

**Report of the
Idaho Falls
Citizens Review Committee for
Public Works**

William Phoenix (Chair)

Hope Forsmann

Samuel Pole

Gerald Sehlke

Syd Withers

September 2015

TABLE OF CONTENTS

1	EXECUTIVE SUMMARY.....	4
2	CITIZENS REVIEW COMMITTEE CHARTER.....	6
3	ACRONYMS	7
4	INTRODUCTION	8
5	BACKGROUND.....	9
5.1	PUBLIC WORKS DEPARTMENT	9
5.2	ENGINEERING DIVISION	9
5.3	GIS DIVISION.....	9
5.4	SANITATION DIVISION	10
5.5	STREET DIVISION	10
5.6	SEWER DIVISION.....	10
5.7	WATER DIVISION	11
6	OBSERVATIONS.....	12
6.1	PUBLIC WORKS DEPARTMENT	12
6.1.1	ENGINEERING DIVISION	13
6.1.2	GIS DIVISION	13
6.1.3	SANITATION DIVISION.....	13
6.1.4	STREET DIVISION	14
6.1.5	SEWER DIVISION	16
6.1.6	WATER DIVISION.....	17
6.1.7	UNINCORPORATED PROPERTIES.....	18
7	PUBLIC WORKS STAFF ISSUES OF INTEREST	20
8	RECOMMENDATIONS	21
8.1	PUBLIC WORKS DEPARTMENT	21
8.1.1	ENGINEERING DIVISION	21
8.1.2	GIS DIVISION	23

8.1.3	SANITATION DIVISION.....	24
8.1.4	STREET DIVISION	24
8.1.5	SEWER DIVISION	25
8.1.6	WATER DIVISION.....	25
8.1.7	UNINCORPORATED PROPERTIES.....	26
9	COMMITTEE BIOGRAPHIES.....	27
10	REFERENCES.....	29
11	ACKNOWLEDGEMENTS.....	30

1 EXECUTIVE SUMMARY

The Citizen's Review Committee (CRC) for the Public Works (PW) Department of the City of Idaho Falls was asked to evaluate the PW Department, identify its strengths, weaknesses, and areas of improvement and offer opinions about its operation. The six divisions of the Public Works Department; Engineering, Geographic Information Systems (GIS), Sanitation, Street and Water, are the largely unseen foundations providing a wide range of vital services to help ensure a healthy, orderly and safe community. Some involve very expensive capital infrastructure and others significant intellect, training and education.

The objective of the report is to make observations and recommendations concerning the operations and management of the PW Department, based on the material presented to the CRC. It is beyond the scope of this document to fully describe the considerable scope of activities conducted within the PW Department, and the technical depth and operation of each of the six divisions within the Department. Therefore, this report simply summarizes the CRC's impressions of the Department's operations, responsibilities, strengths, and key opportunities for improvement.

The CRC has been greatly impressed with the operation of the PW Department and its personnel. The Department appears to be well run in a frugal, responsible manner. It is an asset to the City of Idaho Falls. The Department in its current state is testament to the high level of support from Mayors and City Councils for many years.

The CRC was also impressed by the dedication and high quality of personnel at all levels. The staff seems to be happy, dedicated and effective as exemplified by Chris Fredericksen, PW Department Director and the late Fred Rowe, Waste Water Treatment Plant Foreman. Stories about women baking cookies for the Sanitation employees suggest widespread community appreciation for the PW Department's services.

There are examples of forward proactive thinking ranging from preparedness for emergencies such as short-term and longer-term power outages and flooding, sleaving the inside of the sewer system piping, anticipating future sewer treatment and water supply needs, staffing and maintenance of equipment.

The CRC believes that some activities should receive greater funding. For example, the City's infrastructure, mainly maintenance of the fresh water and sewer mains, are presently not funded in a long-term, sustainable manner. The City should consider developing sustainable water and sewer infrastructure and equipment funds analogous to the City's existing Municipal

Equipment Replacement Fund (MERF) in order to allow the PW Department to proactively and sustainably manage the funding of ongoing infrastructure and equipment maintenance and upgrades. To enhance the PW Department's planning and management capacity it should consider developing a "life cycle planning" approach to systematically assessing, tracking, managing, and funding critical infrastructure and high capital cost equipment. In addition, a number of city streets have never been paved, some of which date back for more than a hundred years; the City should pave them. Finally, the GIS Division has one full time employee; the city should provide funding for a backup to eliminate a potential single-point-failure in the GIS Division.

The members of the CRC found serving on it to be a very interesting, enjoyable and educational experience and are pleased to report that the PW Department is generally being well managed and is in very good condition.

2 CITIZENS REVIEW COMMITTEE CHARTER

The Citizen's Review Committee (CRC) for the Public Works (PW) Department of the City of Idaho Falls has been established by Mayor Casper. The purpose of the CRC is to review the budget and operations of the PW Department, including its six divisions, and to make observations and recommendations concerning the operations and management of the PW Department. In Mayor Casper's introductory remarks at the first meeting of the four committees chartered to review the four departments to be reviewed in 2015, the Mayor asked for the following to be considered in preparation of a report to be submitted by each committee in September 2015. The Mayor asked that the report address the balance of frugality with sufficiency and responsibility, safety, fairness and equality, property values as affected by actions of the City, protecting the tax base, Citizen's rights, and responsibility to employees (References 1 and 2). The CRC addressed the areas that seemed to be most applicable to the PW Department, particularly frugality with sufficiency and responsibility, safety, fairness and equality and responsibility to employees.

