I. CALL TO ORDER

II. MINUTES APPROVAL

1. Public Works Commission - Regular Meeting - Sep 2, 2020 4:00 PM

III. PWC AGENDA REQUESTS

1. Climate Action Division Introduction
   Presenter: Steve Burgos, Steve Hubble
   Estimated Time: 20 Min
   ACTION REQUESTED: Information Only

2. Water Renewal Utility Plan Rate Study Overview
   Presenter: Heather Buchanan
   Estimated Time: 45 Min
   ACTION REQUESTED: Information Only

IV. DIRECTOR’S REPORTS

1. Billing Collection Status
   Presenter: Steve Burgos
   ACTION REQUESTED: Information Only

2. Education Programs
   Presenter: Steve Burgos
3. **General Fund Capital Projects**  
   Presenter: Steve Burgos  
   ACTION REQUESTED: Information Only

4. **Geothermal Irrigation Projects**  
   Presenter: Steve Burgos  
   ACTION REQUESTED: Information Only

5. **Water Renewal Fund Capital Projects**  
   Presenter: Steve Burgos  
   ACTION REQUESTED: Information Only

6. **Water Quality Regulatory**  
   Presenter: Steve Burgos  
   ACTION REQUESTED: Information Only

7. **Materials Management Program**  
   Presenter: Steve Burgos  
   ACTION REQUESTED: Information Only

8. **Stormwater Regulatory Program**  
   Presenter: Steve Burgos  
   ACTION REQUESTED: Information Only

9. **Climate Action Program**  
   Presenter: Steve Burgos  
   ACTION REQUESTED: Information Only

V. **ADJOURNMENT**
I. Call to Order

PRESENT: Gravatt, Hilton, Thorne, Reading, Nink, Crowley, Quick
ABSENT:

II. Minutes Approval

1. Public Works Commission - Regular Meeting - Aug 5, 2020 4:00 PM

RESULT: ACCEPTED [UNANIMOUS]
MOVER: Judy Thorne, Commissioner
SECONDER: Renee Quick, Commissioner
AYES: Gravatt, Hilton, Thorne, Reading, Nink, Crowley, Quick

III. PWC Agenda Requests

1. Lander Street Water Renewal Facility (LSWRF) Phase 1 Project Update
   Steve Burgos, Public Works Director, introduced Josh Baker, Engineer, Lander Street Phase 1 Project Manager who gave the Commission an update on the Lander Street Phase 1 project.

   • Commissioner Crowley asked how many cubic yards of concrete have been poured so far. Mr. Baker estimated more than 2,000 yards and that’s approximately one third of what will be used.

   • Mr. Burgos complimented Mr. Baker and team on the progress and success of the project so far.

RESULT: DISCUSSED

2. Building Facility Planning Update
   Mr. Burgos introduced Rob Bousfield, Municipal Facility Program Sr. Mgr. who presented the advances made in the building facility planning effort. Mr. Bousfield asked the Commissioners for input on teleworking and virtual
meetings based on their experiences.

- Commissioner Quick commented that person-to-person interaction is important for meetings and other interactions. Mr. Burgos added that Human Resources is working on a telework policy that balances remote work and the value of interaction between co-workers.

- Commissioner Thorne explained one of the obstacles she’s experienced with virtual learning is the lack of hands-on experiences which makes it difficult to evaluate how well a student understands or an instructor teaches. Mr. Burgos asked Commissioner Thorne if Idaho State University is developing a remote work policy. Commissioner Thorne answered a policy is being developed and existing policies are being modified as needs develop.

- Commissioner Gravatt advised individual preferences need to be considered when developing a telework policy. Some individuals, teams and processes are not well suited for remote work.

- Commissioner Hilton’s experience has shown her the importance of working in a setting that allows the team to interact and collaborate.

- Councilmember Sánchez would encourage the city to look at why some employees might be resistant to returning to work after working remotely. In her experience, a reluctance to return to the office can indicate problems with the work environment.

- Commissioner Gravatt asked if we anticipate a long-term need for increased investment in internal services and space needs as Boise grows. Mr. Bousfield answered an effort was made to identify services that might have a need for more space and factor that into the projections. Commission Gravatt asked if we can identify what areas of the city citizens are from that come to City Hall. Mr. Bousfield answered we don’t have a way to track that data. He added some discussion has taken place around providing services in alternate locations to better serve citizens.

- Commissioner Quick commented with the growth in the valley we should be providing services where the people are at a reasonable cost.

- Commissioner Crowley asked for the presentation to be distributed to the Commission and he would also like a breakdown of the anticipated staff requirements for the next 10 to 20 years by function or activity. He asked if daycare services for employees has been discussed. Mr. Bousfield answered the Mayor has asked for a study to evaluate the possibility of a daycare facility for employees.

- Commissioner Thorne thinks there will be opportunities for alternative space solutions as we get past the current situation with COVID-19.
3. Director's Comments

Mr. Burgos told the Commission the recommended final approach for the Water Renewal Utility Plan was presented to Council and he thanked Chairperson Crowley for attending the City Council meeting and briefing the Council on discussions the Commission had about the plan. He advised the Commission that starting in October we will start presenting the Cost of Service Study for the Commissions consideration. Also, in October he will present a presentation on the newly created Climate Action Division.

- Commissioner Quick asked for an update on the orange bags. Mr. Burgos explained we were asked by Hefty if the bags could be used as fuel by a concrete manufacturing plant while Renewlogy was down for upgrades to their equipment. We asked for an environmental assessment whether it is better to landfill the bags or allow them to be used as fuel. The assessment came back that it's a benefit to use them as fuel instead of the carbon-based fuel that would be used otherwise. Participation in the program is still high and an update will be provided to the Commission in October. Commissioner Quick asked what the difference is between Renewlogy burning the bags for fuel and being burned as fuel by the concrete manufacturer. Mr. Burgos answered Renewlogy has a cleaner process and there is a product at the end of the process. Haley Falconer, Environmental Division Sr. Manager added we have asked for a cost assessment for both options and we're waiting for the final report. She clarified Renewlogy does not burn the bags, they use a process to convert the plastics to diesel fuel.

- Commissioner Gravatt asked if there is an update on the recruitment of a new commissioner. Mr. Burgos answered he will have information for the October meeting. Commissioner Gravatt has received requests for information about the Farmers Union Canal. Mr. Burgos gave a brief background on the issue of the city discharging effluent to the canal. The project has been put on hold due to citizen's concerns. There is a misconception that the Water Renewal Utility Plan that will be before council on September 13th will give the city authorization to discharge to the canal. Mr. Burgos stated it will not and any further consideration of the Farmers Union Canal concept will require Council approval and a significant community engagement process.

IV. Adjournment

1. Motion to adjourn the Public Works Commission meeting.

Commissioner Quick made a motion to adjourn, Commissioner Gravatt seconded, and the motion carried. The meeting adjourned at 5:32 p.m.
RESULT: APPROVED BY UNANIMOUS CONSENT
TO: Public Works Commission
FROM: Steve Burgos, Director
Steve Hubble, Climate Action Sr. Manager
DATE: October 7, 2020
RE: Climate Action Division

ISSUE

Introduce and provide background information on the Climate Action Division.

