necessary to make an inspection to enforce any of the provisions of this article, or whenever an authorized enforcement agent has reasonable cause to believe that there exists in any building or upon any premises any condition which may constitute a violation of the provisions of this article, the agent may enter such building or premises at all reasonable times to inspect the same or perform any duty imposed upon the agent by this article; provided that: 1) if such building or premises is occupied, he or she first shall present proper credentials and request entry; and 2) if such building or premises is unoccupied, he or she first shall make a reasonable effort to locate the owner or other persons having charge or control of the building or premises and request entry. *(13-01-07-1.D)* Acts Resulting In Violation Of Federal Clean Water Act: Any person who violates any provision of this article, any provision of any permit issued pursuant to this article, or who discharges pollutants, waste or wastewater so as to cause an illicit discharge into the MS4, or who violates any cease and desist order, prohibition, or effluent limitation, also may be in violation of the federal clean water act and may be subject to the sanctions of that act including civil and criminal penalties. *(13-01-07-7)*
Ordinance must authorize the Permittee to prohibit illicit connections, and the dumping or disposal of materials other than stormwater, into the MS4	13-01-03	Any illicit discharge to any storm drain, including both the MS4 and private storm drains, is a violation of this article unless exempted by provisions of subsections (6) and/or (7) of this section.

Permit Requirement	City Ordinance	Ordinance Language
Ordinance must authorize the Permittee to prohibit, and eliminate, at a minimum, the following discharges to the MS4 to the extent allowable pursuant to authority granted the individual Permittee under Idaho state law: • Sewage; • Discharges of wash water resulting from the hosing or cleaning of gas stations, auto repair garages, or other types of automotive services facilities; • Discharges resulting from the cleaning, repair, or maintenance of any type of equipment, machinery, or facility, including motor vehicles, cement-related equipment, and port-a-potty servicing, etc.; • Discharges of wash water from mobile operations, such as mobile automobile or truck washing, steam cleaning, power washing, and carpet cleaning, etc.; • Discharges of wash water from the cleaning or hosing of impervious surfaces in municipal, industrial, commercial, and residential areas - including parking lots, streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas, etc., where detergents are used and spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed); • Discharges of runoff from material storage areas containing chemicals, fuels, grease, oil, or other hazardous materials;	13-01-03-1	General Requirements And Prohibitions: A. Any person engaged in activities which will or may result in pollutants entering a storm drain shall undertake reasonable measures to reduce such pollutants. Examples of such activities include, but are not limited to: improper application, over use, and disposal of herbicides, pesticides, and fertilizers; activities related to automobile businesses including service stations, automobile dealerships, car washes, and body shops; and light industrial facilities which may be a source of pollutants. B. No person shall throw, deposit, leave, maintain, keep, or permit to be thrown, deposited, placed, left or maintained, any refuse, rubbish, garbage, or other discarded or abandoned objects, articles, and accumulations, in or upon any street, alley, sidewalk, storm drain inlet, catch basin, conduit or other drainage structures, parking area, or upon any public or private plot of land so that the same might be or become a pollutant. C. No person shall cause or permit any dumpster, solid waste bin, or similar container to leak such that any pollutant is discharged into any street, alley, sidewalk, storm drain, inlet, catch basin, conduit or other drainage structures, business place, or upon any public or private plot of land in the city. D. The occupant or tenant, the owner, lessee, or proprietor of any real property in the city where there is located a paved sidewalk or parking area shall maintain said paved surface free of dirt or litter to the extent reasonable and practicable and provide an adequate means for the disposal of refuse, rubbish, garbage, or other articles so as to prevent such matter from entering a storm drain. Sweepings from said sidewalk shall

Permit Requirement	City Ordinance	Ordinance Language
• Discharges of pool or fountain water containing chlorine, biocides, or other chemicals; discharges of pool or fountain filter backwash water; • Discharges of sediment, pet waste, vegetation clippings, or other landscape or construction-related wastes; and • Discharges of food-related wastes (grease, fish processing, and restaurant kitchen mat and trash bin wash water, etc.).		not be swept or otherwise made or allowed to go into the gutter or roadway, but shall be disposed of in receptacles maintained on said real property. E. No person shall throw or deposit any pollutant in any fountain, pond, lake, stream, or any other body of water in a park or elsewhere within the city, except as otherwise permitted under local, state or federal law.

5.2.4 Illicit Discharge Complaint Report and Response Program

In order to receive complaints or reports from the public, the City commits one staff member to serve as the point of contact for the public to report illicit discharges into the MS4. This staff member's telephone number and email address is made publically available, including posted on the City's webpage, with the directions to contact the staff member with any illicit discharge concerns or reports. This staff member is trained and qualified to field the calls and emails, record the complaint, and inspect and follow up as necessary to address the concern. During non-business hours, all calls go through to the Engineering Department's main voicemail; the department's administrative assistant sends any after-hours messages to the staff member in charge of handling illicit discharge calls. In the event that the designated staff member is unavailable, the Engineering department's administrative assistant forwards all calls to other members of the stormwater management team that are available. Contact information for the staff member, and a reminder to contact the City if an illicit discharge is observed will be given at appropriate public education and outreach media.

The City will continue to respond to all complaints or reports as soon as possible, within a maximum of two (2) working days. All responses will include an investigative inspection, to observe the reported discharge or concern, and appropriately document. This inspection will include an inspection of all nearby catch basins, other stormwater infrastructure, and surface water channels as applicable, to determine the extent of the impact. Depending on the results of the inspection, the response and enforcement protocol will be initiated to address and remediate any confirmed illicit discharge. The response protocol is summarized in Figure 9 below.

Regardless of the results of the inspection and the extent of the response and enforcement protocol, all complaints and reports will be recorded in the City's records. The record will include the date of the complaint, location, photographs provided with the complaint or taken during the inspection, a narrative of the inspection, and any supporting documentation or escalation documents. Discharges and spills which make their way to WOTUS are reported to DEQ as a non-compliance. This information will be summarized and included in the Annual Report.

Spill Response Procedure for City Staff

The person who discovers a spill fills an important role to determine immediate actions to ensure the safety of others and the environment. If the surroundings are unsafe, the individual who discovers the spill should restrict access by others and should call for hazmat help as soon as possible. If conditions allow, he or she may also attempt to contain the spill, to prevent/minimize release to the environment.

If conditions are sufficiently safe, responders must make an earnest effort to contain spills at the source rather than resort to separation of the material from the environment or downstream waters. This can be accomplished by isolating sumps, drains, and building berms around potential environmental receptors using granular absorbents or absorbent booms. It is imperative that Street Department response vehicles retain spill kits onsite and readily available.

When reporting, the individual calling in the request for response should provide as much information about the release as possible. Where possible, the person making the call for hazmat response should attempt to provide the following:

- Spill location;
- Date and time discovered;
- Name of material spilled;
- Quantity spilled and source of spill;
- Associated hazards;
- Location and description of potential and actual environmental receptors;
- Actions being used to stop, remove, and/or mitigate the effects of the spill; and
- Description of any damages or injuries.

The City Stormwater Compliance Responders will evaluate the situation to determine immediate actions required and the need for a spill response contractor to clean-up the spill, if necessary. If it is determined that that spill/release can be safely addressed by on-site resources, the Public Works Director, City Engineer, Street Department Superintendent, Stormwater Compliance Responder or appropriate designee may direct personnel to initiate appropriate clean up actions. For spills/releases which cannot be readily managed by on-site personnel, City Staff may be required to contact an appropriately qualified spill cleanup contractor to provide assistance.

The City of Caldwell retains the right to invoice or prosecute the owner of the improperly stored pollutant or otherwise guilty party for all legal, administrative, and directly remedial costs incurred, even in their absence.

***Figure 15**. Spill response procedure.*

See also Section 5.2.7 for spill response contacts.

5.2.5 Dry Weather Outfall Screening Program

The stormwater management team conducts an annual dry weather analytical and field screening monitoring program to identify non-stormwater flows from MS4 outfalls during dry weather. In southwest Idaho, this is typically the months of July and August each year. This program emphasizes screening activities to detect and identify illicit discharges and illegal connections, and allows the City to reinvestigate potentially problematic MS4 outfalls throughout the City.

Because the total number of MS4 outfalls in the City's MS4 area is greater than 50 (see Outfall Inventory for most accurate tabulation of outfalls), each year the City screens at least 50 outfalls. The outfalls will continue to be inspected on rotation, so that every outfall is inspected at least once during each permit term. At the start of each permit term, and in the event that during the permit term all outfalls have been screened and the inspections restart, and at the start of each annual round of screenings priority will be given to outfalls with the following considerations:

- The outfall discharges directly to an impaired surface water (i.e., Boise River, Indian Creek, Mason Creek).
- The outfall was identified as having unresolved or unidentified discharges during its last inspection.
- Illicit discharge records indicate more than one confirmed illicit discharge in the contributing drainage area to the outfall.

