STANDING COMMITTEE MINUTES
City of Spokane
Public Infrastructure, Environment, and Sustainability
April 27, 2020

Committee members present in person, phone or video
Council President Breean Beggs, Committee Chair
Council Member Michael Cathcart, Vice Committee Chair
Council Member Kate Burke
Council Member Lori Kinnear
Council Member Candace Mumm
Council Member Karen Stratton
Council Member Betsy Wilkerson

Council President Beggs called the meeting to order at 1:15 p.m.
https://vimeo.com/412498900

Review and approval of minutes
Council President Beggs asked for a motion to approve the minutes of the March 23, 2020 meeting.

- Action taken
- Council Member Mumm moved to approve the minutes of the March 23, 2020 meeting as presented; the motion was seconded by Council Member Kinnear.

Discussion items
A. Council Requests
   1. Consent items for discussion
      Water Conservation Master Plan adoption (Water) – Discussion was had on the updates and feedback incorporated into the plan. Discussion on the community engagement needed.
   2. Legislative update (if needed)
   3. Traffic Calming Program
      Council President Beggs gave a brief overview of the information on the jointly approved matrix to adopt the projects. Discussion was had on the process and the feedback from the neighborhoods.
   4. Vaulted Sidewalks Policy
      Council President Beggs discussed the draft ordinance and policy on the vaulted sidewalks policy. Discussion was had on the issue of vaults and how they are addressed with property owners, as well as the Avista infrastructure.
   5. ICLEI USA and Global Covenant of Mayors
      Council President Beggs gave a brief overview of the information in the briefing paper and the membership information.
   6. Volunteer Coordinator/Community Engagement position in Urban Forestry

Council President Beggs discussed the item brought forward by the Sustainability Action Subcommittee. Discussion was had on the implementation across the districts and neighborhoods.

7. Office of Neighborhood Services, Neighborhood Clean Up Program/Dump Passes Cancellation

- Program update and future planning
- Communication with neighborhood councils
- Options for residents needing additional assistance with clean green, garbage, household waste disposal --- especially those in low-income neighborhoods. Discussion was had on the short term planning.

8. Kempe to Woodridge Transmission Main
   Scott Simmons asked if there were further questions from Council about this item. Council Member Mumm showed a slide and discussed the planning. She discussed her conversations with Fish and Wildlife about the priority habitat species. She asked that the SEPA exemption be removed and an SEPA performed. Scott discussed the planning and review coordination that was done. Discussion was had on the communications with the neighborhoods.

B. Staff Requests

1. Six-Year Streets Program Draft
   Kevin Picanco presented the 2021-2026 Six-year Comprehensive Street plan. He discussed the background on Arterial Street Programming, reviewed the projects that are new to the list. Discussion was also had on the consistency matrix and various projects. The next steps will be a Plan Commission hearing on May 13th, and City Council on June 17th and the final program is published on July 1, 2020. Council President Beggs discussed scheduling a Study Session to discuss the projects that are not identified as a priority in the matrix. Discussion was had on the projects are in the priority matrix and how others are developed.

Strategic Plan Session

A. Priority Strategy 1. Rapidly accelerating street pavement maintenance projects

- Streets Levy dashboard
  Marlene Feist discussed the street levy dashboard. The dashboard collected all the information from the 2014 Street bond through 2019. She reviewed the financial update of the dashboard of the spending 2015 through 2019. The dashboard shows a map of the street conditions as well as the planned spending for the street program projects in the 6 year plan.
- Overview of additional $10m arterial street pavement preservation projects
  Scott Simmons gave an overview of the arterial street pavement preservation projects. He discussed the pavement condition and experience of drivers on these roadways within the city. Discussion was had on the planned roadway improvements including grind/overlay, chip-seal and crack-seal work. Discussion was had on the district projects and the capacity of funding and planning.

B. Priority Strategy 2. Repurposing public property to stimulate private investment

- No report this meeting.

C. Priority Strategy 3. Sustainable city
- No report this meeting.

Consent items
1. Amendment to Spokane Upriver Dam Hydroelectric Project's Amended and Restate Small Generator Interconnection Agreement (SGIA) with Avista Corporation. OPR 2011-0939
2. SA Premier hot-pour rubberized sealant from Specialty Asphalt (Streets)
3. Water Conservation Master Plan adoption (Water)
4. NSC –Rowan Force Main/Wilson & Company Contract (ICM)
5. 2020 Residential Grind & Overlay Projects (Engineering Services)

Executive session
None.