3 ACRONYMS

- CRC - Citizens Review Committee
- FTE - Full Time Equivalent (employees)
- GIS - Geographic Information System
- IBSD - Iona-Bonneville Sewer District
- INL - Idaho National Laboratory
- MERF - Municipal Equipment Replacement Fund
- PW - Public Works

4 INTRODUCTION

This is the report of the Citizen's Review Committee (CRC) for the Public Works (PW) Department of the City of Idaho Falls. The CRC for the PW Department is one of four committees established by the Mayor in 2015 to review four departments, observe their operation, and provide recommendations for areas of improvement. Four other city departments were previously reviewed by CRCs in 2014. The CRC initially consisted of seven members, Bryan Bjorgaard (Committee Chair), Hope Forsmann, William Phoenix, Samuel Pole, Gerald Sehlke, Gloria Valenti, and Sydney Withers. When Bryan Bjorgaard accepted a position with Idaho Falls Power and left the CRC, William Phoenix was appointed to the chairmanship. Gloria Valenti only attended the initial meeting and is considered inactive.

The initial meeting was devoted to an on-site tour. The tour included the sewage disposal plant, fresh water pumping and storage station, and a relatively new fresh water storage station. For the next eight committee meetings, Chris Fredericksen, PW Department Director, was present and he identified and described the Divisions that comprise the PW Department: Sewer, Water, Street, Engineering, Geographic Information Systems (GIS), and Sanitation. During the first meeting, Mr. Fredericksen presented an overview of the Department. In the subsequent meetings information regarding each division's purpose, structure, operation, and budget was presented and discussed. In addition to the summaries and budgets in his presentations, Mr. Fredericksen gave the CRC web links and/or forwarded electronic copies of studies commissioned by the City of Idaho Falls, Bonneville County and others. Personnel from the divisions sometimes attended the meetings to provide information and answer questions. The remaining meetings were devoted to internal committee discussions of the information provided by the PW Department and writing this report.

The CRC discovered that the topics addressed in this report are of interest to City management as well as the community at large. For example, during this period, a number of these topics were covered by the local newspaper, the Post Register (References 3 through 10). In addition, when the CRC toured the sewage treatment plant, two reporters joined the tour (Reference 4). Water shortages and water meters were also addressed by the Mayor and it was noted by the CRC that the City of Ammon is pursuing water meters (Reference 5). Finally, there were numerous other articles regarding the City's summer road resurfacing and other street work, and sewer and water main replacements.

5 BACKGROUND

The PW Department is large and has considerable scope and depth. The following summarizes each Division within the Department (References 11 through 17).

5.1 PUBLIC WORKS DEPARTMENT

The PW Department consists of six Divisions and employs 120 full time employees. It has an operating budget of approximately \$46.3 million of which 88% is funded through various utility rates and fees and 12% is funded through the city’s general fund (property taxes). Each of these Divisions is discussed in more detail below. PW Administration has four employees that coordinate and provide support and direction to the six PW Divisions.

5.2 ENGINEERING DIVISION

The Engineering Division has 15 full time employees who are responsible for the design and management of construction projects, City-related surveys, conducts traffic-related engineering studies, and provides information for the public rights-of-way, water, sewer and storm drain systems. They are supplemented by up to 10 part time (seasonal) employees. Additionally, the Division provides engineering-related services for other Divisions within the City, including maintaining engineering and infrastructure related information, providing maps, and assisting the public. The Division is also responsible for maintaining all City traffic signs and painting the streets (e.g., striping lanes) throughout the City. The Division has an operating budget of approximately \$1.40 million that is funded through the city’s general fund.

5.3 GIS DIVISION

The Geographic Information Systems (GIS) Division has one employee who coordinates GIS activities throughout the City of Idaho Falls government and assists city operating divisions to implement GIS technology. It provides training to city employees, assists in adopting GIS policies, provides custom programming, and other specialized services. In addition, the Division also assists city operating divisions by providing information to the public over the web via online maps. Examples of products it provides the City and the public include basic street maps, cadastral maps, aerial photos, utility maps and other service-related maps (e.g., maps on the location of construction projects, snow/leaf collection, sanitation routes). This information increases the City’s efficiency, helps with asset management, improves decision making and maintains open communication within the City and with the citizens of Idaho Falls. The Division has an operating budget of approximately \$0.14 million of which half is funded by Idaho Falls

Power and half by the PW Department. The Public Works Sanitation, Sewer, Streets and Water Divisions each pay 25% of the Public Works portion. With the exception of the 1/8 paid by the Street Division, utility rates fund the GIS Division.

5.4 SANITATION DIVISION

The Sanitation Division has 28 employees who are responsible for collecting solid waste from residential and commercial properties to help maintain a clean and safe environment for the residents of the City of Idaho Falls. The Division provides services to 23,521 residential and 1,800 commercial accounts. In addition, the Division maintains 13 recycle bins around the City and a mulch pile created from fall leaves and discarded Christmas trees that are picked up around the City. The Division has an operating budget of approximately \$4.83 million of which 100% is funded through utility fees.

5.5 STREET DIVISION

The Street Division has 21 employees who are responsible for maintaining the streets, bridges, alleys and public parking lots within the City. The services provided by the Division include inspecting and maintaining all public streets, highways, alleys, walks, pavements; managing and administering street cleaning, street repairs, snow removal; and enforcing all ordinances relating to the construction and maintenance of public streets, sidewalks, rights of way, easements and all utility and communication lines therein.

The Division oversees 630 miles of paved lanes, 4½ miles of unpaved roads, 151 bridges/structures and 34 miles of alleys, within the City. The Division has an operating budget of approximately \$5.34 million of which 75% is funded through various gas and sales taxes and 25% is funded through the city's general fund.