When conducting the dry weather screening inspections, if the outfall is discharging water, the inspector will document and record the discharge and attempt to identify the source. Due to the age of the City's MS4 system, in some areas of the City, groundwater and irrigation water is comingled with stormwater, utilizing the same infrastructure. In the new development areas, some residents exhibit a pattern of frequent over-irrigation of residential lots, as new homeowners seek to establish sod on their property but fail to reduce irrigation frequency and duration once the sod has established, leading to irrigation runoff. If the flow observed from the outfall is determined conclusively to be irrigation water, the inspector will document and move on. However, if the source of the discharge is unclear, and the characteristics of the water (clarity, color, odor, floatable, etc.) indicate that the discharge does not merely contain irrigation water, a sample will be collected and the discharge will be tested for temperature, pH, turbidity, phenols, residual chlorine, E.coli, and detergents. If any parameter exceeds the follow-up trigger threshold shown in Table 19, a follow-up inspection will be conducted of the outfall and the surrounding area, using the information

from the lab results to identify the source of the illicit discharge. All results and photos will be recorded in the dry weather outfall screening inspection report.

Table 19. *Dry weather outfall screening discharge parameter follow-up threshold triggers.*

Tested Parameter	Follow-up Threshold Trigger
Temperature	33°C
pH	pH<6 ; pH>8
Turbidity	200 FTU
Phenols	6 mg/L
Residual Chlorine	0.5 mg/L
E.coli	126 cfu/100mL
Detergents	0.5 mg/L

Where an illicit discharge is identified by the dry weather outfall screening program, the City will utilize City Ordinance 13-01-03 and 13-01-07 to pursue the responsible party to the extent allowable by state law.

The City will continue to maintain detailed records of its dry weather screening program activities conducted throughout the permit term. At present, the City uses an online, GIS-based platform to track dry weather screening inspections. City staff intent to continue to use a web-based program for organization of electronic geo-referenced inspection reports. The online mapping platform can be seen in Figure 16, below.

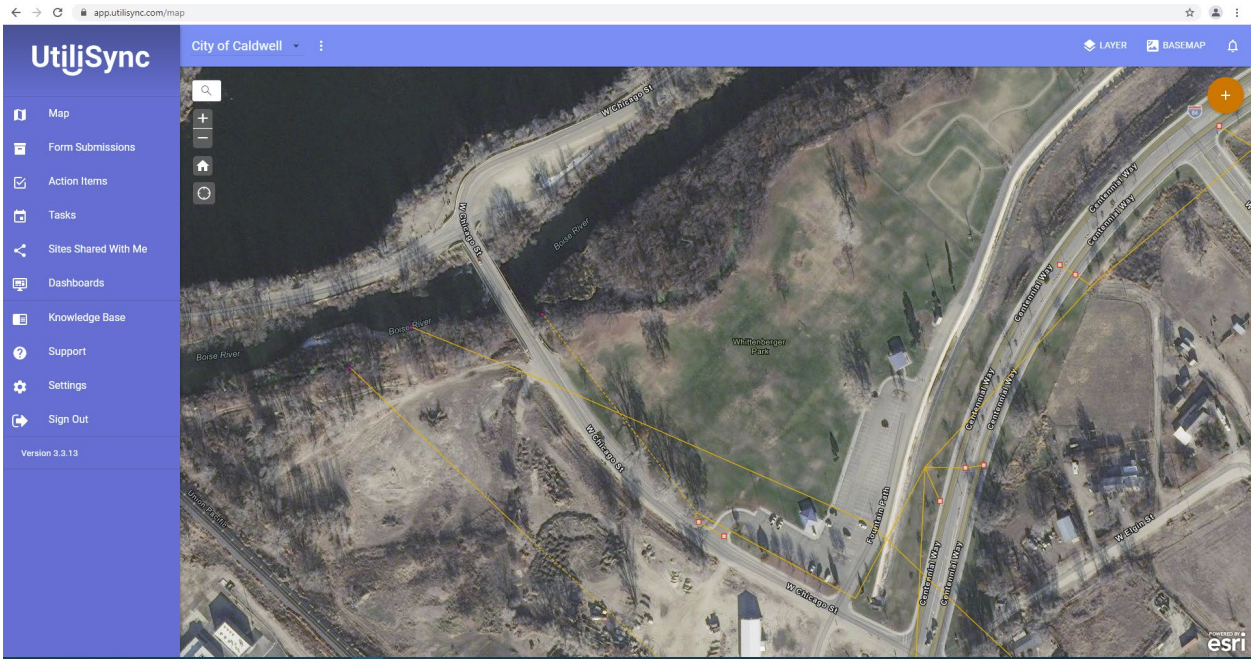


Figure 16. *GIS-based inspection tool for tracking dry-weather outfall inspections.*

For each screened outfall, the following information is recorded:

- Time since last rain event; estimated quantity of last rain event;
- Site description (e.g., conveyance type, adjacent land uses); flow estimation (e.g., width of water surface, approximate depth of water, approximate flow velocity, flow rate);
- Visual observations (e.g., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology);
- Results and documentation of any in-field sampling; recommendations for follow-up actions to address identified problems to the extent allowable pursuant to authority granted the City of Caldwell under Idaho state law; and/or completed follow-up actions taken by the City.

In the Annual Report, the City will include a summary of the results of the dry weather screening program activities conducted throughout the reporting period.

5.2.6 Follow-Up

Within thirty (30) days of its detection, the City will investigate recurring illicit discharges as identified as a result of complaints or as a result of the dry weather screening investigations and sampling, to determine the source of the discharge.

The City will take appropriate action to address and eliminate the source of an ongoing illicit discharge within sixty (60) days of its detection, to the extent allowable under City Ordinance and Idaho state law. For outfalls where the ongoing dry weather discharge is identified to be irrigation return flows or groundwater seepage, the City will document in the Annual Report the outfall location and the facts supporting the determination that the source is from either irrigation return flows or groundwater seepage. The City will create a list of all outfalls with ongoing dry weather flows associated with irrigation return flows or groundwater seepage, to be submitted as part of the Permit Renewal Application.

5.2.7 Prevention and Response to Spills to the MS4

All spills of hazardous material, deleterious material, or petroleum products which may impact waters (ground or surface) of the State will be reported immediately by telephone to the local fire department and State Communications at 1-800-632-8000 or (208) 846-7610. If the spilled contaminant reaches WOTUS, the DEQ permit non-compliance hotline will be called (833) 473-3724. Table 20 contains the complete spill response emergency contact list.

City Ordinance authorizes City staff to access sites and take the necessary steps to contain and remediate a spill. If notified before emergency services and/or federal agencies, City stormwater management team staff will immediately go to the site of the spill, if the individual reporting the spill indicates that the spill is likely not hazardous, staff will wait until they arrive onsite to assess and determine immediate actions required and the need for a spill response contractor to clean-up the spill, if necessary. If the spill appears to be hazardous, City staff will immediately contact the Caldwell Fire Department and request hazmat assistance.

Table 20. *Spill Response Emergency Contact List*

SPILL RESPONSE EMERGENCY CONTACT LIST	
Caldwell Stormwater Management Team Contacts	
Primary Environmental Compliance Responder Emily Johnson, Environmental Engineer	Office: (208) 455-4687 24-hr: (208) 484-7243
Alternate Environmental Compliance Responder Ashley Newbry, Assistant City Engineer	Office: (208) 455-4672 24-hr: (208) 919-8327
Town/State Agencies	
Caldwell Fire Department	911 or (208) 455-3032 (office)
Caldwell Police Department	911 or Emergency: (208) 890-3397
Caldwell Street Department	Office: (208) 455-3072 24-hr: (208) 454-7531
Caldwell Wastewater Treatment Facility	(208) 455-3027 24-hr: (208) 949-1278
Canyon County Emergency Management	Office: (208) 454-7271 Cell: (208) 989-2132
State of Idaho Office of Emergency Management	(208) 258-6524
State of Idaho Communications	1-800-632-8000 (208) 846-7610
DEQ Permit Non-compliance Hotline	(833) 473-3724
Federal Agencies	
National Response Center	(800) 424-8802
EPA Region 10 (Emergency Response)	1-800-424-4372 1-206-553-4973
Spill Response Contractors (Two nearby 24-hr contractors listed below)	
Olympus Technical Services, Inc.; Boise, ID	(406) 443-3087 (24 hr. line)
Master Environmental	(208) 490-8889 (24 hr. line)
L + R Group; Meridian, ID	(208) 996-0146 (24 hr. line)
H2O Environmental, Boise, ID Craig Simmons – Boise Base Manager	(800) 645-8265 (24 hr. line) (208) 343-7867 (office)

When reporting, the individual calling in the request for response should provide as much information about the release as possible. Where possible, the person making the call for hazmat response should attempt to provide the following:

- Spill location;
- Date and time discovered;
- Name of material spilled;
- Quantity spilled and source of spill;
- Associated hazards;
- Location and description of potential and actual environmental receptors;
- Actions being used to stop, remove, and/or mitigate the effects of the spill; and
- Description of any damages or injuries.