BACKGROUND

To accelerate climate action, Mayor McLean announced the formation of a Climate Action Division with existing city staff to put a singular focus on climate change, preparedness, and innovation in the city. The Division will continue to implement existing climate related programs and initiatives including energy, air quality and sustainability. The Division will also develop and frame new climate action policies and programs for consideration by Mayor and Council. The Division will also support internal Departments and existing programs to ensure the integration of climate action where appropriate.

The key initial project of the division will be to develop a Climate Action Roadmap to guide near and long-term climate action in Boise. Roadmap development will be supported by national experts and the community ensuring it is representative of the broad and diverse values of our residents and businesses.

Division staff includes a Climate Action Manager and three existing staff from the Environmental Division of Public Works who will transfer to the Climate Division. In addition, the Division will add an Energy Program Manager with the FY 2021 budget. The Division will also be supported by supplemental staff resources from the Office of Community Engagement and the Boise Watershed to support climate outreach and public education activities.
OPTIONS AND RECOMMENDATION

Information only

SUGGESTED MOTION

Information only
EXECUTIVE SUMMARY

The Water Renewal Utility system is the City’s single largest asset with over $2.0 billion in facilities. The water renewal system serves over 75,600 residential customers and 6,000 commercial customers. The Utility operates and maintains over 1,000 miles of conveyance pipe, 29 lift stations and 3 major water renewal facilities, the oldest of which (Lander Street Water Renewal Facility) was constructed in 1949.

The City has embarked on a multi-year Utility planning process and the resulting Water Renewal Utility Plan (Utility Plan) will provide strategic direction for the Utility to continue delivering high quality services that Boise citizens and businesses have come to expect. We are in the final phase of the Utility Plan approval. In the coming years, significant capital improvements will be needed to address the Utility’s aging infrastructure (portions of which are nearly 100 years old), meet regulatory requirements, provide for capacity needs, and meet citizen’s service level expectations.

A key element of this multi-year planning process is development of a long-term operational and capital financial and rate study. As the Water Renewal System is an enterprise fund, it operates with a fee-for-service model. As such, the Utility receives no funding from general tax sources. The majority of the Utility’s revenues are generated through rates assessed upon the Utility’s residential and commercial customers. Rates must periodically be evaluated to ensure they are properly calibrated to not only generate the estimated amount of revenue to support the Utility’s operations and capital needs, but also to reflect how the community has changed over time so that each customer class continues paying their appropriate share of the Utility’s costs.

In May 2018, the Utility engaged FCS GROUP to prepare a comprehensive Utility financial planning study. Starting in October, we will begin a series of five presentations detailing the study to the Public Works Commission and the City Council. These presentations represent a progression of information so that by the last presentation the Commission and Council will be prepared to make an educated and informed decision on a long-term Utility financial plan. These five presentations are sequenced as follows:
- **Presentation #1 (October 7): Overview of the overall financial planning study process.**
  This meeting will be informational, and no decision is expected from the Public Works Commission. However, your questions and direction are welcomed. The remaining meetings will go into greater detail on each of the key elements of the study.

- **Presentation #2 (Date TBD): Detailed review of rate revenue requirements.**
  This meeting will detail the overall operating and financial plan, including a review of study economic assumptions, operating expenditures, capital expenditures, possible debt alternatives, and financial reserves. The objective of this meeting will be a deeper understanding of what is driving the need for rate increases, what options are available to fund the Utility’s revenue requirements and the public policy choices facing the City. Feedback from the Public Works Commission and City Council on the possible level of rate increase will assist in framing the third presentation.

- **Presentation #3 (Date TBD): Review of cost of service analysis.**
  As discussed above, rates must stay current with how the community has changed. The city has grown quickly over the past several years and it is important that each customer class continue to pay their appropriate share of the Utility’s costs. The objective of this meeting will be to discuss the cost to serve each customer class, how costs are allocated between customer classes, and how rates should change to reflect changes in the community. Feedback from the Public Works Commission and City Council on the changes in rates will assist in framing the fourth presentation.

- **Presentation #4 (Date TBD): Review of system development fees.**
  System development fees, also referred to as connection fees, are one-time fees assessed upon new customers connecting to the Utility system. These fees represent the cost to ‘buy-in’ to the Utility and are an integral element of the City’s policy that growth pays for growth. The objective of this meeting will include a discussion of how these fees are developed, what costs are included (and excluded), and the recommended changes to these fees. Feedback from the Public Works Commission and City Council will assist in framing the fifth and final presentation.

- **Presentation #5 (Date TBD): Adoption of Utility financial plan.**
  This final meeting concludes by recapping the financial plan and adopting the rate and fee changes needed to fully fund Utility operations and capital costs and reflect appropriate cost sharing between customer classes.

The remainder of this memorandum outlines the cost-of-service study process. Again, we will walk the Commission through each step of the study process and will highlight key assumptions, study findings, conclusions and recommendations.
OVERVIEW OF THE FINANCIAL PLANNING STUDY PROCESS

The financial planning study process consists of three major elements, which must be completed in order with each element requiring a decision before proceeding to the next. The three elements can be illustrated as follows:

Revenue Requirements
- How much money do we need to fully fund Operating and Capital needs?

Cost of Service
- Customers should pay their appropriate share of the cost of the Utility system.

Rate Design
- Establish rates necessary to generate the identified amount of revenue from each customer category.

Revenue Requirement Analysis
A revenue requirement analysis establishes the revenue requirements to fund Utility needs and determines the level of Utility rate increases needed to fully fund operating and capital expenses. The revenue requirement analysis begins with fund level financial policies that guide the use of Utility resources. The table below summarizes these financial policies.

<table>
<thead>
<tr>
<th>Policy Topic</th>
<th>Purpose</th>
<th>Capital Use of Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Reserves</td>
<td>Accounts for the day-to-day operations of the WRS</td>
<td>None.</td>
</tr>
<tr>
<td>Debt Reserves</td>
<td>Accounts for debt service payments and to demonstrate compliance with</td>
<td>Primary: Debt service and related costs</td>
</tr>
<tr>
<td></td>
<td>any bond covenant reserve requirements</td>
<td>Secondary: None</td>
</tr>
<tr>
<td>Emergency Reserves</td>
<td>Accounts for the accumulation of funds to be available to the WRS in</td>
<td>Primary: Unplanned Renewal &amp; Replacement</td>
</tr>
<tr>
<td></td>
<td>the event of emergencies</td>
<td>Secondary: None</td>
</tr>
<tr>
<td>Capital Account Reserves</td>
<td>Primary funding source for Planned Renewal and Replacement, Level of</td>
<td>Primary: Level of Service Projects</td>
</tr>
<tr>
<td></td>
<td>Service projects, and other capital investments</td>
<td>Secondary: Unplanned Renewal &amp; Replacement, Regulatory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Projects</td>
</tr>
<tr>
<td>Connection Fee Reserve</td>
<td>Accounts for the deposit of growth-related fees collected by the WRS</td>
<td>Primary: Capacity Projects and Debt Service Related to</td>
</tr>
<tr>
<td></td>
<td>and the payment of growth-related costs to expand the WRS for the</td>
<td>Capacity Projects</td>
</tr>
<tr>
<td></td>
<td>benefit of future customers</td>
<td>Secondary: None</td>
</tr>
</tbody>
</table>

These fund level financial policies form the boundary conditions that then inform a detailed analysis of operating costs and the capital improvement plan. Operating and capital costs are forecasted over a 20-year planning horizon (FY20-FY39). The following
graphic demonstrates how these elements come together to form the revenue requirement.