5.6 SEWER DIVISION

The Sewer Division has 35 employees who operate and maintain all sanitary and storm sewer infrastructure owned and/or controlled by the City. The Division services 23,595 non-metered accounts and four industrial accounts. It is responsible for and maintains 257 miles of main lines, 5,453 manholes and 31 lift stations. In addition it operates and maintains the Idaho Falls Wastewater Treatment Plant, which has a treatment capacity of 17 million gallons per day and currently receives an average of 9-10 million gallons of waste water flow per day. The Division also provides wastewater treatment services to the City of Ucon and the Iona Bonneville Sewer District (IBSD). The City of Ucon maintains its main line to the Idaho Falls system; the Idaho

Falls Sewer Division City maintains 88 miles of main line, 1,796 manholes and seven lift stations for the IBSD. The Division has an operating budget of \$18.3 million, of which 90.5% is funded through Idaho Falls utility fees for sewer and 9.5% is received for services provided to the City of Ucon and the Iona-Bonneville Sewer District.

5.7 WATER DIVISION

The Water Division has 16 employees who operate and maintain all public water supply and distribution facilities owned or controlled by the City. It has an operating budget of \$7.42 million. The operating budget is funded through Idaho Falls Utility fees for water. The Division provides services to 23,500 billable accounts. It maintains 310 miles of main line and 19 deep production supply wells. The water system has a maximum capacity of 61,950 gallons per minute and currently, the maximum demand is approximately 53,500 gallons per minute.

The Division has an operating budget of approximately \$7.42 million of which 100% is funded through utility fees.

6 OBSERVATIONS

6.1 PUBLIC WORKS DEPARTMENT

Each of the 6 divisions in the PW Department was reviewed by the CRC. The following sections provide observations that were determined worthy of further consideration and should be addressed by the City within time and funding constraints.

The following are some General Observations about the PW Department:

1. The PW Department has a goal for long-term sewer infrastructure upgrade/replacement; similar goals should be established in a lifecycle plan for all Divisions that have large infrastructure and large capital equipment costs that require long lead time for planning and financing. The GIS system already contains the data/information necessary for tracking infrastructure/equipment attributes (e.g., infrastructure/equipment type, installation dates, and estimated service life). The system can be expanded to include the cost, benefit, priority and risk attributes that are necessary for conducting life cycle planning. The system could then be automated with the appropriate flags for planning and tracking when various maintenance, upgrade and replacement projects are due based on their estimated service life, costs/benefits and/or their associated risks. Each of these attributes can be weighted based on estimated risks or established priorities.
2. The City Council strives to keep taxes and fees down, and that is admirable; however, as costs go up, either service goes down or budget deficits are incurred. For example, it has been seven years since the city raised water fees, therefore the Division has had inadequate funding to conduct routine upgrades or purchase critical equipment.
3. Emergency Preparedness for prolonged power outages appears to be well coordinated across the Water and Sewer Divisions, with Idaho Falls Power and Bonneville County. It does not appear that flooding will compromise the sewer system. There is sufficient storage and local generation at city wells and sewage lift stations to accommodate a power outage of up to 4 hours, and arrangements have been made with the County to replenish the generators if necessary. Portable generators can be brought to lift stations that do not have generators. The City recently conducted a drill to verify that personnel are trained and the necessary communication is in place. This Committee commends the City for its proactive and collaborative approach to Emergency Preparedness.

The following sections provide a summary of observations made by the CRC for each of the PW Divisions.

6.1.1 ENGINEERING DIVISION

1. The City of Idaho Falls is growing in both size and population; however the staffing size of the Engineering Division is not. The CRC has concerns about the Engineering Division having enough staff to meet the needs of the growing city.
2. The Division is currently in need of help relative to inspection services, design personnel, surveying/deed researchers. A particular area of concern is the Division's inspection services, it appears it is understaffed and inspections are not always completed in what is perceived as a timely fashion.
3. The Division's biggest concern is the sheer volume of work it has to address versus a relatively small staff. Historically, the Division had more personnel to manage the load when Idaho Falls was a smaller city. With larger demands and smaller staffs, there are potential pitfalls relative to managing peak workloads and managing future loss of staff.

6.1.2 GIS DIVISION

1. It appears that there is insufficient staff to meet the growing needs as the City's GIS system becomes more widely used throughout the City's various departments. The CRC's biggest concern is the sheer volume of work the GIS Division has to address with its staff of one. The GIS coordinator is the only person in the Division and he does not have adequate backup personnel. The CRC is concerned about having someone that is trained and has sufficient experience with the City's system to take over seamlessly in case the current GIS coordinator is no longer able to serve or to work with him if he needs assistance.
2. The GIS system has limited metadata (i.e., information about the data contained in the GIS system).
3. The Division's collaborative data sharing program with Bonneville County and the City of Ammon is a positive program and a good use of city resources.

6.1.3 SANITATION DIVISION

1. Costs in the Sanitation Division primarily occur from labor and equipment costs. The Division has concerns relative to the number of injuries associated with the collection of solid waste. Therefore, it has a plan in place to convert its fleet from hand-load to auto-load service in residential areas. Once this conversion is fully implemented, it will result in a change from eight hand-load vehicles to six auto-load vehicles and the existing four tilt-load and seven side-load dumpster trucks for commercial collection. Full implementation of auto-load will be phased in to allow for natural attrition of

employees and, therefore, avoid layoffs/forced downsizing. The CRC believes that this is a prudent and cost effective approach to managing this service.

2. Recycling is available via dispersed, stationary city recycle bins and private providers. The cost to provide this service is about the same as the funds the city receives from the sale of the recyclable materials to local recycling businesses. This is an important service to the citizens of Idaho Falls and the CRC commends the City for maintaining this service. Some council members favor a mandatory recycling program.
3. The rates for city solid waste pickup are less than those for privatized service in the area.
4. A Municipal Equipment Replacement Fund (MERF) is in place that funds equipment maintenance and replacement. The CRC commends the City for planning ahead for the replacement of equipment. The operation and management of the MERF should be considered a good example for developing a proactive, sustainable funding source for maintaining and replacing other long-lived and high-capital-cost equipment and infrastructure.