If the surroundings are unsafe, the individual who discovers the spill should restrict access by others and should call for hazmat help as soon as possible. If conditions allow, they may begin to work to contain the spill, to prevent or minimize release to the environment.

If conditions are sufficiently safe, responders must make an earnest effort to contain spills at the source rather than resort to separation of the material from the environment or downstream waters. This can be accomplished by isolating sumps, drains, and building berms around potential environmental receptors using granular absorbents or absorbent booms.

For spills that cannot be readily managed and cleaned by on-site personnel, City staff may contact an appropriately qualified spill cleanup contractor to provide assistance. The City retains the right to invoice or prosecute the party responsibly for the spill for all legal, administrative, and directly remedial costs incurred, even in their absence. (City Ordinance 13-01-07 (4) to (8))

5.2.8 Proper Disposal of Used Oil and Toxic Materials

The City will educate road maintenance staff and will place community information about the proper management, disposal, or recycling of used oil, vehicle fluids, toxic materials, and other household wastes upon its stormwater management webpage during the permit term.

This will be achieved through postings on the City's publically available webpage and educating staff.

- City Stormwater Compliance Staff have begun a Household Hazardous Waste reference page on the City's website at: https://www.cityofcaldwell.org/departments/engineering/household-hazardous-waste-disposal

5.2.9 Illicit Discharge Detection and Elimination Training for Staff

All persons responsible for investigating, identifying, and eliminating illicit discharges and illicit connections into the MS4 are appropriately trained to conduct such activities and receive additional training annually. The City's construction inspectors, maintenance field staff, and code compliance officers are trained to identify and report illicit discharges and spills into the MS4 to stormwater management staff.

Stormwater management team members receive additional training on conducting dry weather screening activities and responding to reports of illicit discharges to the MS4. All new staff working on illicit discharge detection and elimination will be provided orientation and training within six months of employment.

Training of all personnel is recorded and reported in the Annual Report.

- On November 11, 2021, City Stormwater Compliance staff held a spill clean-up and waste disposal workshop with Caldwell Street department staff. The discussion included reminders of which methods/equipment to use when cleaning up an oil slick or small automotive-fluid spill.

5.3 Construction Site Stormwater Runoff Control

5.3.1 Regulatory Requirements

City of Caldwell MS4 Permit No. IDS-028118 Section 3.3.2 reads "Through ordinance or other regulatory mechanism to the extent allowable under Idaho state law, the Permittee must require erosion controls, sediment controls, and waste materials management controls to be used and maintained at construction projects from initial clearing though final stabilization.

"To be considered adequate, the Permittee's regulatory mechanisms must require construction site operators to maintain effective controls to reduce pollutants in stormwater discharges to the MS4 from sites in the Permittee's jurisdiction, as described in Part 3.3.3.

The Permittee must require construction site operators to submit construction site plans for projects disturbing one or more acres for Permittee review, as described in Part 3.3.4. The Permittee must use inspections and enforcement actions (for example, written warnings, stop work orders and/or fines) to ensure compliance, as described in Part 3.3.5 below, and must maintain a written enforcement policy, as described in Part 3.3.6.

"For construction project in the Permittee's jurisdiction that disturb one or more acres (including projects that disturb less than one acre but are part of a common plan of development or sale that disturb one or more acres), the Permittee must refer project site operators to obtain NPDES permit coverage under the current version of the Idaho CGP."

5.3.2 City Ordinance and Regulatory Mechanisms

The City of Caldwell's construction site runoff control program is established in accordance with the requirements of City of Caldwell Municipal Code 13-01 (Stormwater Management and Discharge Control). The ordinance requires applicable construction sides to obtain NPDES coverage, and prohibits polluted or non-stormwater discharge from sites. Additional specific standards to which proposed and active development must adhere are detailed in the City of Caldwell Municipal Stormwater Management Manual, the Manual being formally recognized in Municipal Code as containing said standards and guidelines for stormwater management within the City.

To support effective implementation of the Construction Site Runoff Control requirements, the following resources are also utilized by City staff implementing the program:

- Catalog of Stormwater Best Management Practices for Idaho Cities and Counties
- Idaho Construction Site Erosion and Sediment Control Field Guide

The City's Ordinance establishes the authority of the City's staff to review proposed stormwater management/erosion and sediment control plans for developments, inspect active and completed construction sites and stormwater management facilities, and to bring enforcement action against parties found to be in violation of the City's Ordinance or the terms of any City-issued permit.

5.3.3 Site Plan Review

All site work development within the City of Caldwell that requires a permit from the Engineering Department is reviewed by the stormwater management team and must be approved before a permit is issued. The stormwater management team staff determines

whether the site exceeds the one acre threshold. Commercial sites less than one acre in size must submit an erosion and sediment control plan, showing how stormwater runoff and erosion will be minimized or eliminated during construction. Sites greater than one acre in size must submit their complete Stormwater Pollution Prevention Plan (SWPPP) for the site. The SWPPP will be checked for accuracy and applicability to the site, and a copy will be retained for reference during inspections.

Applications that fail to submit the necessary documents are denied until the information is supplied. Applicants that are approved, and have sites greater than one acre in size, are reminded to obtain NPDES CGP coverage before commencing ground-disturbing activities onsite. Plan reviewers and inspection staff utilize the web-based ProjectDox program to receive and review submittals.

5.3.4 Site Inspection and Enforcement of Control Measures

5.3.4.1 Inspection Schedule and Prioritization

Inspection prioritization assesses multiple parameters that can influence the potential environmental impact of an active construction site. Table 21 is the inspection prioritization rubric used by stormwater management team inspection staff.

***Table 21**. Inspection prioritization rubric*

Score:	1	2	3	4	5
Date of Last Inspection	Less than 2 weeks	Less than 1 month	More than 1 month	More than 2 months	More than3 months
Size of Project	1 acre	5 acres	10 acres	20 acres	>20 acres
Proximity to Surface Water	More than 1 mile	Within 1500 feet	Within 500 feet	Within 150 feet	Within 50 feet
Prior Non-Compliance	No prior non-compliance	1 prior non-compliance	2 non-compliance	3 non-compliance	3+ NC or Citizen Complaint
Speed of Addressing Concerns	Within 1 day of notification	Within 3 days of notification	Within 1 week of notification	Within 2 weeks of notification	More than 2 weeks/ not addressed
Status of Project	No exposed soils	Minor exposed soils/stabilization evident	Phased soil exposure/ partial stabilization evident	Majority of soils exposed/ not stabilized	Peak earthwork, all/most soils exposed

Score:	1	2	3	4	5
Site Condition	Site is pristine, no ESC concerns, BMPs correctly installed	BMPs installed correctly, minor CA's needed	Corrective actions/ maintenance needed	Site poses a risk to MS4/ resources, CAs required immediately	#4 and No BMPs/ all incorrectly installed, blatant violation of ESC standards

The score created by the prioritization assessment is then used to calculate the deadline date of the next inspection, based on the date of the most recent site inspection. This process is used to create a schedule of inspections for all the sites, where each site should be inspected before its deadline. This prioritization process is automated using an Excel spreadsheet containing active development sites in Caldwell, and the site inspection deadlines automatically updated when inspection date or any of the assessment parameters are updated.

5.3.4.2 Inspection Procedure

When the City stormwater inspector arrives onsite, they will review the SWPPP to locate the required BMPs. After reviewing the SWPPP, the inspector will inspect the site, looking for correct installation of BMPs, damaged or disrepaired BMPs, exposed soils, sediment tracking, proper concrete and paint washout containment, dust generation, proper trash disposal, and storage of potential stormwater contaminants inside, under cover, or with secondary containment.

The Inspector takes photographs throughout the inspection, especially of areas or items of concern, and of anything requiring a corrective action. The inspector also documents all findings and recommendations in the inspection report. After the inspection has been concluded, the inspector reviews the inspection report, assigns corrective actions to the site contact, as applicable, attaches photos taken during the inspection, and sends the inspection report to the site contact for remedial measures.

5.3.4.3 Inspection Documentation

All photographs, inspection reports, and inspection logs will be saved by the City. These records will be summarized and reported upon in the Annual Report.

5.3.4.4 Escalation of Enforcement

The City must develop, implement, and maintain a written escalating enforcement response policy (ERP). The ERP for construction site runoff control will be submitted to EPA and IDEQ with the Permit Renewal Application, no later than April 3, 2025.

The ERP must address enforcement of construction site runoff controls for all construction projects in their jurisdiction, to the extent allowable under Idaho state law.

The ERP must describe the City's potential response to violations with appropriate educational or enforcement responses. The ERP must address repeat violations through progressively stricter responses, as needed, to achieve compliance. The ERP must describe how the City will use its available techniques to ensure compliance, such as: verbal warnings; written notices; escalated enforcement measures such as stop work orders, monetary penalties; and/or other escalating measures to the extent allowable under Idaho state law.

