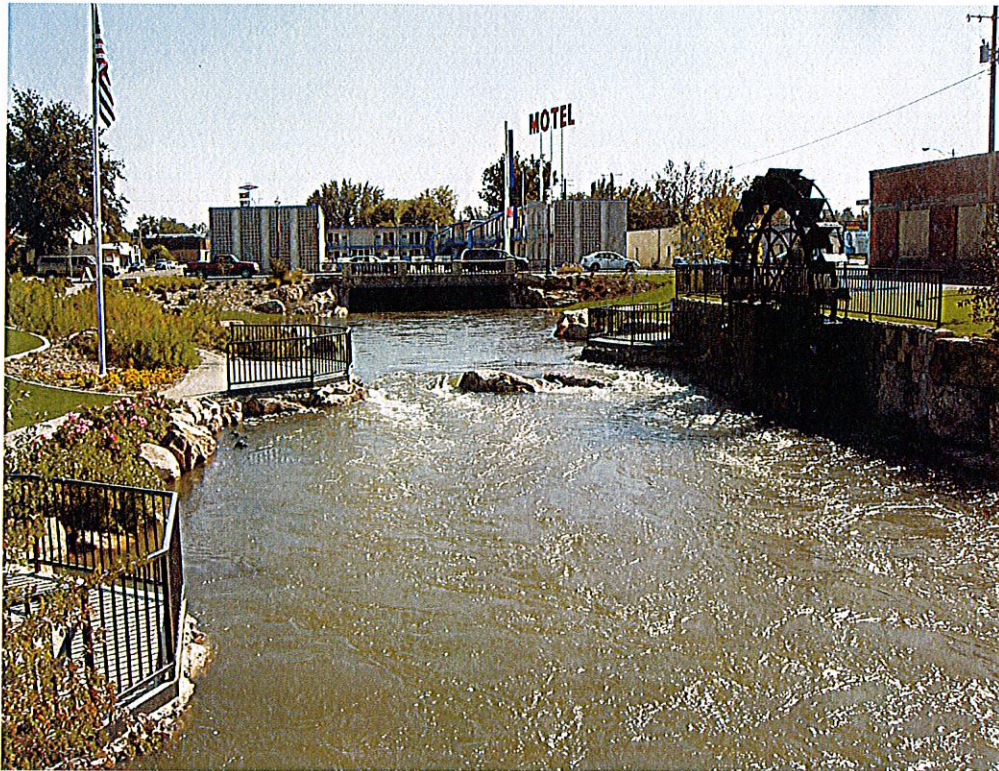


# The City of Caldwell, Idaho

## 1<sup>st</sup> Annual Municipal Separate Stormwater Sewer (MS4) Report

NPDES Permit No. IDS-028118

December 2009 to December 2010



Submitted to

**United States Environmental Protection Agency**

Storm Water Program

Region 10, Seattle, Washington

&

**Idaho Department of Environmental Quality**

Boise Regional Office

Boise, Idaho

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## Report of Certification

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

Signature: Garret L. Nancolas Date: 3/21/11

Garret Nancolas, Mayor, City of Caldwell

## **Introduction**

The Annual Report date in the permit was no later than January 15 of each year beginning in year 2011, however there was a Petition for Review of the permit by Pioneer Irrigation District. EPA reviewed the Petition for Review and in a letter dated November 18, 2009 stated that the entire Permit will become fully effective and enforceable 33 days after this notice is mailed. This changed the effective date from October 15, 2009 to December 21, 2009. Dates in the permit were then adjusted accordingly.

The Storm Water Management Program (SWMP) must cover six areas: Public Education and Outreach; Public Involvement/participation; Illicit Discharge Detection and Elimination; Construction Site Storm Water Runoff Control; Post-Construction Storm Water Management in New Development and Redevelopment; and Pollution Prevention and Good Housekeeping for Municipal Operations. This report will cover the permit requirements and the status of each of the basic areas (including the monitoring process). The requirements are phased in over a four year period and by the end of the permit cycle will all need to be complete. Because this is the first year of the permit, many of the requirements have not yet been implemented. Preparations are being made to complete all the requirements in their proper timeframe throughout the permit cycle.