6.1.4 STREET DIVISION

1. The Street Division is underfunded due to decreasing revenues from state and federal fuel taxes, long delays between increases in gasoline taxes (e.g., no increases between 1996 and 2015), and increased construction costs. Additional funds are or will be needed to adequately maintain and upgrade Idaho Falls' streets. Funding sources are currently from fuel and sales taxes, and the general fund.
2. Some older neighborhoods of the city of Idaho Falls are without paved streets. These properties have paid property taxes for many years but not received the full benefit of an orderly and attractive neighborhood. According to the county tax office, property valuations are not influenced by the presence of paved or unpaved streets, hence these properties have not received the benefit of reduced property taxes, as some believe. Consequently, there is a strong argument that the City should consider implementing some form of paving streets in these neighborhoods.
3. Under normal conditions, developing and paving streets is completed as a new area is developed with costs to the developer recouped through property sales. Additionally, under other circumstances, the city may charge property owners for their share, in linear feet in front of their property, of the costs of paving. However, it seems appropriate to suspend those costs since the owners of these properties have paid property taxes for such a long time. A full upgrade, including storm sewer, curb and gutter, and top tier paving, may not be fiscally achievable. However, the city could proceed with paving the neighborhoods in question using recycled asphalt accumulated

from prior street resurfacings. This material is on-hand so costs would be relatively low. Not installing curb and gutter or storm sewers would likewise minimize costs.

4. Paving these neighborhoods would improve the overall appearance of the city and reduce the cost of continual maintenance of the unpaved streets. Paving one or two areas at a time over a number of budget cycles would help minimize cost impacts on ongoing and/or major street maintenance and upgrade projects.
5. Street cleaning is predominantly a seasonal activity conducted by the Street Division. Winter is down time while snow is on the ground. During the winter the Street Division shifts its efforts to snow removal and maintenance for the safe and continued use of city streets.
6. The budgeted allowance for street cleaning comes from previously mentioned sources. However, street cleaning, especially fall leaf pickup, could be considered a subset of solid waste pickup services. Sanitation costs are covered by a monthly user fee and typically do not impact the city's general fund. If street cleaning is included in the Sanitation Division's fee structure, then cost of this service could be covered by the Sanitation Division's user fee.

Obviously this would necessitate an increase in the current Sanitation Division's user fee. However, based on PW presentations, there are 23,521 residential and 1,800 commercial sanitation accounts in the City of Idaho Falls. If street cleaning costs were spread equally over the combined 25,321 accounts, they would increase the 2014-2015 budgeted sanitation fee \$0.819/month or 8.59%. The current cost of Idaho Falls' monthly residential sanitation fees is \$9.45. An increase of \$0.819 per month would increase the monthly cost to \$10.27. Ammon currently charges \$10.00 per month and Pocatello charges \$16.40 per month for residential solid waste pickup. Pocatello also charges extra for leaf pickup. An increase of \$0.819 per month would be a minimal increase as it could be implemented over two budget years to minimize any perceived hardships

7. Snow removal for any northern community can be and often is a significant budget requirement. Due to the vagaries of weather, budgeting for snow removal is difficult to estimate. Snow removal year-to-year is provided by the City, which augments its work force with the use of contracted equipment and personnel. The costs which are difficult to estimate are covered in part by general funds. Cost reduction would be beneficial and might result in a reduced dependence on general funds. Reducing the need for general funds in the Streets Division may be achieved through a reduction in the extent of snow removal or recovering the costs through service/user fees. As with street sweeping, snow removal could be a subset of the Sanitation Division's user fees with only a modest monthly increase.

Snow removal is divided into two segments, removal of snow from primary arterial routes and later management and removal of snow from secondary roads and neighborhood streets. In Idaho Falls snow removal is somewhat dictated by Idaho National Laboratory (INL) bus routes. However, these routes have changed somewhat over the years. The CRC recommends that the city review which streets are classified as primary arterial routes based relative to the number of reduced routes and/or routes that have been discontinued by the INL. In addition, cost reductions may be achieved by the city not committing to early and immediate snow removal of those routes, and by enforcing the ordinance requiring home owners to not shovel or blow snow from their sidewalks and driveways into the streets, but to remove snow to their yards to aid in snow management.

6.1.5 SEWER DIVISION

1. The Sewer Division has one of the largest budgets in the City. This is largely due to the cost of infrastructure; in addition, there are also relatively large operational costs. However, the waste water treatment plant and conveyance systems seem to be very well operated and maintained and they seem to have adequate surplus capacity to address future growth within the City.
2. A \$21M project was undertaken in 2012 to upgrade the waste water treatment plant. The upgrade is anticipated to enhance odor abatement which has occasionally been a problem. The project was on schedule and within budget as of July 2015.
3. The waste water treatment plant seems to have adequate redundancy and backup for emergency power, as do the lift stations.
4. The Division is in need of a proactive, sustainable funding source for maintaining, upgrading and replacing their long-lived and high-capital-cost equipment and infrastructure. The City's existing MERF should be considered a good example for developing such a fund.
5. There are some State of Idaho, Department of Environmental Quality (DEQ) and U.S. Environmental Protection Agency (EPA) issues with treating wastewater effluents such as ammonia and phosphates which may require more advanced and more expensive treatment in the future.
6. There are potentials for metals, pathogens, phosphates and ammonia to be deposited in the biological solids (sludge) the City delivers to farmer's fields for land application. Therefore, the Division must test the sludge prior to field application. In addition, there are growing concerns relative to monitoring for and treating Emerging Contaminants

(e.g., pharmaceuticals, prescription drugs and over-the-counter medications, flame retardants, detergents, and new types of herbicides and pesticides). If these contaminants become regulated, they may require more advanced and more expensive treatment in the future.