Adjournment
The meeting adjourned at 2:45 p.m.

Prepared by:
Barbara Patrick

Approved by:

Chair

Public Infrastructure, Environment, and Sustainability Committee
Agenda for Monday, April 27, 2020
1:15 p.m. – Streaming live online and airing on City Cable 5

REVISED

The Spokane City Council's Public Infrastructure, Environment, and Sustainability Committee meeting will be held at **1:15 p.m. on April 27, 2020** streaming live online and airing on City Cable 5 at **https://my.spokanecity.org/citycable5/live/.**

The meeting will be conducted in a standing committee format. Because a quorum of the City Council may be present, the standing committee meeting will be conducted as a committee of the whole council. The Public Infrastructure, Environment and Sustainability Committee meeting is regularly held every 4th Monday of each month at 1:15 p.m. unless otherwise posted.

Notice is hereby given that, pursuant to Governor Jay Inslee's Proclamation 20-28, dated March 24, 2020, all public meetings subject to the Open Public Meetings Act, Chapter 42.30 RCW, are to be held remotely and that the in-person attendance requirement in RCW 42.30.030 has been suspended until at least May 4, 2020.

Temporarily and until further notice, the public's ability to attend City Council meetings is by remote access only. In-person attendance is not permitted at this time. The public is encouraged to tune in to the meeting as noted above.

AGENDA

I. Call to order

II. Approval of minutes from March 23, 2020

III. Discussion items

A. Council requests
   1. Consent items for discussion
   2. Legislative update (if needed)
   3. Traffic Calming Program
   4. Vaulted Sidewalks Policy
   5. ICLEI USA and Global Covenant of Mayors
   6. Volunteer Coordinator/Community Engagement position in Urban Forestry
   7. Office of Neighborhood Services, Neighborhood Clean Up Program/Dump Passes Cancellation
      - Program update and future planning
      - Communication with neighborhood councils
      - Options for residents needing additional assistance with clean green, garbage, household waste disposal --- especially those in low-income neighborhoods.
   8. Kempe to Woodridge Transmission Main

B. Staff requests
   1. Six-Year Streets Program Draft – Kevin Picanco

IV. Strategic initiatives session – Council Member Beggs and Scott Simmons

Priority strategy 1: Rapidly accelerating street pavement maintenance projects

- Streets Levy dashboard – Marlene Feist
- Overview of additional $10m arterial street pavement preservation projects

Priority strategy 2: Repurposing public property and assets to stimulate private investment

- No report this meeting.

Priority strategy 3: Sustainable city

- No report this meeting.

V. Consent items

1. Amendment to Spokane Upriver Dam Hydroelectric Project's Amended and Restate Small Generator Interconnection Agreement (SGIA) with Avista Corporation. OPR 2011-0939
2. SA Premier hot-pour rubberized sealant from Specialty Asphalt (Streets)
3. Water Conservation Master Plan adoption (Water)
4. NSC –Rowan Force Main/Wilson & Company Contract (ICM)
5. 2020 Residential Grind & Overlay Projects (Engineering Services)

VI. Executive session

Executive Session may be held or reconvened during any Public Infrastructure, Environment, and Sustainability Committee meeting.

VII. Adjournment

Next Public Infrastructure, Environment, and Sustainability Committee meeting

The next meeting normally held May 25th is rescheduled to May 18, 2020 10:15 a.m. due to the holiday.

Sustainability Action Subcommittee Recommendaton

Global Covenant of Mayors for Climate & Energy (GCoM) & ICLEI – USA Local Governments for Sustainability

April 22nd, 2020

Recommendations

The SAS asks for the following considerations:

1. Council office renews the City's ICLEI-USA membership at the price of $2,250 annually from Council's budget reserve; and
2. The Mayor and City Council jointly sign onto the Global Covenant of Mayors for Climate & Energy. (The Mayor recently declined an invitation to sign on at this time due to her focus on COVID-19 matters, but City Council can join on behalf of the City of Spokane.)