## **Public Education and Outreach**

### **Permit Requirements:**

a) By December 21, 2011, the city must develop and implement an ongoing public education program to educate the community about the impacts of storm water discharges on local water bodies and the steps that citizens and business can take to reduce pollutants in storm water runoff.

b) By December 21, 2011 and at least twice per year thereafter, the city must distribute appropriate storm water educational materials to the target audience.

c) By December 21, 2011 and at least once per year thereafter, the city must update its stormwater information webpage with appropriate educational information.

### **Program Implementation**

The city's staff is in the process of developing a public education program. As part of the effort, they have contacted the "Partners for Clean Water" located in Boise, Idaho to join with them in the educational segment of their organization in order to have a regional approach to public instruction.

The City's parks department has installed and is maintaining two dog cleanup stations along the Indian Creek Greenbelt.

The webpage is still in design and has not yet been implemented but is planned to be up and functional by December 2011.

## **Public Involvement/Participation**

### **Permit Requirements:**

a) The city must comply with applicable State and local public notice requirements when implementing a public involvement/participation program.

b) The city must make all relevant SWMP documents and all Annual Reports required by this permit available to the public. By December 21, 2012, all SWMP documentation and Annual Reports must be posted online through its regularly maintained website.

c) The city must involve interested stakeholders in the development of the City's construction site runoff control program. The meeting schedule must be made know to the public, EPA and IDEQ through direct mail, email notification, and/or other locally appropriate means.

d) By December 21, 2011, and at least once a year thereafter, the city shall host a public meeting regarding the SWMP and progress to date.

e) At least once a year starting by December 21, 2009, the city shall organize, promote and participate in community Clean up Day(s)

f) By December 21, 2011, the city must organize and conduct a storm drain stenciling program. Within four years (by 12/21/13) of the effective date of the permit, at least 75% of storm drains throughout the city's jurisdiction must be stenciled.

### **Program Implementation**

The city does and will continue to comply with the public notice requirement when implementing a public involvement/participation program.

In December of 2011, when the City's Stormwater webpage is accessible to the public, SWMP documents and annual reports will be regularly posted along with other pertinent information. The web page will be accessible through the City of Caldwell's web page.

The city held an open house on May 12, 2010 at 6:00 – 7:00 p.m. in the Caldwell's Police Station's Community Room on the proposed new Stormwater Ordinances. The notice of the meeting was published in the City's brick and mortar newsletter 2010 volume 1, issue 1. This newsletter is sent out to developers and contractors that work in the city. Unfortunately nobody from the community showed up to discuss the proposed new storm water ordinances. See CD 1 Appendix A- Community meetings

The staff from the City of Caldwell has helped to organized, promoted and participated in Boise River Sweep this year. The staff supplied translation corrections from English to Spanish for the Spanish radio ads and as a contact for Spanish speaking citizens wishing to sign up for the event. Boise River Sweeps, held on September 18, 2010, had over 89 volunteers to clean up the Lower Boise River from Eagle all the way up near Parma. Over 50 of these volunteers cleaned up Caldwell's City Greenbelt along the Boise River and the adjacent parks as part of the Boise River Sweeps campaign. Over 7 cubic yards of trash were collected from the lower Boise river sites. This will be an annual event with the next Boise River Sweep scheduled for September 17, 2011. See CD 1 Appendix B: Community Cleanup

The staff of the City of Caldwell has organized all the supplies and informational sheets for a stormwater stenciling program. The next step will be part of our Public Outreach to start recruiting volunteer groups to install the stencils on storm drains in city.

## Illicit Discharge Detection and Elimination

### Permit Requirements:

a) By December 21, 2012, the city must develop and implement a plan to detect and eliminate illicit discharges into their MS4, including roadways and associated drainage facilities, ditches, pipes, culverts, catch basins, and retention ponds in the permit area. This plan must include written spill response procedures for detection, identification of the source, and removal of non-storm water discharges from the MS4. This plan must address illegal dumping into the MS4, and include training for City staff on how to respond to reports of illicit discharges. The city must develop an information management database system to track the activities and actions of the program.

b) By December 21, 2012, the city must effectively prohibit non-storm water discharges into the MS4 through an ordinance. The city must implement appropriate enforcement procedures and actions, including a written policy of enforcement escalation procedures for recalcitrant or repeat offenders.