Cost of Service
The results of the revenue requirement analysis form the basis for a cost of service analysis. This element of the study determines the appropriate share of costs that each customer class should bear. Considerations include how the community has changed, the demands each customer class places on the Utility system, and other factors including used water flow and strength characteristics by customer class.

Rate Design
Once the cost of service is determined, the final step in the study process is the development of rates, which serve as the basis for generating the necessary amount of revenue to operate the Utility.

UTILITY CIP FORECAST
The Utility capital improvement program (CIP) consists of four major investment project categories:

- **Level of Service** investments are needed to demonstrate alignment with broader City goals or otherwise increase citizen and stakeholder satisfaction.
- **Capacity** investments are those made to expand or maintain the ability to serve future customers of the water renewal system or to prevent the loss of existing capacity.
- **Renewal and Replacement** investments meet the ongoing need to maintain and preserve the functionality of existing assets. Investments in this category occur with high frequency related to the age and condition of the City’s infrastructure.
- **Regulatory** projects are improvements that are needed to comply with federal, state and local mandates. These investments are necessary to bring the City’s facilities up to the standards of compliance.

The following table presents how projects in each category may be funded. This is a proposed approach to funding sources and uses and can be adjusted based on policy discussions and feedback.
Ratepayers provide the funding through their rates for servicing new debt and for increases to the Capital Account. The Connection Fee account is funded primarily from the connection fees that only apply to new construction or a customer’s increased capacity utilization. Therefore, future customers are the primary funding source for Capacity capital projects, but existing customers are the primary funding sources for the other capital project categories.

As discussed earlier, some parts of the Utility system are nearly 100 years old. Timely replacement of this infrastructure is necessary to avoid costly repairs and disruption in services to the community. The Utility has worked to evaluate and establish the condition and replacement needs of the Utility infrastructure. In addition, regulatory, capacity and level of service projects also contribute to the Utility’s capital investment needs. As shown in the following graph, over the next 20 years, the capital needs of the Utility are significant (totaling approximately $1.1 billion in today’s dollars) and are the primary driver for needed rate increases.

## 20-YEAR CIP FORECAST

WRUP CIP Forecast

$1.1B – today’s dollars
$1.5B – escalated to year of construction
FUNDING THE CIP - OPTIONS

Utilities across the country have traditionally used a mix of cash financing supplemented by debt financing to meet capital investment needs. While each Utility is unique, finding a strategy to balance cost, funding, execution and affordability means fully evaluating all the options before selecting the best fit. In this section, we explore considerations and options available to fund Utility capital investment.

Public Policy

Before exploring available options for funding Utility capital investment, we will discuss and establish the appropriate public policy principles that guide what type of funding mechanism should be pursued.

- **Intergenerational equity**: The concept of intergenerational equity is that customers that benefit from the constructed Utility system should bear a proportionate share of the cost. In other words, if a proposed capital improvement provides service for city residents today and well into the future, it stands to reason that all who benefit should pay an appropriate share of that cost.

- **Rate stability and predictability**: Ratepayers prefer predictability in how rates will change from year to year. Rates may be increased to address changes in the cost of doing business (e.g., the cost to comply with a new federal environmental regulation or simply the cost of annual inflation). Typically, ratepayers do not welcome rates that vary widely from one year to the next as rate variability makes it difficult for Utility customers to budget their expenses.

With this as context, there are several options available to the PWC and City Council to finance Utility infrastructure.

Cash

Cash financing of Utility infrastructure needs is commonly referred to as a pay-as-you-go approach to funding capital needs. In most recent history, cash has been the primary financing method used by the Utility. The source of Utility cash can come from revenue raised from rates and rate increases, accumulated reserves in excess of any minimum reserve balance requirements or accumulated operational savings that would otherwise fall to the operating fund balance at the end of a fiscal period. Under a cash approach, the Utility will be required to increase rates when needed to fund capital improvements.

Debt

Debt provides a means of spreading the cost of capital projects over a period more consistent with the expected life of the related assets, at the cost of interest and potentially other requirements. The key types of debt available for the Utility to use include:

- **State Loans**: These low-cost loans are often the preferred source of debt funding when available, as they tend to have lower interest rates and fewer conditions than other types of debt. Typically, State loans are available through specific programs administered by the Idaho Department of Environmental Quality (DEQ).

- **Revenue Bonds**: Secured solely by the revenues of the Utility these bonds often come with requirements such as debt service coverage ratios, reserve
requirements, and restrictive covenants. Utility revenue bonds are among the most common financing sources for municipal utilities in the United States.

In summary, issuing revenue bonds for the City’s water renewal Utility would require a simple majority voter approval or judicial confirmation.

Grants

Federal and state grant programs helped utilities meet their infrastructure funding needs in past decades, especially in the 1970s and 80s during implementation of federal environmental laws. More recently, grant-related funding has waned, and the availability of grants has reduced in favor of loan programs like the USEPA state revolving fund. Moreover, what little grant funds remain often come with additional requirements that can easily increase the cost of the project(s). Grant funding will be considered when possible, but reliance on grant funds as a primary funding source is not recommended.

The following table summarizes the Utility financing strategies against the public policy principles that should be considered by the Commission and City Council.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Intergenerational Equity</th>
<th>Rate Sustainability and Predictability</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>Ratepayers today will bear full burden of financing improvements that may last many decades and benefit future residents of the City</td>
<td>Rates will need to be adjusted regularly to meet operating and capital cash flow needs</td>
<td>Reliance solely on cash may leave the Utility vulnerable to economic and political changes</td>
</tr>
<tr>
<td>Debt</td>
<td>Debt service payments are amortized over the repayment term</td>
<td>Debt service payments can be amortized in equal annual installments over the repayment term</td>
<td>Highly reliable. Est’d $4.4T in municipal bonds outstanding across the country</td>
</tr>
<tr>
<td>Grants</td>
<td>Not applicable. Grants do not need to be repaid by ratepayers</td>
<td>Not applicable. Grants do not have an impact on rates, today or into the future, as it does not need to be repaid</td>
<td>Not reliable due to federal and state budget cuts</td>
</tr>
</tbody>
</table>

CONCLUSION

Staff has worked closely and collaboratively with FCS GROUP over the past two years to analyze the Utility’s capital and operating needs and develop a long-term financial plan that complies with City financial management policies. The details of the financial plan will be discussed over the coming months through the five-part presentation process outlined in the memo. We look forward to a rich and robust discussion with the Public Works Commission. As always, do not hesitate to contact me with any questions.