7. Storm-water discharges to “waters of the U.S.” are regulated by the Clean Water Act. At present, numerous City storm-water sewers discharge unfiltered/unsettled storm water directly to the Snake River and to local streams and canals (which are “waters of the U.S.”). Although EPA and DEQ are currently not aggressively pressuring small to medium cities to reduce/eliminate storm-water discharges, they will most likely begin focusing on this issue in the near-term.
8. There are potential operations and revenue issues related to the malting plants, south of the City. Currently, the malting plants contribute a significant amount of waste materials to the City sewage system that relate back to the biological oxygen demand (BOD) and total suspended solids (TSS) treated by the City sewage system. This adds to the waste loads that must be treated by the system (*a negative*); however, it also generates significant fees for the City (i.e., about \$1 – 2.5 million annually, *a positive*). Currently, the malting plants are planning on building their own treatment facilities to reduce the BOD and TSS loads that they discharge to the City’s system. If the malting plants do implement their own treatment system it will change the content and the flows into the City’s system, it will affect system operations and it will likely result in reduced wastewater treatment fees to the City, hence requiring increased fees for other City system users.

6.1.6 WATER DIVISION

1. The water system seems to have adequate redundancy and backup for emergency power.
2. The Division is in need of a proactive, sustainable funding source for maintaining, upgrading and replacing their long-lived and high-capital-cost equipment and infrastructure. The City’s existing MERF should be considered a good example for developing such a fund.
3. There is adequate isolation and flow for the city’s water tanks; however, many water tanks and pumps are quite old and may need to be upgraded or replaced in the not too distant future. The city uses 19 wells in the summer and four in the winter, so most water is used for landscape irrigation.
4. Growth prospects for eastern Idaho and the Idaho Falls area could and most likely will accelerate in the foreseeable future. Increased growth will ultimately require additional

water wells, storage tanks, lift stations, and piping. The need for additional infrastructure could be forestalled if the demand for water was reduced. For example, Commercial customers are charged a use rate based on water meter readings; providing feedback on their water use and a monetary motivation for reducing water use. However, Residential customers are currently not metered in Idaho Falls and water meters are not in place to meter most residential water users; hence there is little motivation for Residential customers to reduce their water use.

5. Idaho Falls currently requires all new residential construction to provide a meter pit with connections for installation of a future water meter. By installing the meter pit at the time the water line is installed with each new construction, the cost of excavation and backfill to install a meter at a later date is eliminated or reduced. Meter pits currently cost over \$700 each when purchased in bulk.
6. Idaho Falls water rates are significantly lower than other cities in Idaho. The CRC understands the City's desire to keep water rates low; however, the city needs to decide whether keeping them artificially low is advisable if low rates inhibit the Division from implementing the appropriate operations and maintenance tasks necessary for ensuring the long-term health of the City's water system.
7. Current charges for cost of water service are evenly distributed among residential customers at a uniform rate of \$21.00. This means, in terms of residential customers, pricing is equal regardless of lot size, hence, water use. Smaller residential lots in the numbered streets, essentially subsidize areas such as Stonebrook, Rose Nielson, and other large-lot subdivisions. The cost of water service/usage should ideally be based on the volume of water used. However, Idaho Falls does not have residential water meters which would allow water costs to be charged based on the volume of water used. Installation of residential water meters would help educate citizens relative to the amount of water they use and, potentially self-regulate their use; allow the City some flexibility relative to demand management; and allow a more equitable distribution of service and usage costs. However, retro-fitting existing residential properties for water meters have, thus far, been deemed overly expensive.

6.1.7 UNINCORPORATED PROPERTIES

The City of Idaho Falls is currently pock-marked with "in-holder" (county island) properties that are technically not in the City, but in Bonneville County, that receive services and benefits directly and indirectly from the City. However, these costs of service are not fully recouped by the City through property taxes since these properties are taxed by the county. Most of these in-holder properties were connected to or use City services based on *a priori* agreements to be

annexed into the City once their properties were contiguous with the City boundary. However, many of these properties are now contiguous, but the property owners have refused to be annexed into the City. Currently, the costs of services and benefits to these county properties are provided for and/or are subsidized by Idaho Falls tax payers. The longer this situation continues the more difficult it may become to annex and tax those unincorporated properties within the City. Lost tax revenues and increased operating and maintenance costs will also continue to grow over time. Lost tax revenues and increased costs will have to be offset by increased taxes to Idaho Falls residents as operational and maintenance costs continue to creep upward.

7 PUBLIC WORKS STAFF ISSUES OF INTEREST

Several issues of concern to the PW Department were identified to the CRC. They include:

1. Utility services provided outside of City limits
2. Street Division Funding (e.g., gas tax)
3. Street Division snow removal process (citizen's perspective)
4. Water Division metering (citizen's perspective, conservation, equitable rates)
5. Employee safety (e.g., Sanitation and Sewer Divisions)
6. Maintaining adequate funding, but using those funds wisely

The CRC considered these issues when making the recommendations provided in Section 8.

8 RECOMMENDATIONS

Based on the charter given by the Mayor; the PW CRC is to provide recommendations on issues that it observed or learned about during their review that it believes can help improve the management and operations of the PW Department and the City. Based on the observations provided in Section 6, the CRC's makes the following recommendations.