c) Through the ordinance set forth in the above section b, the city must prohibit any of the non-stormwater flows not meeting the requirements in the permit. The city must document to EPA in the Annual report any existing local controls or conditions placed on the types of non-storm water discharges in the permit.

d) By December 21, 2012, the city must update and complete its comprehensive MS4 map. At a minimum, the map(s) must show jurisdictional boundaries: the location of all City-owned or operated storm sewers, culverts, ditches, and other conveyances: the location of all inlets and outfalls: points at which the city's MS4 is interconnected with other MS4s: names and locations of all waters that receive discharges from those outfalls: locations of all city-owned or operated facilities, including all maintenance/storage facilities, and city-owned or private snow disposal sites. Location of all outfalls must also be provided in latitude and longitude, and the diameter of all outfalls must be provided with the map. The map must be available in electronic or digital format as appropriate. A copy of the completed map (s), as both a report and as an electronic file via Arc GIS format, must be submitted to EPA and IDEQ as part of the corresponding Annual Report.

e) By December 21, 2012, the city must begin an ongoing education program to inform users of the MS4, especially public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste. This program must be conducted in concert with the public education requirement.



### **Permit Requirements:**

f) By December 21, 2012, the city must begin dry weather field screening for non-storm water flows from all storm water outfalls. By December 21, 2014, at least 20% of the city's outfalls within the City Limits must be screened for dry weather flows. The screening should include field tests of selected parameters as indicators of discharge sources. The city must investigate any illicit discharge within fifteen days of its detection, and must take action to eliminate the source of the discharge within 45 days of the detection.

g) By December 21, 2012, the city must inventory all industrial facilities that discharge directly to the city's MS4 within the permit area and submit this inventory as part of the corresponding Annual Report. This inventory must include the names and address of the facility and the location of its outfall.

### **Program Implementation**

The city staff has been working on developing a plan to detect and eliminate illicit discharges into their MS4. Implementation of this plan will occur prior to the implementation deadline.

New stormwater ordinances have been written to address the above items b and c. These new ordinances are in for review by the City's legal staff before going to City Council for approval and ratification.

The City has a current Arc GIS storm drain map of all city storm drain infrastructure, however, this map is being upgraded to include the additional requirements under the permit. Also, since the permit went into effect, the city has incorporated an additional 35 acres that are being updated in the City GIS system. A DVD copy of the current city's storm water map is attached to this report. See CD 1 Appendix C: Stormwater Map

The staff has contacted Partners for Clean Waters for a regional approach to the education of the public. Funds have been dedicated to start next fiscal year.

The city's staff is working on developing a recording form and a tracking system for dry weather screening of stormwater outfalls but has not started any testing at this time. The city's staff is still working on developing a procedure for tracking illicit discharge occurrences. The city staff has investigated seven illicit discharge complaints received this year, all investigated on the day they were received. Two of the complaints were resolved by talking to the property owners and having them instruct their staff that their practices were considered to be illicit discharges and they needed to cease the activity. Two of the complaints required the property owners to physically disconnect from the city's storm drain system. Both owners complied

within the 45 day period. One of the complaints involved a failed onsite retention facility which was cleaned up by the owner within the 45 days. Two complaints involved water in the streets. The first one was a complaint of standing water in the catch basin and water running down the gutter without a rainstorm. When investigated this turned out not to be an illicit discharge because the standing water in a catch basin was a cross street siphon and the running water was from lawn watering. The second involved a rainstorm in August where freshly applied dust suppressant mixed with rainwater runoff and discharged into the street. This dust suppressant was an EPA approved product for use on gravel surfaces to keep the dust down. The city's street crew installed straw waddles around the catch basin that was receiving this runoff. City staff talked to the owner of the lot about making sure to apply the dust suppressant with adequate time to bond to the gravel before a rain event.

The city's staff is preparing to review and inventory all of the industrial facilities that discharge directly to the city's MS4. This action will be completed within the required timeframe.