We believe that our current Ordinance 04-19-15, which addresses enforcement, may leave room for improvement in the area of escalation. We intend to better clarify the escalation approach during the permit term.

5.3.5 Information from Public

In order to receive complaints or reports from the public, the City commits one staff member to serve as the lead point of contact for the public. This staff member's telephone number and email address will continue to be made publically available, including posts on the City's webpage, with the directions to contact the staff member or Engineering Department with concerns related to construction activity. This staff member will be trained and qualified to field the calls and emails, record the complaint, and inspect and follow up as necessary to address the concern. During non-business hours, all calls go through to the Engineering Department's main voicemail; the department's administrative assistant will send any after-hours messages to the staff member in charge of handling construction runoff calls. In the event that the designated staff member is unavailable, the engineering department's administrative assistant will forward all calls to other members of the stormwater management team that are available.

The City will continue to respond to all complaints or reports as soon as possible, within two (2) working days. All responses will include an investigative inspection, to observe the reported concern, and appropriately document.

5.3.6 Construction Runoff Control Training for Staff

All persons responsible for preconstruction site plan review, site inspections, and enforcement of the MS4 requirements are appropriately trained or otherwise qualified to conduct such activities and receive additional training as needed. All new staff working on construction runoff control will be provided orientation and training within six months of employment. Training of all personnel is recorded and reported in the Annual Report.

Much like calendar year 2020, during the December 1, 2020 to December 1, 2021 portion of the permit term, stormwater compliance staff struggled to execute in-person training exercises. This struggle was largely caused by fluctuations in City office closures from the COVID-19 pandemic. Despite the pandemic, we have made a special effort to have all site work/utility (Engineering Dept.) inspectors and plan-reviewers trained and certified as Responsible Persons within the first 6 months of employment. This certification remained available via remote training options.

During 2021, we recognized the need to transition to an electronic training platform for all City field staff. At that time, costs were budgeted for implementing the program – approximately $25,000 – in fiscal year 2022. Since we've entered fiscal year 2022, stormwater compliance staff are working through roll-out of the ComplianceGo stormwater training platform.

5.4 Post Construction Stormwater Management for New Development and Redevelopment

5.4.1 Regulatory Requirements

City of Caldwell MS4 Permit No. IDS-028118 Section 3.4 reads "Through an ordinance and/or regulatory mechanism, to the extent allowable under Idaho state law, the Permittee must require the installation and long-term maintenance of permanent stormwater controls at new development and redevelopment project sites in its jurisdiction that result in land disturbance of greater than or equal to one (1) acre (including construction project sites less than one acre that are part of a larger common plan of development or sale that would disturb one acre or more) and that discharge into the MS4.

"Required permanent stormwater controls must be sufficient to retain onsite the runoff volume produced from a 24-hour, 95th percentile storm event; or sufficient to provide the level of pollutant removal greater than pollutant removal expected by using onsite retention of runoff volume produced from a 24-hour, 95th percentile storm event.

“The Permittee must specify permanent stormwater controls for project sites in their jurisdiction to install for sites that result in land disturbance of greater than or equal to one (1) acre (including construction project sites less than one acre that are part of a larger common plan of development or sale that would disturb one acre or more) and that discharge into the MS4. The Permittee may define appropriate controls for different types and/or sizes of site development activity occurring in their jurisdiction.

“The Permittee must develop, or update as necessary, any written specifications to address proper design, installation, and maintenance of required permanent stormwater controls. A Permittee may adopt specifications created by another entity that complies with this Part.

“At a minimum, the Permittee must review and approve preconstruction plans for permanent stormwater controls at new development and redevelopment sites that result in land disturbance of greater than or equal to one (1) acre (including construction project sites less than one acre that are part of a larger common plan of development or sale that would disturb one acre or more) and that discharge into the MS4. The Permittee must review plans for consistency with the ordinance/regulatory mechanism and specifications required by this Part. The Permittee must not approve or recommend for approval any plans for permanent controls that do not meet minimum requirements specified in their written specifications.

“The Permittee must inspect high priority permanent stormwater controls at new development and redevelopment sites that result in land disturbance of greater than or equal to one (1) acre (including construction project sites less than one acre that are part of a larger common plan of development or sale that would disturb one acre or more) and that discharge into the MS4. The purpose of such inspections is to ensure proper installation, and long-term operation and maintenance, of such controls.

“The Permittee must establish an inspection prioritization system to identify sites for inspections of permanent control installation and operation. Factors to consider when establishing priority regarding where, and when, inspections occur must include, but are not limited to: size of new development or redevelopment drainage area; potential to discharge to portions of the MS4 discharging to impaired waters; sensitivity, and/or impairment status of receiving water(s); and history of non-compliance at the site during the construction phase

“The Permittee must maintain a database inventory to track and manage the operational condition of permanent stormwater controls in its jurisdiction. All available data on existing permanent controls known to the Permittee must be included in the database inventory. At a minimum, the Permittee must begin tracking at the time the Permittee takes ownership,

using a database that incorporates geographic information system (GIS) information and/or developed in conjunction with the MS4 Map required in Part 3.2.2 (MS4 Map and Outfall Inventory). The tracking system must also include reference to the type and number of permanent stormwater controls; O&M requirements; activity and schedule; responsible party; and any applicable self-inspection schedule."

No later than April 3, 2025, the City must update the existing controls to impose the required SWMP control measure components in the Permit (Parts 3.4.2 through 3.4.7).

5.4.2 City Ordinance and Regulatory Mechanisms

City of Caldwell Municipal Code 13-01-05 (Stormwater Management Plans and Comprehensive Drainage Plans) requires stormwater management plans or comprehensive drainage plans for industrial, commercial, and institutional developments which require a building permit and multi-family residential developments that are not part of a larger subdivision project, as well as subdivision projects that have private access, which also require a building permit. The City of Caldwell Municipal Stormwater Management Manual requires a Drainage Report be submitted to the City Engineering Department for any of the following development scenarios:

- New or modified development that includes the establishment of a storm drainage system that connects to an existing downstream system;
- Any development or redevelopment discharging to an existing storm drainage system where more than 1,000 square feet of impervious surface is added;
- Modification of the existing drainage system;
- Addition of impervious areas that tends to increase quantity or decrease quality of discharge.

The City of Caldwell Municipal Stormwater Management Manual also establishes design and performance standards for all permanent stormwater controls.

5.4.3 Permanent Stormwater Controls Specifications

Permanent stormwater controls specifications have been compiled in the City's Caldwell Municipal Stormwater Management Manual. This document is made publically available on the City's website. Revisions to the Manual must be approved by Caldwell's City Council. The most recent substantial revision of the Manual was completed in July of 2009. A major

revision of the Manual, to ensure compliance with the 2020 MS4 Permit (and site containment of the 24-hour, 95th percentile storm event) is scheduled to be completed in 2022.

5.4.4 Permanent Stormwater Controls Plan Review and Approval

Stormwater management plans and comprehensive drainage plans must be submitted to the City's Engineering Department at the time building plans are submitted, as part of the building permit application package. Qualified staff members then review the plans for compliance with the Caldwell Municipal Stormwater Management Manual, City Ordinance, and other applicable rules and standards.

Plans will only be approved if they demonstrate that the project will not increase the peak levels (rate and volume) of stormwater runoff from impervious areas, unless the plan identified measures to control and limit runoff to peak levels no greater than would occur if the site was left in its natural, undeveloped condition. Without an approved plan, no development or use of land which requires a stormwater management plan or comprehensive drainage plan per the Caldwell Municipal Stormwater Management Manual is permitted; nor will a building permit be issued.

5.4.5 Permanent Stormwater Control Inspection and Enforcement

When constructing the permanent stormwater controls, the owner or responsible person must inform the City prior to the commencement of the development. The City's inspection staff will then inspect the construction of the permanent stormwater controls throughout the development, to ensure the construction is being completed to standards. Once completed, the owner or responsible person must provide engineering certification that the development is in conformity with the previously approved drainage plans.

The City must develop a permanent stormwater control inspection and enforcement program, to ensure that all controls have been properly maintained, and that the controls continue to perform as designed. Similar to the construction site stormwater program, the City will develop an inspection prioritization rubric to identify and prioritize the inspection of "High Priority Locations." The prioritization will include factors such as: size of new development or redevelopment area; potential to discharge to portions of the MS4 discharging to impaired waters; sensitivity, and/or impairment status of receiving water(s); and history of non-compliance of the site during the construction phase.

Once high priority locations have been determined, the City will schedule inspections of the permanent stormwater controls at these new development or redevelopment (that result

from land disturbance of one or more acres) sites, at least once annually. The inspections will determine whether permanent stormwater management or treatment practices have been properly install (i.e., an "as built" verification); evaluate the ongoing operation and maintenance of the stormwater controls; identify deficiencies in the installation, operation, and/or maintenance; and identify potential solutions to reduce negative water quality impacts to receiving waters.