8.1 PUBLIC WORKS DEPARTMENT

1. The PW Department should conduct a campaign to inform the public about the services it provides and its activities associated with operating and maintaining the City's infrastructure. For example, information could be provided monthly or quarterly in a manner similar to Idaho Falls Power's current information campaign.
2. There seems to be a need for a more effective "advertising" effort regarding city services and for obtaining citizen input/interaction concerning basic infrastructure maintenance, improvements, and safety. The CRC recommends that the City consider expanding such efforts through the City utility billing and flyers regularly sent to their customers. Providing the PW Department more visibility at public functions may also help. Educating the community about the PW Department's mission and activities is difficult. Therefore, the City might consider a public relations or advertising consultant for suggestions on ways to do this effectively and efficiently.
3. The CRC recommends that the GIS Division implement a citizen hot-line for reporting and locating issues that need to be addressed by the various City Departments (e.g., pot holes, downed signs, broken and out of service lighting).
4. The CRC recommends that the PW Department utilize the City's GIS system to develop a life cycle management system for planning, managing and tracking the maintenance, upgrade and replacement of all critical and high-cost infrastructure and equipment owned and managed by the Department.
5. The CRC recommends that the Divisions implement life cycle upgrade/replacement plans, updated and presented annually to the City Council.

8.1.1 ENGINEERING DIVISION

1. The CRC recommends that the City consider adding additional full time staff to the Engineering Division and leveraging City employees in other divisions to be cross-trained as backups or support for the Division during peak times/seasons (e.g., during spring street painting and summer construction seasons). Doing so is critical for the continued

success and maintenance of the quality level of service currently provided by the Division.

2. The CRC suggests that hiring a small number of full-time employees could offset the need for hiring a larger number of temporary employees each year. The CRC believes that this would possibly be a wash budget-wise. By doing so, annual training time may be reduced and the ability to cross-training employees to support/backup other personnel in the Division could be increased; this is an option that is typically not available with temporary employees. The CRC believes that addressing this personnel issue will position the Division to address many of the other observations made by the CRC.
3. The CRC recommends that it would be prudent to hire additional inspection personnel to keep up with planned and emergent construction projects as Idaho Falls continues to grow.
4. The CRC recommends that the Division utilize the City's GIS system to develop a life cycle management system for planning, managing and tracking the maintenance, upgrade and replacement of all critical and high-cost infrastructure and equipment owned and/or managed by the Division. The Division should assess and update the GIS data/ information associated with its infrastructure and equipment on a regular basis. It should develop a consistent and systematic schema for estimating the cost and benefits, for establishing priorities and risks, and for weighting the various attributes. Each of the attributes that are necessary for conducting life cycle planning within the Division should be updated at least annually or more frequently if necessary.
5. The CRC recommends that the City Council consider making tax/fee adjustments on a more regular basis such that it does not periodically "shock" the taxpayers. More "real time" adjustments will allow the PW Department to better keep up with maintenance, repairs, upgrades, and replacements in a more sustainable manner.
6. Because the State Legislature has been reluctant to increase fuel taxes, the CRC recommends that the City consider other approaches to diversify the City's sources of income to support funding increases as needed. Although the State Legislature appears to be unwilling to supply adequate funding for meeting critical City services, infrastructure, and equipment needs, it will probably be loath to release the political power that comes letting the cities raise their own funding take care of their own needs. Therefore, the CRC recommends that the City consider negotiating alternative approaches such as a Local Option Tax, following the example of Utah. A change of this magnitude will require close collaboration by City officials and the State Legislature. However, it is recommended that the City pursue such options to obtain adequate funding to properly fund the City's essential services and infrastructure.

8.1.2 GIS DIVISION

1. There is only one employee that performs the function of managing the GIS system for the entire city. While there are employees in other divisions who use the GIS database, they do not have the overall knowledge and experience to administer the entire system. The CRC recommends that the city consider methods to correct this potential “single point failure”. It would be very difficult, expensive and time consuming to replace the current GIS coordinator. Therefore, the CRC recommends hiring a second employee to work with and train to back-up the GIS coordinator. The CRC believes that hiring a second employee would position the GIS Division to address numerous other observations/recommendations provided in this report.
2. If hiring a second employee is not feasible due to budget constraints or other issues, then the CRC recommends that the City cross-train one of the GIS users in another division to act as a back-up.
3. The CRC recommends that the Division modify the City’s GIS system to accommodate and automate a life cycle management system for planning, managing and tracking the maintenance, upgrade and replacement of all critical and high-cost infrastructures and equipment owned and/or managed by each Division within the PW Department, as determined to be appropriate. The GIS Division should assist other Divisions in developing a consistent, holistic and systematic schema for estimating the cost and benefits, for establishing priorities and risks, and for weighting the various attributes. The Division should develop the code necessary for automating the life cycle assessment schema and to easily input the data/information and develop status reports on an annual or more frequent basis.
4. The CRC recommends that metadata be developed and maintained for all long-life, critical, large-capital-cost infrastructure and equipment owned and/or operated by the City. The Division should develop a consistent approach and a prioritization scheme for developing and maintain the appropriate metadata. It may be possible to use interns to help input metadata.
5. The CRC recommends that the GIS program expand its current collaboration efforts and take advantage of the expertise and the data/information available from other sources that have strong GIS programs, such as the INL and the Idaho Department of Water Resources (IDWR).

8.1.3 SANITATION DIVISION

1. The CRC recommends incorporating street-sweeping within the Sanitation Fee structure thereby making general funds available for higher-priority Street Division maintenance needs. The CRC believes residential street-sweeping should be a function of the Sanitation Division because it is a cleaning and removal process.
2. The CRC recommends incorporating snow removal within the Sanitation Fee structure thereby making general funds available for higher-priority Street Division maintenance needs. The CRC believes snow removal should be a function of the Sanitation Division because it is a cleaning and removal process.
3. The CRC recommends that the Division consider options for increasing residential and commercial recycling in the city (including coordinating between the city and private recycling entities). The CRC believes that this service, if fully assessed relative to the cost of building, maintaining and operating an engineered land fill, is cost-effective and it provides tangible benefits to the environment (hence the citizens of Idaho Falls). Therefore, it is an important service to maintain and to expand to the extent feasible. However, the extent to which this service is expanded should be based on fiscal costs and benefits, general public views, and feasibility.