ICLEI-USA, Local Governments for Sustainability

ICLEI is a membership organization that gives cities the tools they need to achieve their climate and energy commitments. From ICLEI's website: *ICLEI – Local Governments for Sustainability is a global network of more than 1,750 local and regional governments committed to sustainable urban development. Active in 100+ countries, we influence sustainability policy and drive local action for low emission, nature-based, equitable, resilient and circular development.* The City of Spokane would be re-joining the United States chapter of ICLEI, which is governed by current and former local officials from across the United States. The main benefit of joining would be to gain access to sophisticated climate planning and reporting tools that would save City of Spokane staff time and money as they comply with existing city ordinances.

Global Covenant of Mayors (GCoM)

The Global Covenant of Mayors for Climate & Energy (GCoM) is an international alliance of cities and local governments with a shared long-term vision of promoting and supporting voluntary action to create a lower emission and resilient society. This is a historic and powerful response by the world's cities to address the climate challenge. It is the broadest global alliance committed to sustainability leadership, building on the commitment of over 10,000 cities and local governments from six continents and 127 countries representing more than 770 million people. There is no financial or legal impact of joining.

	Description	Cost	Benefits	Notes	Member Examples
ICLEI-USA	ICLEI is a membership organization that gives cities the tools they need to achieve their climate and energy commitments.	$2,250/ year	• Scenario Planning **Tools** • US Focused using standard protocols • Standardizes our reporting process for both local reporting required by SMC and for GCoM reporting • Tools for conducting both interim reports and full GHG Inventories • Network of Local Governments	Spokane has been ICLEI member in the past; membership lapsed in 2018	King County, Auburn, Bellingham, Boise, Bozeman, Missoula, Snoqualmie,Tacoma
GCoM	The GCoM for Climate & Energy is an international alliance of cities and local governments with a shared long-term vision of promoting and supporting *voluntary* action to combat climate change and move to a low emission, resilient society.	none	• Formalizes COS's **Commitment** to Climate & Energy planning • Creates framework for on-going strategic planning • Network of Local Governments	Many of the GCoM requirements are already being undertaken by the COS	Seattle, San Diego, Fort Collins, Flagstaff, Reno, Salt Lake City, and Bellingham

Sustainability Action Subcommittee Recommendaton

Create and Fund an Urban Forestry Volunteer Coordinator Position

April 22nd, 2020

Background & Rationale

The City of Spokane passed the Protecting Leaves and Adding New Trees (PLANT) Ordinance in October of 2019. The PLANT Ordinance, seeks to help the City achieve its goal of reaching 40% canopy coverage by 2030 from the current estimate of 23% canopy coverage within the city limits of Spokane. In order to accomplish this goal and to protect our current tree canopy, the City will need to be more creative in leveraging community sentiment and volunteer hours to plant and maintain thousands of new trees across all Spokane neighborhoods.

Recommended Solution

Work with the Park Board to develop a "tree stewards" program for the City to support urban forestry and assist homeowners.

All current functions of the City's forestry program are carried out by a very limited staff. We believe that there are many residents and organizations in our community that would be willing to give their time as volunteers to assist in these efforts. Cities such as Portland, Oregon have successfully implemented similar programs[1]. Volunteers would be trained by the City as tree stewards to perform the following functions:

a. Conduct neighborhood and park tree inventories
b. Identify tree maintenance needs & planting opportunities
c. Provide simple consultations with residents about care and maintenance of yard trees
d. Participate in school and community group planting programs
e. Work with local nonprofits to coordinate volunteer planting events

The Tree Stewards program could be folded into the Green Corps program that the City's Parks and Recreation Department has already initiated. This program is supported by the City's Urban Forestry department, but has struggled to gain success due to a lack of resources for coordinating volunteers. To assist in getting these efforts underway at a sufficient level to meet the ordinance goal of a 40% tree canopy, we urge that the City consider either providing funding for a Project Employee Volunteer Coordinator position with the Parks & Recreation Department or to contract with a local nonprofit organization to implement a two year pilot program with tangible, measurable goals.