The City will utilize inspection checklists and will maintain records of the inspections and actions taken in response to the inspections of permanent stormwater controls at high priority new development and redevelopment sites.

5.4.6 Operation and Maintenance of Permanent Stormwater Controls

Stormwater facilities must be maintained by the owner or other responsible party. The City owns, operates, and maintains permanent public stormwater controls, but the operation and maintenance of all private facilities is the sole responsibility of the owner or their duly authorized representative. In addition to establishing owner maintenance responsibility, City Ordinance 13-01-05(3) specifies that the owner must repair and/or replace stormwater controls and facilities when they are no longer functioning as designed.

The owner of the permanent stormwater control must retain all records of installation, maintenance, and repair for the facility for a period of five years. These records must be made available to the City of Caldwell's Public Works Department upon request. Any failure to maintain facilities or correct problems with facilities after receiving due notice from the city may result in criminal or civil penalties and the City may perform corrective or maintenance work which shall be at the owner's expense. (Ord. 2884, 12-5-2011)

The City will create and maintain a database inventory to track and manage the operational condition of permanent stormwater controls within the City's jurisdiction. All available data on existing permanent stormwater controls known to the City will be included in the database inventory as well. The tracking system will also include reference to the type and number of stormwater controls; operations and maintenance requirements; activity and schedule; responsible party; and any applicable self-inspection schedule.

On a related note, the City presently makes a concerted effort to track new public and private stormwater infrastructure on our GIS layer(s). Many facilities are a combination of public and private because new developments are required to accommodate the water along their frontage, even though it is in the public right-of-way. When the development is complete, all portions of the stormwater collection system inside the public right-of-way are transferred to the ownership of the City (public MS4). Infrastructure outside of the right-of-way must

be privately owned and maintained by the property owner or HOA. City policy requires such infrastructure to be in an easement or common lot for accessibility, inspection, and maintenance purposes.

Where parties other than the City are responsible for the operation and maintenance of permanent stormwater controls, the City requires a legally enforceable and transferable operation and maintenance agreement with the responsible party, or other mechanism, that assigns permanent responsibility for maintenance of such permanent stormwater control practices.

At present, the City has a few mechanisms staged to facilitate maintenance of privately-owned stormwater infrastructure.

- City Ordinance (See City Ordinance 13-01-03(8); 13-01-05(1)(B); 13-01-05(3))
- Stormwater Management Manual (Policy)
- Order of Decision (Development Agreement with Developer)
- Final Plat of a Development (Plat Notes include requirement for HOA to maintain all common lots that they own.)

5.4.7 Permanent Stormwater Training for Staff

All persons responsible for reviewing site plans for permanent stormwater controls and inspecting the installation and operation of stormwater controls are appropriately trained to conduct such activities and receive additional training annually. All new staff working on permanent stormwater control will be provided orientation and training in the first six months of employment. Training of all personnel is recorded and reported in the Annual Report.

5.5 Pollution Prevention / Good Housekeeping

5.5.1 Regulatory Requirements

City of Caldwell MS4 Permit No. IDS-028118 Section 3.5 reads "The Permittee must properly operate and maintain the MS4 and its facilities, using prudent pollution prevention and good housekeeping as required by this Part, to reduce the discharge of pollutants through the MS4."

No later than April 3, 2025, the City will ensure that the stormwater infrastructure and management program includes the required SWMP control measure components described in the Permit (Parts 3.5.2 through 3.5.10).

5.5.2 Inspection and Cleaning of Catch Basins and Inlets

The City will inspect all City-owned and operated catch basins and inlets in the MS4 at least once every five years and take all appropriate maintenance or cleaning actions based on the inspections to ensure the catch basins and inlets continue to function as designed.

Material removed from catch basins will be taken to the City Wash and Drying Rack, where the materials will be placed on a drying pad, where liquids will be allowed to drain off into the City's sewer system or evaporate until the material is completely dry. The material will then be relocated to the City's fill storage area, from where it will be reused in municipal road projects.

The City utilizes the ESRI program ArcGIS Collector to update and maintain records on catch basin status and maintenance. Records reflecting catch basin and inlet inspection, and material removal and cleaning will continue to be updated and maintained by the City. Actions taken during the latest reporting period will be summarized in the Annual Report.

5.5.3 Operation and Maintenance Procedures for Streets, Roads, Highways, and Parking Lots

Where the City is responsible for the Operation and Maintenance (O&M) of streets, roads, highways, and/or parking lots, the City will ensure those procedures are conducted in a manner to protect water quality and reduce the discharge of pollutants through the MS4.

At a minimum, O&M procedures will include:

- Practices to reduce road and parking lot debris/pollutants from entering the MS4;
- Practices related to road deicing, anti-icing, and snow removal;
- Operation of snow disposal areas;
- Storage areas for street/road traction material (e.g. salt, sand, or other chemicals); and
- The long-term O&M of permanent stormwater control measures associated with the City's streets, roads, highways, and parking lots.

For reach type of maintenance activity, practice, or facility, the City will establish specific schedules for inspection and maintenance, and appropriate pollution prevention/good housekeeping actions.

When site conditions allow, the City will consider and utilize water conservation measures for all landscaped areas as part of these updated O&M procedures to prevent landscape irrigation water from discharging through the MS4.

5.5.4 Inventory and Management of Street/Road Maintenance Materials

Where the City is responsible for the O&M of streets, roads, highways, and/or parking lots, the City will utilize control mechanisms to minimize pollutants in discharges to the MS4 and waters of the U.S. from street/road maintenance material storage stockpiles (such as sand, salt, and/or sand with salt stockpiles).

The City will maintain an inventory of street /road maintenance materials stored at locations within the Permit Area that drain to the MS4. The City will assess the adequacy of each Material Storage Location to prevent potential adverse surface water quality impacts and make structural or nonstructural improvements as necessary to eliminate any discovered impacts.

The City owns and operates a few key stockpiles of potentially erosive materials, utilized for a variety of municipal functions:

1. Sand stockpile at Street Department Gravel Pit
    a. Sand is located beneath sand shed covering, located at 43.682664, -116.701444.
    b. Stockpile is covered and contained with economy blocks to prevent erosion.
2. Rock chip stockpile at Street Department Gravel Pit
    a. Stockpile is not covered, and is in proximity to City-owned gravel pit pond at 43.679842, -116.702107.
    b. Chips are clean and commercially purchased; they are composed of pea gravel only. This stockpile does not contain fines, sand, or sediment.
3. Broken concrete stockpile at Street Department Gravel Pit
    a. The site is located here 43.681895, -116.700520.
    b. Broken concrete can be reused as rip-rap (bank stabilization) in manmade channels, such as canals or drains.
    c. The City draws upon these resources as needed for municipal projects.
    d. This stockpile is kept 50 feet from irrigation surface water.
4. Basalt stockpile at Street Department Gravel Pit

a. Basalt stones can be repurposed as rip-rap (bank stabilization) in natural channels, such as rivers or creeks.
b. The City draws upon these resources as needed for municipal projects.
c. This stockpile is in proximity to the City-owned gravel pit pond. This stockpile does not contain fines, sand, or sediment.
d. The rock was given to the City as a donation from a business associate. The rock is sourced outside of Kuna, ID and is of natural origin.

5. Milled asphalt stockpile at Street Department Gravel Pit
    a. Stockpile is located here 43.682987, -116.699642.
    b. Asphalt is a bituminous material used for roadways. It can be readily re-crushed and used for road base, shoulder repair, or even re-combined into an asphalt mix.
    c. This location is not in proximity to surface water.

6. Sand stockpile at Street Department Shop
    a. Small sand stockpile is utilized for loading into sand trucks during winter maintenance. It is located inside the shop (covered) at 43.678525, -116.680170.
    b. This location is not in proximity to surface water.

7. Rock chip stockpile at Crown St at Aviation Way
    a. At this site 43.652985, -116.652167 commercially-purchased rock chips can be stored, screened, and sorted.
    b. This site borders the Canyon Hill Lateral, which is closely managed and monitored by Pioneer Irrigation District. The Lateral top-of-bank sits above the elevation of the Crown Street site. The irrigation access road acts as a berm between the City and Pioneer's facilities.

8. Street sweepings material to be screened
    a. This site is located at 43.681602, -116.702971.
    b. As many DEQ staff are aware, the City is still determining the best method of managing – and reusing, if possible – material which is swept from the streets. (December 2021)
    c. The street sweepings are mostly composed of sand (spring), rock chips (late summer), and leaves (autumn). Screened material is reused in municipal projects such as berms and/or roadway shoulder repair.
    d. A screening plant to remove undesirables such as litter, is located at 43.681454, -116.703024.