8.1.4 STREET DIVISION

1. The cost of maintaining city streets remains underfunded even with the recent increase in state fuel taxes. The CRC recommends that the Idaho Falls City Council, continue to push the Legislature for adequate funding to accommodate projected growth and for operating, maintaining, upgrading and replacing the City's streets. Other alternative sources of funding should also be considered to help make up for the cumulative shortfalls the City has been experiencing for many years.
2. The CRC recommends that the unpaved streets in longtime residential areas should be paved using City funding/resources. It is recommended that the drive path of these streets be paved, as a minimum, if full paving (e.g., including storm water sewer drainage, curbs, and sidewalks) is too expensive in some areas. In addition, the CRC recommends that recycled paving materials be considered for such uses, in addition to other appropriate areas/projects around the city.
3. The CRC recommends that the classification of all primary and secondary roadways be reviewed and adjusted on a regular basis. For example, legacy snow routes, such as old INL bus routes, to be reclassified from primary to secondary, where appropriate.

4. The CRC recommends that street sweeping be considered as a subset of the Sanitation Division with a concurrent increase in the sanitation fee to cover street sweeping costs.
5. The CRC recommends that snow removal be considered a subset of the Sanitation Division with a concurrent increase in the sanitation fee to cover snow removal costs.

8.1.5 SEWER DIVISION

1. The CRC recommends that the Sewer Division continuously perform and maintain impact analyses for all large entities (e.g. malting plants) that may significantly impact the volume and/or characteristics of waste water and subsequent treatment needs for the purpose of long-term planning, and for developing appropriate and sustainable service cost recovery rates and mechanisms.
2. The CRC recommends that the Division assess the risks and liabilities associated with the discharge of untreated storm water to the Snake River and other “waters of the U.S.” The Division should develop a long-term prioritization and remediation plan to begin proactively eliminating these discharges in accordance with current regulations. In addition, the CRC recommends that the City implement a project/a select number of projects each year to spread out the cost of implementing this program – i.e., using a phased approach.
3. The CRC recommends that the Division utilize the GIS system to develop a life cycle management system for planning, managing and tracking the maintenance, upgrade and replacement of all critical and high-cost infrastructure and equipment owned and/or managed by the Division. The Division should assess and update the GIS data/information associated with its infrastructure and equipment on a regular basis. It should develop a consistent and systematic schema for estimating the cost and benefits, for establishing priorities and risks, and for weighting the various attributes. Each of the attributes that are necessary for conducting life cycle planning within the Division should be updated at least annually or more frequently if necessary.
4. The CRC recommends that the City develop a Sustainability Sewer Infrastructure and Equipment Fund (analogous to the MERF for rolling equipment). It is recommended that the City set aside an adequate percentage of the Division’s annual revenues in a rolling fund dedicated to the sustainable replacement of sewer lines, pump/lift stations, and other large, critical infrastructure and high-cost-capital equipment.

8.1.6 WATER DIVISION

1. The CRC recommends that the Division utilize the GIS system to develop a life cycle management system for planning, managing and tracking the maintenance, upgrade

and replacement of all critical and high-cost infrastructure and equipment owned and/or managed by the Division. The Division should assess and update the GIS data/information associated with its infrastructure and equipment on a regular basis. It should develop a consistent, holistic and systematic schema for estimating the cost and benefits, for establishing priorities and risks, and for weighting the various attributes. Each of the attributes that are necessary for conducting life cycle planning within the Division should be updated at least annually or more frequently if necessary.

2. The CRC recommends that the City develop a Sustainable Water Infrastructure and Equipment Fund (analogous to the MERF for rolling equipment). It is recommended that the City set aside an adequate percentage of the Division's annual revenues in a rolling fund dedicated to the sustainable replacement of water lines, tanks, pump/lift stations, and other large, critical infrastructure and high-cost-capital equipment.
3. Idaho Falls should develop a rolling 25-30 year planning cycle to ensure future water supply security and to develop and implement an equitable cost of service plan.
4. As an interim measure, the CRC recommends a user fee charge for water service based on lot size/actual water use.
5. The CRC recommends that the City follow the City of Ammon's approach of installing water meters (Reference 9). This should include preparing a phased multi-year plan to install water meters.
6. The CRC recommends the City modify city code as necessary in order to require the installation of meter pits for all new structures receiving city water and all upgrades to service lines from city mains to residential customers. In addition, the City should consider modifying city code as necessary in order to require the installation of water meter for all new structures.

8.1.7 UNINCORPORATED PROPERTIES

The City of Idaho Falls should initiate a program of annexation of in-holder properties for tax and service reasons and consolidate the city boundaries. Prioritizing and selectively targeting a few properties annually may aid in the eventual annexation of all in-holder properties currently in the City.

9 COMMITTEE BIOGRAPHIES

William Phoenix

Bill Phoenix was born and raised in Pocatello, married a local farm girl (Kathie Allred Phoenix) 46 years ago, has 2 grown children and 2 grandchildren, and is avid amateur musician (trombonist). He and his family lived throughout the States and England while Bill commissioned nuclear power plants. In 2003, Bill and Kathie retired early and left Southern California to return to Idaho Falls. Not liking retirement, for several years he was an Adjunct Professor in Nuclear Engineering for Idaho State University at the graduate and undergraduate levels, consulted, and is now helping restart the TREAT reactor at Idaho National Laboratory. Bill earned Professional Engineering (PE) Licenses in Mechanical Engineering, Nuclear Engineering, and Control Systems Engineering. He has a M.S. in Nuclear Engineering with a minor in Radiation Biology, and a B.S. in Mathematics, and a B.S. in Physics, all from Oregon State University. He plays trombone in the Idaho Brass Quintet and several local productions and bass trombone in the Idaho State Civic Symphony in Pocatello, where he is an Orchestra Representative on the Symphony's Board.