RECOMMENDED OR REQUESTED ACTION

Information only
TO: Public Works Commission
FROM: Heather Buchanan, Chief Administrative Officer
       Roxanna McNew, Utilities Customer Service Manager
DATE: September 16, 2020
RE: Billing and Collection Status

BILLING AND COLLECTION STATUS UPDATE

Utility Billing
For fiscal year 2020 to date (Oct 2019 to August 2020), Utility Billing Services (UBS) has handled 44,482 inbound calls for billing, moves and general customer service questions. In addition, the team processed approximately 34,094 emails (23,642 UB – 7,700 Escrow – 2,752 Warranty), and 941 walk-in customers. Walk-in numbers are down significantly due to City Hall being closed since mid-March. City Hall has re-opened to the public, but very few customers are coming to the building.

The UBS team continues to work remotely due to COVID-19 guidelines. Overall, the team has been able to handle normal levels of customer inquiries despite the slower system performance due to remote access. Since March, only one customer has complained about a delay in customer service response time.

Collections
From the beginning of the fiscal year through August, the collection rate has averaged 85%, as compared to 84.1% for the same period last fiscal year. This is exceptional considering that outbound collection efforts were suspended mid-March due to COVID-19. Even though collection efforts were temporarily suspended, the utility bills are still due.

As noted in the July report, the collections team is gradually reinstating collection efforts. In August, we began charging interest again. Outbound collection calls have also resumed with a focus on how we can help customers facing financial hardship due to COVID-19.

UBS has received calls from 244 residential and commercial customers stating they were financially impacted by COVID-19. The team will work with each of these customers over the next few months to establish payment plans to assist with bringing the past-due balances current. In addition, water usage reductions for 125 commercial accounts affected by the COVID-19 closure order resulted in billing adjustments of $108,993.
TO: Public Works Commission  
FROM: Colin Hickman, Communication Manager  
DATE: October 7, 2020  
RE: Boise WaterShed - Education Program Update

MAJOR PROJECTS, INITIATIVES, CURRENT ISSUES

Attendance


<table>
<thead>
<tr>
<th>Month</th>
<th>Lessons &amp; Tours Attendance</th>
<th>General Visitors</th>
<th>On-site events attendance</th>
<th>Outreach events attendance</th>
<th>Outreach lessons attendance</th>
<th>Monthly TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>June</td>
<td>5</td>
<td>127</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>132</td>
</tr>
<tr>
<td>July</td>
<td>21</td>
<td>230</td>
<td>162</td>
<td>0</td>
<td>0</td>
<td>413</td>
</tr>
<tr>
<td>Aug</td>
<td>0</td>
<td>206</td>
<td>104</td>
<td>0</td>
<td>0</td>
<td>310</td>
</tr>
<tr>
<td><strong>On-Site Total</strong></td>
<td><strong>855</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>855</strong></td>
</tr>
<tr>
<td><strong>Off-site Total</strong></td>
<td><strong>0</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>

Attendance Analysis

During the three-month period from June - August, staff served 855 people with on-site programs and events. This is significantly lower (6,000 less) than last year during this period due to the impacts of COVID-19. The Exhibit Hall was closed during this time, but the outdoor River Campus was open with social distancing protocols in place.

Significant Projects June - August 2020

Exhibits and Public Art

In recognition of founding non-profit director Donna-Marie Hayes, Boise WaterShed Exhibits, Inc. raised funds for a geothermal software-based exhibit that will complement the existing geothermal exhibit components of a 3D painting, photo booth, historic pipes and timeline. Software development will begin in September with an anticipated completion date of January 2021.
Education Programs and Events

The Boise WaterShed re-opened the River Campus to the public on June 15. Visitors, mostly families, enjoyed the water feature, outdoor public art and nature play areas. Programming during this time period was limited to scaled-back WaterShed Wednesdays, eARThworks children’s art and science classes, a teacher workshop and an adult WaterShed Studio class, all of which were taught outdoors. Our education program focus turned to reaching audiences through online learning opportunities. Utilizing the city’s platform, Be Well Boise, staff were able to produce, edit and share 28 educational videos so that 271 parents, teachers and children could still have access to high-quality educational material delivered in an accessible way.

The seven WaterShed Wednesday family programs this summer were attended by an average of 32 visitors per event. Due to COVID-19, we were limited to 50 attendees per event, and we asked that visitors register for the events ahead of time.

This July, Boise WaterShed offered one Project WET (Water Education Today) teacher workshop titled Climate Literacy, which focused on local and global climate change impacts and solutions. The workshop was offered in partnership with BSU and Project Learning Tree and served 11 teachers.

In partnership with Arts & History, two eARThwork Art and Science classes were attended by 17 children this summer. Participants were presented with a science topic which they interpreted into works of art. A similar program for adults, WaterShed Studio, was offered in August for 10 people. Maximum class sizes were 12 people.

This summer, Boise WaterShed applied and became a host site for a STEM Extern through the Idaho STEM Action Center. The extern worked 200 hours at the Boise WaterShed, developing curriculum, planning and staffing WaterShed Wednesdays, and interviewing more than ten employees/STEM professionals within the city. The goal of the program is to give classroom teachers the opportunity to expand their skill set so that they can better prepare students for life beyond high school.

The Boise WaterShed continues to offer free learning opportunities in person and virtually to reach broad segments of our community. This challenging time during COVID has afforded staff the opportunity to learn distance learning techniques, improve familiarity with video editing and production, and critically evaluate lesson plans and offerings for teachers.

Climate and Water Science Center

The Boise WaterShed continues to make major progress on the plans to move to a Climate and Water Science Center. A partnership with Dr. Jen Pierce at Boise State University yielded a new Climate Literacy teacher workshop, noted above. A new middle school Weather and Climate lesson was developed. Staff participated in on-line climate change training and discussion offered through the National Network for Ocean and Climate Change Interpretation (NNOCCI.)
Communication

The city’s Be Well Boise platform was utilized to advertise the virtual program offerings this period.

- Featured on Channel 2’s Leaders in Learning segment. View [story](#).
- Partner non-profit, Boise WaterShed Exhibits Inc.’s fundraising efforts were featured in the Idaho Press. The full article can be found [here](#).
TO: Public Works Commission  
FROM: Rob Bousfield, Municipal Facility Prog Mgr. Sr.  
DATE: October 7, 2020  
RE: General Fund Capital Projects

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MAJOR PROJECTS, INITIATIVES, CURRENT ISSUES

Library Projects

Based on discussions with Mayor and Council in June, library system planning will be conducted to baseline existing services and infrastructure, engage the community to establish service goals, and develop and evaluate alternatives for future investments. Public Works will assist Library staff in this effort, which is expected to take approximately 3 years. In the near-term staff are assisting with site and repair & maintenance planning.

Fire Projects

Staff have evaluated alternatives for Fire Station 5 and, based on Council feedback in June, additional options will be studied. Additionally, planning for a new station in the northwest will begin in October, and both stations are anticipated to begin construction in 2022/2023. A remodel and condition project is currently underway for Fire Station 6, which is anticipated to begin construction in early 2021.