[1] Neighborhood Tree Stewards (NTS), Portland, OR

Briefing Paper

Public Infrastructure, Environment, and Sustainability Committee

Division & Department:	Public Works Division / Integrated Capital Management
Subject:	6-Year Streets Program Draft
Date:	4/27/20
Contact (email & phone):	kpicanco@spokanecity.org
City Council Sponsor:	
Executive Sponsor:	
Committee(s) Impacted:	
Type of Agenda item:	☐ Consent ■ Discussion ☐ Strategic Initiative
Alignment: (link agenda item to guiding document – i.e., Master Plan, Budget , Comp Plan, Policy, Charter, Strategic Plan)	
Strategic Initiative:	
Deadline:	
Outcome: (deliverables, delivery duties, milestones to meet)	6-Year Comprehensive Street Program – 2021-2026: Final Reconciliation and DRAFT program

Background/History:

In support of the State Growth Management Act and the City of Spokane's Comprehensive Plan, the City must maintain 6-year capital financing plans for certain providers of public facilities and services. Accordingly, the City must maintain a 6-year capital financing plan for its capital street program. Pursuant to RCW 35.77.010 the capital street program must be adopted before July 1 of each year, and filed with the Secretary of Transportation not later than 30 days after adoption. To determine the plan's consistency with the Comprehensive Plan, it is scrutinized by the City Plan Commission. The Commission then makes a recommendation to the City Council as to the plan's consistency with the Comprehensive Plan, and the City Council then accepts or modifies the plan accordingly.

Executive Summary:

- This annual update facilitates:
  - Compliance with the Growth Management Act and RCW 35.77.010,
  - City of Spokane can qualify for grant and low interest loan funds,
  - Meets requirement that the City maintain a 6-Year Capital Improvement plan for its capital street program.
- **Review of new projects in the program.**

Budget Impact:

Approved in current year budget? ☐ Yes ☐ No ■ N/A

Annual/Reoccurring expenditure? ☐ Yes ☐ No ■ N/A

If new, specify funding source:

Other budget impacts:

Operations Impact:

Consistent with current operations/policy? ☐ Yes ☐ No ■ N/A

Requires change in current operations/policy? ☐ Yes ☐ No ■ N/A

Specify changes required:

Known challenges/barriers:

Briefing Paper
Public Infrastructure, Environment & Sustainability (PIES) Committee

Division & Department:	Water and Hydroelectric Services
Subject:	Amendment to Spokane Upriver Dam Hydroelectric Project's Amended and Restate Small Generator Interconnection Agreement (SGIA) with Avista Corporation. OPR2011-0939
Date:	April 8, 2020
Author (email & phone):	Dana Zentz dzentz@spokanecity.org 509.867.9375
City Council Sponsor:	
Executive Sponsor:	Dan Kegley and Scott Simmons
Committee(s) Impacted:	Public Infrastructure, Environment & Sustainability (PIES) Committee
Type of Agenda item:	■ Consent ☐ Discussion ☐ Strategic Initiative
Alignment: (link agenda item to guiding document – i.e., Master Plan, Budget , Comp Plan, Policy, Charter, Strategic Plan)	City of Spokane Upriver Dam Hydroelectric Project. This action simplifies operations at Upriver, and provides for greater City control over operating functions.
Strategic Initiative:	Sustainable Energy
Deadline:	April 30, 2020
Outcome: (deliverables, delivery duties, milestones to meet)	Approval of Contract Item – Amendment to SGIA.

Background/History:

There are two high voltage electric switchyards at Upriver Dam. The existing SGIA allows for City Ownership of and joint (with Avista) operational access to the disconnect switch for switchyard #2 only. This amendment to the SGIA and the accompanying Title Transfer Agreement provide for the City to obtain ownership of the high voltage disconnect switch at switchyard #1 as well. Accordingly, the City will receive the right of joint (with Avista) access to and operation of the Switchyard #1 disconnect switch. The city agrees to accept title to the disconnect switch at switchyard #1, and Avista will provide O&M services for it at City expense on as-needed basis.

Executive Summary:

Small Generator Interconnection Agreement between the City of Spokane and Avista Corporation:

- Parties agree to amendments necessary to provide for joint operation of disconnect switch at Upriver Dam switchyard #1.
- Amendment includes City taking title to disconnect switch hardware and contracting with Avista for O&M of the switch and related infrastructure (poles, etc.).

Budget Impact:

Approved in current year budget? ☐ Yes ☐ No

Annual/Reoccurring expenditure? ☐ Yes ■ No

If new, specify funding source:

Other budget impacts: (revenue generating, match requirements, etc.)