## Construction Site Storm Water Runoff Control

### Permit Requirements:

a) By December 21, 2012, the city must implement and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction activities resulting in land disturbance of greater than or equal to one acre. This program must also include controls for pollutants in such storm water discharges from activities disturbing less than one acre, if that construction activity is part of a larger common plan of development or sale that disturbs one acre or more.

b) The city must provide appropriate information to representatives of proposed new development and redevelopment construction projects concerning the NPDES General Permit for Storm Water Discharges for Construction Activity in Idaho.

c) By December 21, 2012, the city must adopt an ordinance or other regulatory mechanism to the extent allowable under state or local law that requires all construction site operators to practice appropriate erosion, sediment and waste control. This ordinance or regulatory mechanism must include sanctions to ensure compliance.

d) By December 21, 2012, the city must publish and distribute requirements for construction site operators to implement appropriate erosion and sediment controls BMPs and to control waste (such as discharged building supplies, concrete truck washout, chemicals, litter and sanitary waste at a construction site) that may cause adverse impacts to water quality.

e) By December 21, 2012, the city must develop procedures for reviewing all pre-construction site plans for potential water quality impacts, including erosion and sediment controls, control of other wastes, and any other impacts according to the requirements of the law, ordinance, or other enforceable mechanism created to comply with adopted storm water runoff ordinances. These procedures must include provisions for receipt and consideration of information submitted by the public.

f) By December 21, 2012, the city must implement a program to receive, track, and review information submitted by the public regarding construction site erosion and sediment control complaints.

## **Permit Requirements:**

g) By December 21, 2012, the city must develop and implement procedures for site inspection and enforcement of control measures established as required by ordinances and including a written policy of enforcement escalation procedures for recalcitrant or repeat offenders. By December 21, 2012, the city must inspect all construction sites in the permit area disturbing five acres or more for appropriate erosion/sediment/waste control practices at least once per construction season. By December 21, 2012, the city must also develop a written policy identifying how construction sites disturbing less than five acres will be prioritized for inspection.

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

## **Program Implementation**

The city's staff has written new storm water ordinances and is awaiting adoption before many of the programs can be implemented.

The city's plan review staff has been providing appropriate information to representatives of proposed new development and redevelopment construction projects concerning the NPDES General Permit for Storm Water Discharges regarding Construction Activities in Idaho. The NPDES General Permit is currently under EPA authority with the city to take over the inspection and management by December 21, 2012.

A publication has been prepared on implement appropriate erosion and sediment controls BMPs and to control waste, however, it references the proposed new storm water ordinances that have not yet been adopted. The publication plans to be distributed after adoption of the storm water ordinances.

The city staff is currently developing procedures for site inspection but is currently awaiting the adoption of appropriate ordinances for inspections to begin.

The city requires that the contractors file a NOI with EPA on all projects that meet the requirements. The city will be taken over this responsibility before the end of the permit cycle.

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

### **Permit Requirements:**

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

b) By December 21, 2013, the city must adopt an ordinance to address post-construction runoff from new development or redevelopment projects.

c) By December 20, 2014 the city must ensure proper long term operation and maintenance of all permanent storm water management controls for newly developed project areas greater than one acre discharging into its MS4 area.

d) By December 20, 2014 the city must develop and implement a process for pre-construction plan review and inspection of permanent storm management control to ensure proper installation and appropriate long-term operation and maintenance.

e) By December 21, 2013, and at least once per year thereafter, the city must educate the development community about appropriate design, operation, and maintenance of storm retention facilities and vegetative practices to address post-construction storm water runoff from new development and redevelopment within the city's jurisdiction.

### **Program Implementation**

The Caldwell Municipal Stormwater Management Manual addresses stormwater discharge on any project that adds over 1,000 square feet of impervious surface. This is much smaller than the one acre requirement in the permit.

The Caldwell Municipal Stormwater Management Manual was first adopted in 1996. The latest version was adopted in July 2009. This manual addresses the stormwater discharge from new development and redevelopment. See CD 1 Appendix D- Storm water manual

At this time the long term operation and maintenance of the newer developments are the responsibility of the private developers. The city's street department has a policy and procedure for inspecting and cleaning out catch basins in the older sections of town. A total of

1374 catch basins were inspected and 834 were cleaned last year. The city's street sweepers have swept 8,801 miles of city streets last year. The street department spent 5,048 man hours on snow removal and 2,268 man hours on spreading 3,000 tons of sand. See CD 1 Appendix E- Catch basin cleaning log

As part of obtaining building permit the developer must submit stormwater plans and calculation for approval to the building department. City inspectors insure that site construction is as per approved plans. Builders on individual lots in an approved subdivision are not required to submit a stormwater calculation if the original subdivision stormwater plans includes runoff from individual lots.