Police Downtown Station

Construction on the downtown district station began in late January and is anticipated to be completed in late October. The project is currently on budget and on schedule.

Building Facility Planning

As discussed in the September meeting, staff are continuing work to develop a long-term plan to meet various building needs. Alternatives analysis is starting and strategic recommendations are expected by the end of December.

Facility Upgrades

- Several smaller remodel projects at City Hall and City Hall West are under construction.
- Planning work is underway for several interim space needs. Staff are partnering with Information Technology department staff to test how teleworking changes office space needs.
Numerous repair and maintenance projects are underway. Staff has been working with consultants to review the appropriate type and sizing of several key HVAC components at City Hall. The contract has been issued for the first package and that equipment update is anticipated to result in significant energy savings. Numerous smaller repair and maintenance projects have been completed.
TO: Public Works Commission
FROM: Jon Gunnerson, Engineer II
DATE: October 7, 2020
RE: Geothermal and Irrigation Systems Report

GEOTHERMAL

Proactive Repairs
Proactive repairs continued over the summer to improve system reliability and minimize unscheduled interruptions. In FY 19, the geothermal system experienced 25 unscheduled interruptions compared to 4 in FY 20. As a result, the geothermal system has a year-to-date (YTD) reliability rate of 97.2% and, excluding these proactive projects, has a reliability rate of 99.8%.

The proactive repairs have shown effective as demonstrated by a limited number of line breaks this past season further highlighting the importance of these proactive upgrades.

Production Well Connectivity and Control
Tracking and monitoring of pumping conditions is currently being upgraded to include the latest technologies and connectivity. New fiberoptic connections coupled with upgraded Programmable Logic Controllers (PLCs), among other enhancements, will greatly enhance the systems operations. Final upgrades are being completed and will be fully operational prior to the upcoming heating season.

Improving Asset Management Processes
Public Works staff is collaboratively implementing new asset management programs to better track, predict and prioritize work. Data-driven decision making will provide new mechanisms to provide a higher level of service to geothermal customers. These efforts will also help inform staff decisions, including system vulnerabilities and more accurate accounting.
**Geothermal Aquifer**

The geothermal aquifer is in good condition. The minimum water elevation (March 2020) and the maximum elevation (September 2020) both remained higher than the previous year (see Figure 1). Both are indicators of improving aquifer levels. These maximums are likely due to the warmer than average winter coupled with COVID-19 business closures in the spring and early summer. The health of the aquifer is also benefiting from the successful reinjection programs of the City and other local geothermal districts.

![Figure 1 Water Level Comparisons](attachment:GeothermalIrrigationProjects.png)
PRESSURE IRRIGATION

All five Boise Municipal Irrigation District (BMID) systems are operational and providing pressure irrigation to eleven subdivisions in west Boise.

Minimal maintenance or repairs were required on the systems this year; mostly as a result of the dedication from the Utility Maintenance operators and the work they have completed over the past several years.

All systems will be winterized in October and serviced for the upcoming year.
TO: Public Works Commission
FROM: Robyn Mattison, Asst. City Engineer and Rich Wiebe, Asst. City Engineer
DATE: October 7, 2020
RE: Water Renewal Fund Capital Projects

MAJOR PROJECTS, INITIATIVES, CURRENT ISSUES

Water Renewal Engineering: Major Projects Status

Water Renewal Utility Plan

Adapting to the required operational changes for COVID-19 meant changing the communications plan for 2020. The planning team updated the planned approach to adjust the number of required meetings and presentations and consolidated the conversations with the advisory group and stakeholder groups to meet the new schedule. As a result, the planning team presented the final recommendations of the Utility Plan to the Public Works Commission and City Council beginning in June. Final adoption of the plan by Council is planned for October 13th.

The cost of service study continues to run in parallel to the main planning process. Because the financial model and rate recommendations are dependent on the final plan decisions, the financial policy discussions will happen in late 2020 thru early 2021. This timing will also allow the planning team to update the models based on revenue impacts from COVID-19.

Lander Street Water Renewal Facility (LSWRF) Plant-Wide Improvements

The Lander Street (LS) Program includes projects to meet future total phosphorus (TP) limits and to replace aging infrastructure. A Preliminary Engineering Report (PER) has been approved by Idaho Department of Environmental Quality (IDEQ) for preliminary treatment, tertiary treatment, ultraviolet (UV) disinfection, and associated site civil improvements.

Construction of the early civil package began in July 2019 and is nearly complete. This work included a new facility entrance driveway off Veterans Memorial Parkway and a new greenbelt access path around the west side of the pond from Lander Street to the greenbelt. A new public restroom facility will also be installed as part of this package.

Construction of the new headworks and UV facilities began in early 2020. Excavation for the Headworks and UV buildings has been completed. Concrete pours for the Raw
Sewage Pumping Station are nearly complete with only the top slabs and interior concrete remaining. The headworks concrete is approximately 30% complete. UV footing construction will begin in the next few months. Yard utility work continues as allowable with the schedule and site constraints.

The team determined it would be beneficial to bring a consultant on board to assist with program management for future phases of capital improvements at the Lander Water Renewal Facility (WRF). The city will be able to utilize the expertise of an experienced team to help develop program management systems and approaches to more effectively prioritize and manage project delivery for multiple capital projects. It is anticipated that systems and tools developed for this program will be expanded throughout the utility, and perhaps citywide. An RFP for program management support services was issued in February 2020 and Stantec was selected. Phase 1 of the program is to audit existing resources, processes, and tools and develop a gap analysis to identify areas that can be built up to prepare for more complex capital expenditures. Phase 1 will take place July through September. Phase 2 will focus on developing a resource loaded schedule with all the projects running in parallel and start closing the process and tools gap based on City needs.

**West Boise Water Renewal Facility (WBWRF) Tertiary Treatment**

An evaluation of Tertiary Treatment alternatives at the West Boise Water Renewal Facility (WRF) is being conducted using a business case evaluation (BCE) approach. Treatment technology alternatives considered are sized to meet the expected WBWRF portion of total phosphorus using the combined loading targets on the Boise River. Additional pilot testing is expected to start in the fall of 2020 to confirm design criteria and loading assumptions made in the selection of the lowest potential total asset cost (PTAC) alternative. Detail design will be started after pilot testing results are evaluated.

**Secondary Treatment Enhancement Project**

The goal of the Secondary Treatment Enhancement Project (STEP) is to improve and add reliability to both WRFs ability to remove phosphorus in the secondary treatment process. A project at WBWRF to install baffle walls in the south aeration basins is complete.

The next project that has been kicked off is chemical addition at WBWRF. This project will help trim the phosphorus coming into the plant reducing the load and aiding biological phosphorus removal. The chemical addition project is substantially complete. Start-up activities will occur at the end of September 2020.

The STEP project at LSWRF will be incorporated into the next phase of improvements at the facility.
Sewer Design: Collection System Projects Status

Sewer Rehabilitation Program

While we continue to focus on our existing rehab projects in progress, several new projects are now on the list that pose unique risks and challenges.