No later than April 3, 2025, the City will include in this SWMP Document a complete description of all Material Storage Locations in the Permit Area that drain to the MS4. The description of each Material Storage Location must, at a minimum, include a narrative of the

individual location, an estimated average annual quantity of materials stored at the location; a short description of how/where the City typically uses the material(s) in its jurisdiction; and a summary description of any structural or non-structural controls used by the City to prevent pollutants at material storage locations from discharging to the MS4 and to waters of the U.S.

5.5.5 Street, Road, Highway, and Parking Lot Sweepings

Where the City is responsible for the O&M of streets, roads, highways, and/or parking lots, the City will sweep those areas that discharge to the MS4 at least once annually.

In general, two sweepers are assigned to one zone at a time, and a total of 4 sweepers are typically on-the-go. Snowy winter months are typically down-time used for performing annual maintenance on the street sweepers. In early spring (March-April), sweepers pick up the sand deposited on the roadways over the winter. Spring cleaning is performed to prep for seal coat in May. (Roadways are chip sealed June 1-15, depending on weather.) For the rest of June and July the sweepers will focus on picking up the excess chips. Again, from August to October, sweepers return to regular coverage of assigned zones. Sweepers perform coverage of City co-sponsored events such as fairgrounds and rodeo. Every Thursday morning sweepers cover half of downtown and arterial roadways. Catch basin and SG traps cleaning has recently been performed as needed, using the same zone maps. More recently, a full-time employee was hired to tend to vactor-ing the drainage facilities. As weather permits, the entire sweep-able area of the City is covered every three months.

A road maintenance map book is utilized by the Street Department to track sweeping and catch basin cleaning activity progress. It is the City's intent to re-prioritize the map book, in order to sweep new development areas less frequently than older developments, which are more likely to discharge directly to surface waters with minimal control/treatment mechanisms.

The City is in the process of implementing an online-based system to track the miles of roadways swept. The program the City has selected is LiGO, which is developed and hosted by PreCise MRM, LLC. The City is working with PreCise to install monitoring sensors on all sweeper and vacuum trucks to record when the vehicle is actively sweeping (or vacuuming) and maintain a record of where the sweeping occurred. The program also allows for monthly and annual reports to be generated, simplifying the documentation and tracking of roadway maintenance. As of late 2021, the City is coordinating with PreCise to finalize the last round of installation of sensors on the vehicles. The online tracking platform can be seen in Figure 17 below.

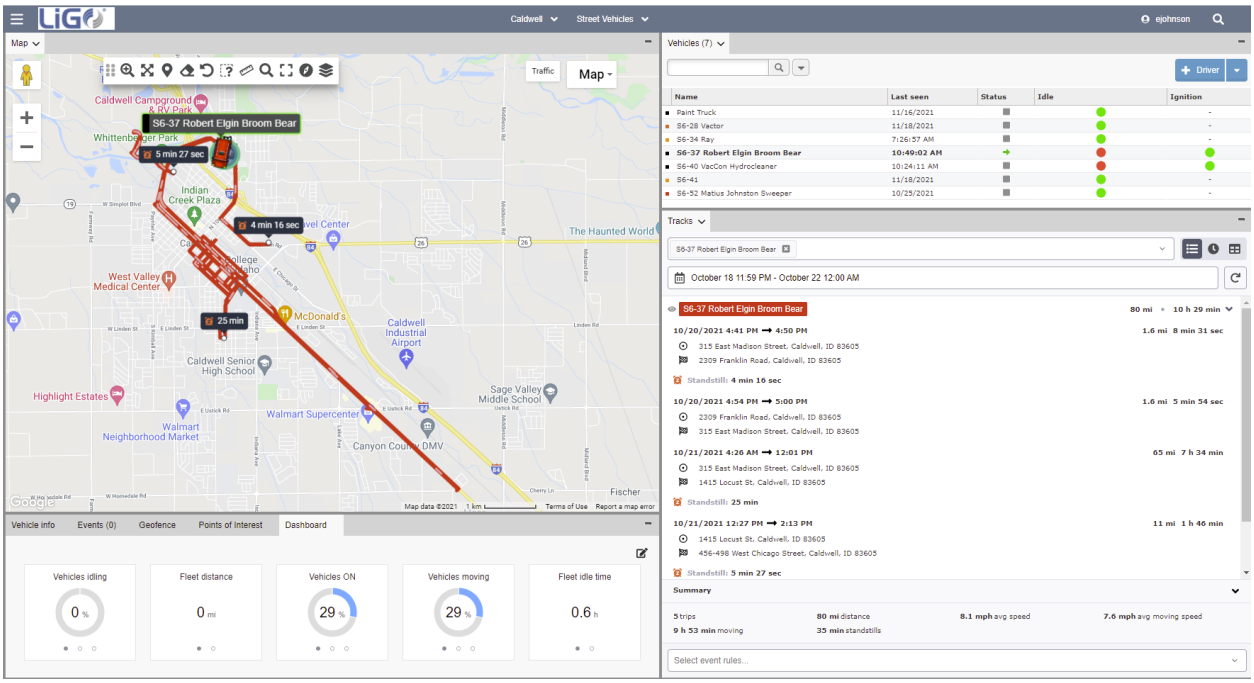


Figure 17. *LiGO tracking and recordkeeping platform.*

No later than **April 3, 2025**, the City will include in this SWMP Document a written description of its sweeping management plan. The sweeping management plan must include:

- An inventory and/or map of all streets, roads, highways and public parking lots owned, operated, or maintained by the City in the Permit Area that discharge to the MS4 or directly to waters of the U.S., and identify their selected sweeping frequency;

- A discussion of any areas where sweeping is technically infeasible; for such areas, the City must document the reasons why sweeping in the particular area of the jurisdiction served by the MS4 is infeasible, and describe any alternative means the City uses to minimize pollutant discharges from these areas into the MS4 and into any adjacent waters of the U.S;

- An overall description of the street sweeping activities to minimize pollutant discharges into the MS4 and receiving water; including the types of sweepers used, number of swept curb and/or lane miles; general schedule or dates of sweeping by location and frequency category; volume or weight of materials removed; and any public outreach efforts or other means to address areas that are infeasible to sweep.

5.5.6 Operation and Maintenance Procedures for Other Municipal Areas and Activities

The City will conduct its municipal O&M activities in a manner that minimizes the discharge of pollutants through the MS4 to protect water quality. The City will review, and update as necessary, existing procedures for inspection and maintenance schedules to ensure pollution prevention and good housekeeping practices are conducted for the following activities:

- grounds/park and open space maintenance;
- fleet maintenance and vehicle washing operations;
- building maintenance;
- snow management and snow disposal site O&M;
- solid waste transfer activities;
- municipal golf course maintenance;
- materials storage;
- heavy equipment storage areas;
- hazardous materials storage;
- used oil recycling; and
- spill control and prevention measures for municipal refueling facilities.

5.5.7 Requirements for Pesticide, Herbicide, and Fertilizer Applications

The City will implement practices to reduce the discharge of pollutants to the MS4 associated with the City's application and storage of pesticides, herbicides and fertilizers in the Permit Area. At a minimum, such areas include the City's public rights-of-way, parks, recreational facilities, golf courses, and/or landscaped areas. All employees or contractors of the City applying pesticides will follow all label requirements, including those regarding application methods, rates, number of applications allowed, and disposal of the

pesticide/herbicide/fertilizer and rinsate. Additionally, all employees applying pesticides will be properly trained and certified in proper pesticide application.

At present, the City houses two positions which require an Idaho Pesticide Applicators License. One position is located in the Caldwell Street Department and one is located in the Caldwell Parks Department. Staff in these departments are not authorized to utilize pesticide without holding their own license(s) or working under the immediate supervision of a supervisor who holds a license. Please see the Idaho Department of Agriculture's website for further information on Pesticide Applicators Licensing: https://agri.idaho.gov/main/56-2/pesticides/pesticide-licensing/.

5.5.8 Stormwater Pollution Prevention Plans (SWPPPs) for City Facilities

The City will develop and implement site-specific SWPPPs to manage stormwater discharges from City-owned material storage facilities, heavy equipment storage areas, and maintenance yards:

- Streets Department
- Parks Department
- The gravel pit

Other City-owned facilities discharging stormwater are covered under other NPDES/IPDES permits. These facilities include the Caldwell Airport (MSGP) IDR050007 and the Wastewater Treatment Plant IDS028118. Any City-owned projects that include stormwater discharges associated with construction activity will be properly permitted under the CGP, and will have site-specific SWPPPs prepared before commencing any land-disturbing activities.

5.5.9 Litter Control

Throughout the Permit term, the City will implement methods to reduce litter in its jurisdiction. The City will work cooperatively with others to control litter on a regular basis, and after major public events, in order to reduce the discharge of pollutants to the MS4.

5.5.10 Stormwater Pollution Prevention / Good Housekeeping Training for Staff

All persons responsible for stormwater infrastructure management and O&M activities are appropriately trained or otherwise qualified to conduct such activities. All new staff working

on infrastructure management and O&M activities will be provided orientation and training within six months of employment. All staff members responsible for pesticide application will be trained and certified for such activities. Training of all personnel is recorded and reported in the Annual Report.