The city staff has been working with Partners for Clean Water to join with them on developing educational opportunities for the development community. There has been no training at this time of the development community.

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

### **Permit Requirements:**

a) By December 21, 2013 the city must develop and implement an operation and maintenance program intended to prevent or reduce pollutant runoff from municipal operations. This program must address municipal activities occurring within the permit area with the potential for negative storm water related water quality impacts, including; the use of sand and road deicers; fleet maintenance and vehicle washing operations; street cleaning and maintenance; grounds/park and open space maintenance operations; building maintenance: solid waste transfer activities; water treatment plant operations: storm sewer system maintenance; municipal golf course maintenance; and snow disposal site operations and maintenance.

b) By December 21, 2013 and once a year thereafter, the city must develop and conduct appropriate training for municipal employees relative to best maintenance practices for protection of water quality. This training must be conducted at least once per year and address the activities in item a) above.

c) By December 21, 2013 the city must prepare and implement storm water pollution prevention plans for the city' fleet maintenance/street department site and waste water treatment plant.

### **Program Implementation**

The city has started work on building a street sweeper cleanout station. This station will allow the city's street sweepers to discharge their loads. All waste water from cleanup will be sent to the municipal sanitary sewer system. All collected waste will be drained and then transported to an approved landfill site. This station also has a 26x60 foot pressure wash bay for cleaning even the largest city vehicles. The water from this is also sent to the municipal sanitary sewer. The city department's staffs are continuing to work on developing programs to address the remainder of the item.

The city's staff held a series of meetings last year with municipal employees that primary duties require working outdoors. This training covered Municipal Stormwater Pollution Prevention. One element of the training was the EXCAL storm watch DVD. The city staff planned to hold annual training events for municipal employees. See CD 1 Appendix F: Municipal Stormwater Training

The current city's fleet maintenance /street department building is slated to be torn down and a new building to be erected on an adjacent lot. Architectural plans are being finalized. The new site and building will address the stormwater problems associated with the old building.

The waste treatment plant has had a series of upgrades in the past few years. As part of these upgrades the stormwater runoff has been routed to onsite retention.

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

### **Permit Requirements:**

1) The city must conduct storm water discharge monitoring.

2) The city must determine whether storm water discharges from any part of the MS4 contribute pollutants of concern, either directly or indirectly, to the Boise River and associated tributaries. Pollutants of concern are total phosphorus, sediment, and E. coli.

3) The city's Annual Report must include a description of how the activities of each of the minimum control measures are targeted by the city to control the discharge of pollutants of concern, and ensure to the maximum extent practice that the MS4 discharges will not cause or contribute to the excursion above the applicable Idaho water quality standards. This discussion must specifically identify how the city will evaluate and measure the effectiveness of the SWMP to control the discharge of pollutants of concern. For those activities identified requiring multiple years to develop and implement, the city must provide updates on progress to date. The city must submit this description of the SWMP implantation to EPA and IDEQ as part of the first Annual Report and update it annually in subsequent Annual Reports.

## **Program Implementation**

The City of Caldwell has submitted a Monitoring Plan and Quality Assurance Plan in December, 2010. Monitoring of the storm water discharges will begin on or before December 21, 2011 as per the permit. Once the City of Caldwell starts monitoring the storm water discharges, the city will include the results of the pollutions of concerns in the annual report. See CD 1 Appendix G: Monitoring Plan and Quality Assurance Plan



# CD1

**Appendix A-Community meetings**

**Appendix B- Community Cleanup**

**Appendix C- Stormwater map**

**Appendix D- Stormwater manual**

**Appendix E- Catch basin Cleanout log**

**Appendix F -Municipal Stormwater Training**

**Appendix G- Monitoring Plan and Quality Assurance Plan**