- **RSP 334 - 2020 Small Diameter Rehab - Construction**
  - Completing construction of the 35 worst segments (approximately 2 miles) throughout the system. These projects address the worst and oldest pipes in the system and replace them with longer-lasting plastic pipe. They require close coordination with the contractor, property owners and utilities.

- **RSP 332 - HP Line Rehab – Design/Bidding**
  - Project consists of 500 LF of 30-inch and 2300 LF of 42-inch sewer rehabilitation with open cut, slip-lining and UV cured-in-place liner.
  - Contractor prequalification complete – six contractors selected.
  - Property owner coordination – the location of this project, with sewer running through back yards, has required extensive property owner coordination. Coordination and negotiations are ongoing and may push construction into 2021.

- **RSP 349 - 2021 Veteran’s Administration Rehab – Design**
  - Project consists of replacement of 12 segments of 8 and 10-inch pipe with 12-inch plastic pipe to relieve existing capacity issues downstream of the VA hospital.
  - Project design is nearing completion with construction planned for FY 2021.
• **RSP 366 - UV Cured in Place Rehab - Design**
  o Approximately twenty segments throughout the system were combined into a single cured-in-place plastic (CIPP) pipe project to provide a larger project and a better economy of scale for bidding. This project includes several difficult locations where a less intrusive CIPP technology works well.
  o Project design is nearing completion with construction planned for FY 2021

• **RSP 349 - 2021 Small Diameter Rehab - Design**
  o Fifteen segments of traditional small diameter rehab throughout the system will be completed. These segments will include structural deficient segments with additional attention to root control goals.

• **RSP 337 – Ridenbaugh and South TK Avenue Crossing - Design**
  o Rehab or replacement of higher risk segments of 24-inch sewer under and near an elevated portion of the Ridenbaugh Canal near South TK Avenue. This project will address existing pipe condition as well reducing risk by improving access for inspection and maintenance.
  o This project moved up our priority list as a result of our SPORE (System Planning Operation and Rehabilitation) program and additional inspection of higher risk lines such as the canal crossings and lines crossing under the runways.
  o The project is on an expedited schedule for completion of the crossing prior to the 2021 irrigation season.

• **RSP 389 Sewer Rehab New York Canal, Gloucester and Shoshone – Planning/Preliminary Design**
  o Rehab or replacement of higher risk segments under and near an elevated portion of the New York Canal. It includes three crossings, an 18-inch and 8-inch sewer crossing near Gloucester, and a 12-inch crossing near Shoshone. This project will address existing pipe condition as well reducing risk by improving access for inspection and maintenance.
  o Like project RSP 337, this project also moved up on our priority list as a result of canal crossing inspections.
The project is scheduled for completion in FY 2022.

Biosolids Transmission Line - Design
- The biosolids line carries processed biosolids from the LSWRF to the WBWRF through approximately 29,000 feet of 6-inch pipeline, mostly made up of fiberglass pipe. This pipeline is critical to the operation of the LSWRF and our solids handling system. The pipeline has shown an ongoing trend of loss of performance and inspection has identified structural defects as well as debris deposits. Staff is moving forward with rehab and replacement of the first 10,000 feet of the pipeline in three phases.
- We are planning on designing and constructing Phase 3, the first pipe bursting phase, in house to alleviate operational challenges during construction. This is possible with highly skilled utility maintenance construction crew members and engineering inspection staff experienced with pipe bursting.
- The first three phases of the project are currently under design with construction planned for FY 2021.

Miscellaneous Projects
- Harris Ranch Lift Station Upgrade – Lift station improvements provide increase capacity to prepare for ongoing growth in the area. This project is under construction and slated for completion this fall.
- Glenwood Lift Station Improvements – This project has been split into several phases. The first phase, currently under construction, replaces the original electrical panel and electrical components.
TO:         Public Works Commission  
FROM:      Kate Harris, Water Quality Environmental Program Mgr.  
DATE:      October 7, 2020  
RE:        Water Quality Regulatory Report  

This memo summarizes major water quality regulatory items for the City of Boise.

NATIONAL OR IDAHO POLLUTANT DISCHARGE ELIMINATION SYSTEM (IPDES) PERMITS  
Water Renewal Facilities  
City staff met with the Idaho Department of Environmental Quality (IDEQ) throughout 2020 with the objective of working toward the issuance of the new IPDES permits. The IDEQ meetings have provided a common understanding of the structure and content of the draft permits so the City can move forward with facility design and construction. The City submitted updated IPDES permit applications in October 2019 and we anticipate draft permits for City review in early 2021.

Geothermal Program  
City staff submitted a revised IPDES permit application for the Geothermal System in July 2019 and received a completeness determination in August (2020?). We are continuing to work with IDEQ toward permit reissuance.

RECYCLED WATER REUSE PERMIT  
The Recycled Water Reuse permit application submission has, temporarily, been put on hold. The City will be developing a community engagement approach for recycled water upon approval of the Water Renewal Utility Plan. The approach will provide an opportunity for citizen stakeholders to assist and provide feedback to the City of Boise in examining the future of reuse in Boise and specific project concepts.

IDEEQ RULEMAKING AND ASSOCIATED ACTIVITIES  
Idaho Pollution Discharge Elimination System Permits  
The IDEQ has issued one, new, IPDES permit in 2019 to the City of Shoshone. Additional permits for the City of Cascade and City of Montpelier are in draft form. City staff commented on boilerplate language in the first permit and are happy to report that this language has been revised in the City of Montpelier draft permit.
**Negotiated Rulemaking**

**Arsenic**

In May 2016, the Environmental Protection Agency (EPA) entered into a consent decree with Northwest Environmental Advocates to reconsider EPA’s 2010 approval of Idaho’s human health criteria for arsenic. In September 2016, EPA disapproved Idaho’s human health criteria of 10 µg/L arsenic for both consumption of fish only and consumption of fish and water. The consent decree requires that EPA propose new human health criteria for arsenic by November 15, 2018, and that EPA either approve Idaho’s submittal of revised human health criteria for arsenic or promulgate federal criteria by July 15, 2019. In June 2018, EPA requested the court modify the dates in the 2016 consent decree. The court granted the request. The new dates are November 15, 2022, for EPA to propose and November 15, 2023, for EPA to finalize federal criteria for Idaho in absence of EPA approval of a criterion adopted by Idaho. Rulemaking has been ongoing to enable Idaho to adopt human health criteria for arsenic under state rulemaking and may prevent federal promulgation of criteria for Idaho by EPA.

State rulemaking, rather than federal promulgation, is important to the City of Boise as well as the overwhelming majority of other municipalities in Idaho. Ambient (instream) concentrations have arsenic concentrations higher than the current EPA criteria. For water renewal facilities and wastewater treatment plants that discharge to these waterbodies, this would translate into discharge permit limits and a total maximum daily load (TMDL) that is driven by background conditions being naturally higher than the criteria.