Section 6. Pollutant Reduction Activities

6.1 Regulatory Requirement

Indian Creek, Mason Creek, and the lower Boise River have been classified as impaired because they fail to meet their beneficial use standards. In order to meet the loading requirements established in the TMDL for the Lower Boise River, additional activities must be implemented by the City, as required by their MS4 permit. The City must conduct quantitative pollutant reduction activities designed to assess and minimize impairment pollutants in MS4 discharges to Indian Creek, Mason Creek, and the Boise River.

City of Caldwell MS4 Permit No. IDS-028118 Section 4.3 reads "In carrying out the requirements of this Part, the Permittee must implement the two (2) activities referenced in Part 4.1 to reduce impairment pollutants from the MS4 to Indian Creek, Mason Creek, and the Boise River.

"In the final report required by Part 4.1.3 above, the Permittee must quantify the estimated pollutant reduction accomplished resulting from such activities."

6.2 Pollutant Reduction Activities

In April of 2021, the City of Caldwell submitted a document entitled *City of Caldwell Stormwater Management Program Pollutant Reduction Activities* to EPA. This document contained proposals for two activities designed to target pollutants of concern identified in the Lower Boise River TMDL. The activities are as follows:

- Activity 1. Expand Wash Rack to Improve Sediment Removal Program Efficiency
- Activity 2. Microbial Source Tracking Study Phase 2: Identify and Remove Intermittent Human Source E. coli Bacteria

EPA, with support from IDEQ, approved the pollutant reduction activities (PRAs) and formally modified the City's MS4 Permit to reflect the adoption of the PRAs on June 1, 2021.

6.3 Reporting Requirements

Beginning with the first Annual Report of the Permit term (December 1, 2021), the City will document in each Annual Report the progress on conducting the aforementioned pollutant reduction activities. The extent of the reporting is provided in detail in the *City of Caldwell*

Stormwater Management Program Pollutant Reduction Activities, included as Appendix B of this document.

No later than April 3, 2025, the City will submit a final report summarizing the pollutant reduction activities conducted to date.

Section 7. Monitoring Program

7.1 Regulatory Requirements

Indian Creek, Mason Creek, and the lower Boise River have been classified as impaired due to bacteria, nutrients and temperature, as they fail to meet their beneficial use standards. In order to comply with its MS4 permit, which is supportive of the TMDL, the City must conduct quantitative monitoring and assessment activities designed to assess and control impairment pollutants in the MS4 discharges to Indian Creek, Mason Creek, and the Boise River.

No later than October 1, 2022, the City will submit a Monitoring/Assessment Plan. EPA and IDEQ will review the materials submitted, and as necessary, propose to modify the City's MS4 permit to incorporate by reference the specific monitoring/assessment plan. No later than 30 days following EPA's written notice that the Permit has been revised to incorporate the monitoring/assessment activities, the City will begin implementation of the activities.

7.2 Monitoring/Assessment Activities

The City will submit a Monitoring/Assessment Plan that is designed to quantify, at a minimum, pollutant loadings for the impairment pollutants from the portions of the MS4 discharging into the receiving waters listed in Table 22. Minimum Monitoring/Assessment Expectations (from City of Caldwell MS4 Permit, NPDES Permit #IDS028118) The City will measure temperature, total suspended sediment (TSS), total phosphorus (TP), and e. Coli in stormwater discharge samples from the MS4 into Indian Creek, Mason Creek, and the Boise River to quantify stormwater impact to these waterbodies.

Table 22. *Minimum Monitoring/Assessment Expectations (from City of Caldwell MS4 Permit, NPDES Permit #IDS028118)*

Location	Pollutant Parameter
City of Caldwell MS4 Discharges into Indian Creek, Mason Creek, and the Boise River	Temperature E. coli Sedimentation/Siltation Total Phosphorus

Samples, measurements and/or assessments conducted in compliance with the Permit will be representative of the nature of the monitored discharge or activity. If the City quantitatively monitors and/or assesses pollutants in their MS4 discharges more frequently, or in more locations, than specified in the Monitoring/Assessment Plan named in the Permit, the results of any additional monitoring will be included with other data submitted to IDEQ.

7.3 Wet Weather Discharge Monitoring

If the City monitors wet weather discharges from MS4 outfalls, we will include the following characteristics of each sample and/or sampling location.

- **Location -** the locations of such monitoring must be identified in the Monitoring/Assessment Plan
- **Sample Type**. The sample collection must be identified in the Monitoring/Assessment Plan.
- **Parameters**. The pollutants to be sampled must be identified in the Monitoring/Assessment Plan.
- **Frequency**. The samples must be collected at a frequency identified in the Monitoring/Assessment Plan. At least one sample each calendar year must be collected in the September - October period.
- **QA Requirements.** The City must develop a Quality Assurance Project Plan (QAPP), or revise an existing QAPP, to clearly identify all methods and protocols to be used in the wet weather sampling effort.
- **Reporting.** The City must submit all data collected to EPA.

At the time of preparation of the 2021 SWMP Document, the City prefers to continue its wet weather discharge monitoring in a manner similar to the 2009 MS4 Permit. We anticipate some refinements to the previous monitoring program, including QAPP procedures, sampling site selection, and sampling window, for the safety of our present staff.

7.4 Quality Assurance Requirements

The City will develop a Quality Assurance Project Plan (QAPP) for any monitoring or quantitative assessment activities conducted in compliance with the Permit.

7.4.1 QAPP Content

The QAPP will assist the City in planning for the collection and analysis of stormwater discharge, receiving water quality, catch basin sediments, and/or other types of information collected in compliance with this Permit, and in explaining data anomalies when they occur.

At a minimum, the QAPP will reflect the content specified in EPA's *Requirements for Quality Assurance Project Plans* (EPA/QA/R-5) and *Guidance for Quality Assurance Project Plans* (EPA/QA/G-5)., including:

- Details on the number of samples, identified sampling locations, type of sample containers, preservation of samples, holding times, analytical detection and quantitation limits for each target compound, analytical methods, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements;

- A map with GPS coordinates indicating the location of each monitoring point;

- Qualifications and training of all personnel involved with water quality and discharge sampling;

- Specifications for the collection and analysis of quality assurance samples for each sampling event, including matrix spiked and duplicate samples and analysis of field transfer blanks (sample blanks); and,

- Name(s), address(es), and telephone number(s) of the laboratories used by, or proposed to be used by, the City.

QAPP Procedures: Throughout all sample collection and analysis activities, the City will use EPA-approved and chain-of-custody procedures described in *Requirements for Quality Assurance Project Plans* (EPA/QA/R-5) and *Guidance for Quality Assurance Project Plans* (EPA/QA/G-5). Copies of these documents can be found at *http://www.epa.gov/quality/qs-docs/g5-final.pdf*

7.4.2 QAPP Updates and Availability

Following initial approval of the QAPP document, the City may update the QAPP as needed, when there is a modification in sample collection methodology, sample analysis, or other procedure addressed by the QAPP.

Copies of the QAPPP will be maintained by the City as part of the Monitoring/Assessment Plan, updated as necessary, and made available to EPA and/or IDEQ upon request.

7.5 Analytical Methods

Sample collection, preservation, and analysis will be conducted according to sufficiently sensitive methods/test procedures approved under 40 CFR §136, unless another method is required under 40 CFR subchapters N or O. Where an approved 40 CFR § 136 method does not exist, and other test procedures have not been specified, an alternative available method will be used. The City will use sufficiently sensitive analytical methods as follows:

- A method that detects and quantifies the level of the pollutant, or
- A method that can achieve a maximum Minimum Level (ML) less than or equal to those specified in **Table 23**;
- The City may request different MLs. The request must be in writing and must be approved by EPA.

Table 23. *Minimum Levels (from City of Caldwell MS4 Permit, NPDES Permit #IDS028118)*

Pollutant & CAS No. (if available)	Minimum Level in µg/L, unless specified
Total Ammonia (as N)	50
Cadmium, Total (7440-43-9)	0.1
Copper, Total (7440-50-8)	2.0
Dissolved oxygen	0.2 mg/L
Total Hardness	200 as CaCO3
Lead, Total (7439-92-1)	0.16
Nitrate + Nitrite Nitrogen (as N)	100
Oil and Grease (HEM) (Hexane Extractable Material)	5,000
Soluble Reactive Phosphorus (as P)	10
Phosphorus, Total (as P)	10
Temperature	0.2°C
Total Suspended Solids	5 mg/L
Zinc, Total (7440-66-6)	2.5

Section 8. Required Response to Excursions above Idaho Water Quality Standards

Under the City's MS4 Permit, the City will be presumed to be in compliance with applicable Idaho Water Quality Standards if the City is in compliance with the terms and conditions of the Permit. If the City, EPA, and/or IDEQ determines that the discharge from the MS4 causes or contributes to an excursion above the Idaho Water Quality Standards, then the City remains in compliance with this Permit as long as the City implements all applicable SWMP control measures required by the Permit and undertakes the following actions:

8.1 Notification

The City must notify IDEQ within 30 days of becoming aware that, based on credible site-specific information, an unauthorized discharge from the City's MS4 is causing or contributing to a known or likely excursion about the Idaho Water Quality Standards.