Hope Forsmann

Hope Forsmann has been a resident of Idaho Falls for 20 years. She has been a computer scientist at the Idaho National Laboratory for 15 years and at Argonne National Laboratory – West 5 years prior. She is currently a member of the RELAP5-3D Development Team. She works in support of licensed customers developing user tools, enhancing the RELAP5-3D functionality, and addressing user problems. Prior to joining the RELAP5 Team, she performed modeling and simulation research in the areas of critical infrastructure, subsurface fluid flow, and adhoc network routing protocols. She has a Masters from Montana State University in Mathematics.

Samuel Pole

Samuel B. Pole IV is 70 years old. Sam has lived in Idaho since 1990 and 19 years in Idaho Falls. Sam has a B.A. in Earth Sciences and Geology, 1968, Denison University. Graduate studies Baylor University 1967-1970. From 1971 through 1989 worked as a field investigator for Texas Water Commission and Texas Department of Water Resources in surface and ground water contamination; approved solid waste design and disposal plans; developed underground injection plans and drafted injection permits; managed the injection well program and enforcement of permit requirements; Section Chief for hazardous and solid waste and underground injection control programs. From 1990 through June 2000 worked as an Engineer/Scientist for the Department of Energy Idaho National Laboratory. Sam retired in 2000. He volunteers as a Master Naturalist and at the Museum of Idaho.

Gerald Sehlke

Jerry Sehlke has been a resident of Idaho Falls for almost 30 years. He has 29 years experience in research and development, regulatory compliance, environmental restoration, water resources policy and planning, groundwater monitoring, groundwater protection programs, and program management. His professional interests are focused on developing a nexus between policy/law and science; that is, ensuring that ongoing environmental science can support policy and legal needs and evaluating whether environmental policies/laws are scientifically sound. His recent areas of research include advising the U.S. Army Corps of Engineers, Institute for Water Resources, on the development of a National Adaptive Integrated Water Resources Management (A-IWRM) Framework; U.S. Department of Energy (DOE) on adapting arctic transport networks to the impacts of climate change; DOE's/Western Governors Association's west-wide assessment of water availability for future power generation; DOE Climate Change Technology Policy Program's develop of climate change adaptation strategies; and DOE's Energy-Water Nexus and Water Supply Technology Act assessment of climate change impacts/vulnerabilities relative to energy-water systems. Jerry is a Past-President of the American Water Resources Association, Chair of the Laws and Institutions Committee of the Environmental and Water Resources Institute, and he has written or co-written approximately 50 peer-reviewed and technical publications.

Syd Withers

Syd Withers has lived in Idaho Falls for 40 years. Syd received a Bachelor of Science in Civil Engineering from Utah State University and graduated from the Naval Officer Candidate School in 1971. From 1971 to 1975 Syd served in the National Oceanic & Atmospheric Administration (NOAA) Commissioned Corps performing geodetic and hydrographic surveying. Since moving to Idaho Falls in 1975, Syd had worked for operating contractors at the INL. He was a design engineer for infrastructure projects for the first four years at the INL and then a project manager for infrastructure, radioactive waste management facilities, and spent nuclear fuel storage and transfers for 34 years until his retirement in 2013. Syd also served five years as a Naval Reserve Officer in the Civil Engineering Corps while employed at the INL. He volunteers in multiple capacities in the Boy Scouts of America and enjoys most outdoor activities.

10 REFERENCES

1. '2015 Citizen Review Committees', distributed at first meeting, February 7, 2015
2. 'City of Idaho Falls Organization', distributed at first meeting, February 7, 2015
3. 'Citizen Review – Round 2', The Idaho Falls Post Register, March 3, 2015.
4. 'Growing Thirst', The Idaho Falls Post-Register, March 8, 2015.
5. 'Water users face tough choice', Idaho Falls Post-Register, June 5, 2015.
6. 'Idaho's growing disconnect', a guest editorial by Ed Marohn, member of the Idaho Falls City Council, July 15, 2015.
7. 'Idaho eyes new water standards', Post-Register, July 12, 2015, page B7.
8. 'New Idaho Falls report on water use released', Post-Register, July 15, 2015, page C5.
9. 'Conserving a vital resource', Post-Register, July 16, 2015, Page A1.
10. 'Upward and onward', Post-Register, Corey Taule, Editor, May 20, 2015, Page A6.
11. 'Department Assignments, Idaho Falls Public Works', distributed at first meeting, February 7, 2015
12. 'City of Idaho Falls Public Works Division', overview PowerPoint Presentation.
13. 'City of Idaho Falls Public Works Division', Capital Improvement Projects 2015-2019.
14. 'City of Idaho Falls, Secondary Treatment Improvements.
15. Idaho Falls Waste Water Treatment Plant Organization Charts April 2013.
16. 'City of Idaho Falls 2014-2015 Budget Analysis Worksheet, Water Division'.
17. Idaho Falls Waste Water Treatment Facilities Plan, prepared by Murray, Smith and Associates, Inc., Boise, ID, and Pharmer Engineering, LLC, Boise ID 83705, August 9, 2010 (Includes as Appendix D the NPDES Permit ID0021261, Preliminary Draft Permit, Murray, Smith & Associates, Inc., Boise, ID, and Pharmer Engineering, LLC, Boise, ID, August 10, 2010) .
18. City of Idaho Falls Emergency Response and Public Notification Plan, April 2013.

11 ACKNOWLEDGEMENTS

The city employees that the committee had the opportunity to meet and talk with are outstanding! Their demeanor, professionalism and expertise are exceptional. Idaho Falls is very fortunate to have such high-quality personnel managing, operating and maintaining the City.

Bryan Bjorgaard accepted a position with the City of Idaho Falls; as such, he was unable to continue as a CRC volunteer. The committee would like to thank him for his participation and his leadership prior to accepting this position and we wish him the best in the future.