DEQ is drafting the text of the rule in conjunction with a voluntary negotiating committee made up of persons having an interest in the development of this rule, including the City of Boise. DEQ has agreed to explore the use of updated arsenic toxicity information and bioaccumulation factors to derive human health criteria for consumption of fish only and consumption of fish and water using Idaho specific inputs for cancer risk factor and fish consumption rates. However, EPA’s update of the IRIS database has been delayed due to the pandemic. In addition, DEQ is collecting ambient water quality data to determine background concentrations of arsenic in Idaho waters and potential feasibility of achieving ambient water quality criteria derived for arsenic. Similarly, those efforts were scaled back in 2020 due to the pandemic.

The next meeting is in November 2020.

**Ammonia**

Ammonia was included in the list of topics presented in public meetings during the DEQ’s triennial review. The DEQ will be releasing the standards selected for revision and the prioritization list later this month.

**NATIONAL REGULATORY ITEMS OF INTEREST**

Most regulatory items have been put on hold due to the pandemic.
Reduce and Reuse Program

Reducing the amount of waste we create, all of which needs to be transported, sorted, recycled or landfilled, is one of the most impactful ways to conserve our finite resources. As a result, the Curb It team has identified an opportunity for developing the “Reduce and Reuse Program” which will help focus our community’s attention on limiting the consumption and discarding of materials, particularly those designed to be single use.

Staff presented an introduction to the proposed Reduce and Reuse Program for Public Works Commission review and input. The Commission shared several suggestions which will be considered by staff during development of the long-term program plan. Website content has been provided to Community Engagement and the addition of this program to the Curb It site will be completed shortly. The next step is officially launching the Reduce and Reuse Program in late 2020 to highlight the opportunities for waste reduction in our community. Several waste reduction commitments have been developed and are awaiting review by Mayor and Council.

Commercial Waste

Staff is identifying methods to reduce waste in the commercial sector. Historically, the focus of local materials management programs has been on residential waste. The tonnages of commercial and residential wastes are shown below with commercial waste accounting for almost twice that of residential. Commercial/business waste components vary much more than residential/household waste and are therefore more difficult to target for diversion.

A pilot program with a local construction company (ESI), Timbercreek Recycling and Republic Services has begun diverting certain construction wastes (wood and sheetrock) for recycling at a local facility. The wood and sheetrock are ground together and used for cattle bedding. In the first two months of the pilot (June and July), we were able to recycle over 380 cubic yards of material that would have been taken to the landfill (see Figure 1). We have also gained valuable feedback on improving
signage and contamination. The pilot will be completed in October and an evaluation report will be developed.

![Image](image1.png)

Figure 1 Boise construction site diverting wood for the pilot program

**Compost Program**

The curbside compost program and the Twenty Mile South Compost Facility (TMSCF) is approaching its fourth fall leaf season. The composting program has helped to reduce residential waste taken to the landfill by almost 30% since 2016. This spring, we saw a 13% increase in tons of material collected in the compost program compared to the same time frame in 2019. This was likely due to a combination of factors including a very wet spring and many people being at home doing more yard work.

As TMSCF is accepting more material than ever, Republic Services and Materials Management staff are collaborating to assess the need for compost facility expansion. Staff are assessing existing and possible compost procedures and technologies and making projections for program growth in the years to come. Through staff research and expert advice, the goal is to expand the compost facility to meet the city’s current and future needs.

Republic Services and the city have recently re-certified the TMSCF’s Operating Plan with the Idaho Department of Environmental Quality and the Central District Health Department. The Operating Plan dictates how the facility is run and what is permitted
onsite. Materials Management staff have been working closely with Republic Services site operators to make sure the Operating Plan is updated and positioned to help the program grow in the next three years.

The compost giveback locations at the Idaho Botanical Gardens and near the West Boise Water Renewal Facility continue to operate throughout the year and are preparing for a busy fall giveback season.

Public Works staff are partnering with Parks & Recreation to provide approximately one cubic foot of compost to each participant in the City of Trees Challenge in late September. Five hundred residents will receive free compost, mulch and a local tree to plant as part of this exciting new initiative.

**Fall Leaf Collection**

Staff is preparing for the annual leaf collection season in the City of Trees. Volumes of leaves collected and taken for composting will increase dramatically during October and November. Staff has prepared an updated plan in collaboration with Republic Services to provide customers with the best service possible during this seasonal event. We have also added a section to the plan addressing the potential for Republic staff shortages due to COVID-19 or flu season.

**Hefty EnergyBag Program**

The Hefty EnergyBag program continues to be popular with Boise residents. This program is designed to recover hard-to-recycle plastics and use them to produce energy resources. Since EnergyBag collection started in early May 2018, over 600 tons of plastics have been collected and the community is averaging 25-30 tons per month. Renewlogy has received the equipment for upgrading their facility and is in the process of design and testing at their Salt Lake City facility. Completion of these needed upgrades is currently estimated for late 2020.

Continued delays in processing at Renewlogy and the need for identifying secondary market options has prompted a Life Cycle Analysis (LCA) to be performed by a third-party consultant. The city has received a draft version of this analysis which is slated to be peer reviewed and finalized by fall of 2020. The draft LCA identifies environmental benefits through utilizing the EnergyBag material as a fuel alternative to coal in the cement manufacturing process. During Renewlogy’s processing delay, we have decided to temporarily send collected EnergyBags to a cement manufacturing facility in Utah.

Once the final draft of the LCA is available, we will use the conclusions as a guide for determining future end market options for the collected EnergyBags. Based on the results of the LCA and Renewlogy’s progress, staff will also be making a recommendation for another EnergyBag voucher/coupon distribution to Boise residents in early 2021.
In the interest of having multiple markets for our material, another potential market for EnergyBags is being explored. Hefty EnergyBag partners and city staff met with a company that produces building materials from recycled plastics. A sample of our exact materials from Boise will be sent to their facility in California to test how it performs in their process. If the test goes well, a pilot project (funded by Hefty/Reynolds) could start early next year. The company, ByFusion (https://www.byfusion.com) makes blocks from discarded plastic that can be used in place of concrete blocks. More research on the viability of this option will be conducted prior to considering this process as a long-term market for our materials.

**COVID-19 Impacts**

The impacts of the COVID-19 pandemic on Materials Management include several programs which were suspended temporarily. Glass drop-off, compost give-back, large item collection and Hazardous Waste collection sites were all suspended for approximately a month and a half. These programs are all currently open and operating with proper precautionary measures. Regular trash, recycling, and composting collection services have not been interrupted during the pandemic.

We have also tracked an interesting shift in residential and commercial waste during the pandemic. Waste volumes and disposal costs increased substantially (an average of 13%) in the residential sector with many people working from home. This was balanced by a commercial waste decrease at a similar rate due to business closures. The changes in waste production in different sectors has begun to shift back towards a more normal distribution over the last few months with businesses opening and some returning to the office.
TO: Public Works Commission
FROM: Steve Hubble, Climate Action Sr. Mgr
DATE: October 7, 2020
RE: Stormwater Program Report

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) STORMWATER DISCHARGE PERMIT COMPLIANCE

Private Stormwater Facility Inspection Program

The MS4 Permit requires the development of an inspection program for certain private stormwater management facilities. Staff has developed a prioritization matrix to determine our inspection workload and identified “high priority” locations which will require annual inspections.