Required Non-compliance notification methods to IDEQ:

- 24-Hour Hotline 1 (833) 473-3724 or 1 (833) IPDES24, **AND**
- e-Permitting at https://www2.deq.idaho.gov/water/ipdes

Written notification must identify the source of the site specific information (name of person, organization); describe the location, nature, and extent of the known or likely water quality standard excursion in the receiving water; and explain the reasons why the MS4 discharge is believed to be causing or contributing to the problem. For on-going or continuing excursions, a single written notification provided IDEQ will fulfill the requirement.

Based on the notification provided, IDEQ may notify the City, in writing, that an adaptive management response is required if IDEQ determines that a discharge from the City's MS4 is causing or contributing to an excursion about the Idaho Water Quality Standards in a receiving water. IDEQ may elect not to require an adaptive management response from the City if IDEQ determines that the excursion of Idaho Water Quality Standards is already being addressed by a TMDL implementation plan or other enforceable water quality cleanup plan; or if IDEQ concludes the City's contribution to the excursion will be eliminated through implementation of other permit requirements, regulatory requirements, or City actions.

8.2 Adaptive Management Report

Within 60 days of receiving a response from IDEQ, the City must review its Stormwater Management Program and submit a report to IDEQ. The Adaptive Management Report shall include:

- **Existing BMPs:** A description of the operational and/or structural BMPs that are currently being implemented at the location to prevent or reduce any pollutants that are causing or contributing to the excursion above Idaho water quality standards, including a qualitative assessment of the effectiveness of each BMP.

- **Potential BMPs:** A description of potential additional operational and/or structural BMPs that will or may be implemented in order to prevent or reduce any pollutants that are causing or contributing to the excursion above Idaho water quality standards.

- **Monitoring/Assessment:** A description of the potential monitoring or other assessment and evaluation efforts that will or may be implemented to monitor, assess, or evaluate the effectiveness of the additional BMPs.

- **Schedule:** A schedule for implementing the additional BMPs including, as appropriate: funding, training, purchasing, construction, monitoring, and other assessment and evaluation components of implementation.

Under the terms of the City's MS4 permit, IDEQ is required to, in writing, acknowledge receipt of the Adaptive Management Response Report within a reasonable time and will notify the City when it expects to complete its review of the report. IDEQ will either approve the additional BMPs and implementation schedule, or require the City to modify the report as needed. If modifications to the Adaptive Management Report are required, IDEQ will specify a time frame in which the City must submit the revised Report for IDEQ review.

8.3 Implementation

The City must begin implementation of any additional BMPs pursuant to the schedule approved by IDEQ expeditiously upon receipt of the written notification of approval.

The City must include with each subsequent Annual Report a summary of the status of implementation and the results of any monitoring, assessment, or evaluation efforts conducted during the reporting period to assess progress towards addressing the original water quality excursion. A final summary of such adaptive management efforts must be included with the Permit Renewal Application.

Section 9. Recordkeeping and Reporting Requirements

9.1 Recordkeeping

9.1.1 Retention of Records

The City will retain records and information documenting implementation of all control measures required by the Permit (including a copy of the Permit and all Annual Reports) for a period of at least five years from the date of the report, sample, or measurement, or for the term of this Permit, whichever is longer.

Information and records includes, but is not limited to, records of all data or information used to develop and implement the SWMP control measures and/or used to complete the application for this permit; such materials may include inspection and maintenance records; all monitoring, calibration, and monitoring equipment maintenance records; all original strip chart recordings for any continuous monitoring instrumentation; copies of reports required by the Permit; etc.

9.1.2 Availability of Records

All records associated with this Permit will be stored in a location and format that are accessible to EPA and IDEQ, or are readily available upon request. All records will be made available to the public if requested in writing; the public will be able to view the records during normal business hours. The City will submit the records referred to in Section 9.1.1 above to EPA and IDEQ when such information is requested.

9.2 Reporting Requirements

The City will submit reports and/or documents required by the Permit to IDEQ in an electronic portable document format (PDF) through NetDMR and/or IDEQ's e-Permitting platform.

9.2.1 Annual Report

No later than December 1 of each year, beginning in 2021, the City will submit an Annual Report to IDEQ, the complete reporting schedule for the Permit term is shown in Table 24.

Table 24. *Annual report deadlines (from City of Caldwell MS4 Permit, NPDES Permit #IDS028118)*

Annual Report	Reporting Period	Due Date
Year 1 Annual Report	December 1, 2020 – September 30, 2021	December 1, 2021
Year 2 Annual Report	October 1, 2021 – September 30, 2022	December 1, 2022
Year 3 Annual Report	October 1, 2022 – September 30, 2023	December 1, 2023
Year 4 Annual Report	October 1, 2023 – September 30, 2024	December 1, 2024
Year 5 Annual Report	October 1, 2024 – September 30, 2025	September 30, 2025

The Annual Report will reflect the status of the City of Caldwell's implementation of the Permit requirements during the relevant reporting period, and will include:

- Any summaries, descriptions, and/or other information the City uses to demonstrate compliance with the Permit during the relevant reporting period.
- A current website address where the City's SWMP Document is available as an electronic portable data format (PDF) document;
- If applicable, notification to IDEQ that the City is relying on another Permittee or outside entity to satisfy any obligations under this Permit;
- Notification of any annexations, incorporations, or jurisdictional boundary changes resulting in an increase or decrease in the City's area of responsibility during the reporting period; and
- Point(s) of contact responsible SWMP implementation for the City, and for authorization, certification, and signature pursuant to Part 8.5 (Signatory Requirements).

A copy of each Annual Report, including any required attachments, will be made available to the public on the City's website.

9.2.2 Monitoring/Assessment Report

The City will submit a final report summarizing all monitoring/assessment data collected during the permit term as an attachment to the Permit Renewal Application, no later than April 3, 2025. The Final Monitoring/Assessment Report will summarize and evaluate the information collected and include reference to:

- The date, exact place, and time of sampling or measurements;
- The name(s) of the individual(s) who performed the sampling or measurements;

- The date(s) analyses were performed;
- The names of the individual(s) who performed the analyses; the analytical techniques or methods used; and
- The results of such analyses, including both visual and narrative summary interpretation of the data collected, a discussion of any quality assurance issues, and a narrative discussion comparing data collected to any previously collected or historical information, as appropriate. Raw monitoring data must be submitted in a spreadsheet or text-format electronic file.

9.2.3 Pollutant Reduction Activity Report

The City will submit a final Pollutant Reduction Activity Report summarizing actions conducted during the Permit term to reduce pollutant loadings from the City's MS4. The Pollutant Reduction Activity Report will be submitted as an attachment to the Permit Renewal Application, no later than April 3, 2025. The final Pollutant Reduction Activity Report will summarize the actions taken, as delineated in the *City of Caldwell Stormwater Management Program Pollutant Reduction Activities* and in Section 7.2 above.

9.3 Duty to Reapply

In order for the City to continue discharging from the City's MS4 after the Permit expiration date, the City must apply for and obtain a new permit. In accordance with 40 CFR §122.21(d), the city will submit an application at least 180 days before the Permit expiration date, or no later than April 3, 2025.

The Permit Renewal Application must contain the information required by 40 CFR 122.21(f), which includes: name and mailing address of the City, the names and titles of the primary administrative and technical contacts for the City. In addition, the City will identify the identification number of the existing NPDES MS4 Permit (IDS028118); and any previously unidentified water bodies that receive discharges from the MS4. The following attachments will be submitted as part of the complete Permit Renewal Application:

- Updated SWMP Document;
- MS4 Map, and the accompanying Outfall Inventory;

- List of MS4 outfall locations with dry weather flows identified by the City as being associated with irrigation return flows and/or groundwater seepage, including latitude/longitude and physical description/characteristics;
- Enforcement Response Policy for Construction Site Runoff Control;
- Enforcement Response Policy for Permanent Stormwater Management Controls;
- If applicable, a written summary of the City's adaptive management actions to date;
- A Final Report summarizing any required Monitoring/Assessment activities; and
- A Final Report summarizing implementation and effectiveness of Pollutant Reduction Activities to date.

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 have no personal knowledge that the information submitted is other than 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.

X Robb MacDonald

Digitally signed by Robb MacDonald
Date: 2021.11.30 16:58:19 -07'00'

Robb MacDonald
Caldwell City Engineer

Appendix A. City of Caldwell MS4 Permit

Appendix B. Pollutant Reduction Activities

Appendix C. City of Caldwell MS4 Map