Staff is preparing to complete the annual inspections for 2020 this Fall. Staff will coordinate with private property owners during the inspection process as the owners will be responsible for resolving any maintenance issues at the facilities.

Annual Report and Stormwater Management Program Plan (SWMP) Updates

The MS4 Permit requires that an Annual Report be developed each year and submitted to the United States Environmental Protection Agency (EPA). The City completed its report in January, and it was submitted to the Ada County Highway District (ACHD). ACHD compiled the Annual Reports for all six co-permittees and submitted them to EPA. The City will begin work this fall to develop this year’s annual report.

The MS4 Permit also requires that the City develop a Stormwater Management Program Plan (SWMP). The SWMP serves as the City’s work plan to implement Permit requirements. The Permit requires that the SWMP is updated annually and posted to the Partners for Clean Water website for public comment. The SWMP was updated for 2020 in May.

Public Education and Outreach

The MS4 Permit requires the development and implementation of public education activities on stormwater and water quality for city residents and businesses. The City is the lead agency for public education and outreach on behalf of our co-permittees. As one part of our education and outreach program, Public Works and Community Engagement staff implements an annual media campaign.
Staff is currently implementing the 2020 campaign. In July, messaging was focused on pet waste. During September, the focus will shift to yard waste and leaf collection with the goal of encouraging residents to keep leaves out of the street. This helps to prevent the collection of debris in storm drains to minimize localized drainage issues and flooding and to prevent nutrients from decomposed leaves and yard waste from entering the River and other local waterways. An example of our outreach material is provided below.

MS4 PERMIT RE-APPLICATION

The MS4 Permit, issued to the City and its five co-permittees, expired on January 30, 2018. On behalf of the co-permittees, the Ada County Highway District (ACHD), submitted a re-application for permit renewal on July 28, 2017. EPA received the re-application and informed the co-permittees of application completeness and administrative continuance of the existing permit on October 11, 2017.

Recent EPA activities indicate work to update other Treasure Valley MS4 permits, therefore indicating that it is likely that EPA could shift to updating our permit in the near-term. Following development of the draft permit, the City and our co-permittees will provide relevant comments to EPA. Once permittee and public comments are resolved, the permit will become effective.
INTRODUCTION

With the creation of the Climate Action Division, the Director’s Report for air quality, energy and sustainability is being reformatted as the Climate Action report. The report will include details of existing program activities covered in past reports and will include additional information as the work of the climate action division commences and expands.

An introduction to and overview of the Climate Action Division will be provided at the October Public Works Commission meeting.

AIR QUALITY

- Staff often receives complaints about air quality during the summer. Many complaints are related to construction site dust and related activities. The inquiries are referred by Public Works staff to Planning and Development Services, Erosion and Sediment Control inspectors or Code Enforcement inspectors for follow up and resolution.

CLIMATE

Climate Action Planning

- Staff has executed a contract and scope of services with the Brendle Group (Boise’s Energy Future plan consultant) to support our climate action planning initiatives. The goal of the plan will be to coordinate climate action across numerous city programs while identifying greenhouse gas emission reduction goals and identifying actions to build resiliency in our community. Work commenced on the project in September.

Greenhouse Gas Emissions Inventories

- Historically, staff has developed municipal and community wide greenhouse gas emissions inventories every five years, beginning in 2005. With Boise’s increased focus on climate action, the inventories are now being updated on an annual
basis. Staff recently completed the 2018 inventories and is currently developing the 2019 inventories. The inventories will be published to the city website and available to the public for review.

ENERGY

Boise’s Energy Future

- After Council approval of Boise’s Energy Future, staff has commenced initial implementation activities including outreach on existing utility efficiency programs and continued participation with regulatory activities at the Idaho Public Utilities Commission (IPUC)

- Staff is preparing to commence additional analysis and planning concerning our thermal energy sources (natural gas and geothermal) to establish quantitative goals for clean energy transition and to identify more detailed implementation actions

Municipal Facility Initiatives

Climate Action Division staff implements and supports various activities related to municipal energy use, efficiency and renewable energy including:

- Supporting Electric Vehicle (EV) implementation in the City vehicle fleet in coordination with the Department of Finance and Administration

- Supporting an update to City solar panel policies and procedures supporting our designation as a Solsmart Gold community

- Partnering with Facilities Services and Operations (FSO) to develop an electrification analysis for several city buildings and facilities to reduce natural gas consumption and transition to clean thermal energy sources

- Assisting Engineering staff that support the street light program to obtain rebates from Idaho Power for various upgrades

- Analyzing municipal energy use data for 2019

OTHER PROGRAMS AND INITIATIVES

Treasure Valley Clean Cities Coalition (TVCCC)

- TVCCC’s many planned community activities in 2020 have been impacted by COVID-19. However, some events have been adjusted to an on-line format. A virtual local EV interest group meeting was held in August to update attendees on local activities. Additional webinars are being held in coordination with an Oregon Clean Cities Coalition and in partnership with Idaho Power.
• A Commercial/Industrial EV Showcase with information on electric forklifts, shuttles and small utility vehicles and a webinar directed at dealerships to inform them about status of public interest and technology/infrastructure developments related to EVs are being developed and will be made available before the end of CY2020.

**Urban Sustainability Directors Network - Virtual Communications Conference**

• Due to COVID-19, Boise was unable to host an in-person conference for the Urban Sustainability Directors Network (USDN) planned in May. However, USDN will instead host a virtual conference over the next several months and several employees from the Climate Division will be participating to learn new techniques for community engagement to support our climate action activities.

**Robert Wood Foundation Grant Update**

• The city responded to a request for proposals (RFP) from the Robert Wood Johnson Foundation (RWJF) funds research to address the intersection of public health, equity and climate issues. RWJF received a significant number of proposals and unfortunately ours was not selected for funding.

• Staff will continue to identify other opportunities for supplemental funding that support climate action and other related initiatives.

**City of Trees Challenge**

• On Arbor Day (April 24, 2020), Boise launched the City of Trees Challenge with the goal to plant 100,000 trees by 2030. That’s one tree for every household in Boise. This initiative will address climate change and reduce greenhouse gas emissions by mitigating carbon through increasing the tree canopy across the City. This project is a joint effort with the Treasure Valley Canopy Network and other community partners.

• Boise is also one of the first cities to submit a pledge to 1t.org – also known as the "trillion trees platform." The U.S. Chapter launched in August and Boise is pledging to plant an additional 235,000 seedlings in Idaho forests through a partnership with the Nature Conservancy of Idaho. Link to Boise’s 1t.org pledge: [https://us.1t.org/pledge/city-of-trees-challenge/](https://us.1t.org/pledge/city-of-trees-challenge/)

• On Friday, September 25, 2020 the city plans to re-launch the City of Trees Challenge by giving away 500 trees to be planted at households and businesses within Boise city limits. The trees will be registered for and picked up at the Boise Farmers Market during the month of October.