Operations Impact:

Consistent with current operations/policy? ■ Yes ☐ No

Requires change in current operations/policy? ■ Yes ☐ No

Specify changes required: City will develop and administer Switchyard #1 disconnect switching operations plan similar that in place for Switchyard #2 disconnect.

Known challenges/barriers: none

ASSET TRANSFER AGREEMENT BETWEEN
AVISTA CORPORATION AND THE CITY OF SPOKANE

This Agreement ("Agreement") is entered into by and between Avista Corporation ("Avista") and the City of Spokane ("City"), each of which may be referred to herein individually as a Party or collectively as the Parties.

RECITALS

WHEREAS, Avista and the City are parties to the Small Generator Interconnection Agreement for the Upriver Dam Hydroelectric Project (Avista Contract No. AV-TR15-0309-01; City OPR No. OPR2011-0939) ("Interconnection Agreement") that provides for the ongoing terms and conditions governing the interconnection of the City's Upriver Dam Hydroelectric Project (FERC Project No. 3074) ("Project") to Avista's electrical system;

WHEREAS, Avista currently owns certain facilities at the point of interconnection for Switchyard No. 1 of the Project, including Air Switch No. 1083 and three 15kV disconnect switches (labeled 34C), as more fully described in Section 2 herein (collectively, the "Facilities");

WHEREAS, the City desires to own and operate the Facilities and Avista is willing to transfer the Facilities to the City pursuant to the terms of this Agreement; and

WHEREAS, all terms and conditions regarding the future operation, maintenance, renewal and replacement of the Facilities shall be pursuant to the Interconnection Agreement.

NOW THEREFORE, in consideration of the mutual covenants contained herein, the Parties agree as follows:

AGREEMENT

1. Transfer of Facilities

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Avista does hereby transfer ownership of the Facilities to the City. The City understands and agrees that the Facilities are being conveyed "AS-IS" and without warranties of any kind. Avista disclaims all implied or express warranties, including, without limitation, warranties of fitness or merchantability.

2. Description of Facilities

The Facilities to be transferred from Avista to the City are:

- Three Phase Air Switch No. 1083 and its associated 40-foot cedar pole (manufactured 1986, Class 3, Avista pole# 415420) and all appurtenant facilities including cross arms, brackets, connectors, and grounds;

- Three 15kV disconnect switches (labeled 34C) and their associated 40-foot cedar pole (manufactured 1986, Class 3, Avista pole# 415421) and all appurtenant facilities including cross arms, brackets, connectors, and grounds; and
- One span of three-phase aluminum overhead conductor with all appurtenant deadends, connectors, insulators, taps, and jumpers.

3. Signatures

This Agreement may be executed in multiple counterparts, all of which taken together will constitute one single agreement.

IN WITNESS WHEREOF, duly authorized representatives of each Party have executed this Agreement as of the latest date executed below.

AVISTA CORPORATION	CITY OF SPOKANE
Signed: JA Schlect	Signed: _____
Name: Jeff Schlect	Name: Nadine Woodward
Title: Senior Manager, Transmission Services	Title: Mayor
Date: March 25, 2020	Date: _____

Attachment 2

Amended Description of the Small Generating Facility, Point of Interconnection, Interconnection Facilities and Metering Equipment

Equipment, including the Small Generating Facility, Interconnection Facilities, and metering equipment shall be itemized and identified as being owned by Interconnection Customer or Transmission Provider.

Description of Small Generating Facility and Premises

The Upriver Dam Hydroelectric Project (the "Project") (Upriver Dam FERC Project No. 3074) and Premises are specifically described as follows: a hydroelectric generating facility located on the Spokane River in Spokane County, Washington, which has a present nameplate capacity of 17.7 megawatts, and the Well Electric and Parkwater Pump Stations owned and operated by Interconnection Customer that are located adjacent to and served by the generating facility. The Point of Interconnection is shown on Attachment 3.

Description of Point of Interconnection (POI)

The Point of Interconnection is comprised of two separate physical points as identified below:

1) The point at which Transmission Provider's 13.8 kV overhead conductors serving Switchyard No. 1 (a) dead end on Interconnection Customer's structure and (b) connect with Interconnection Customer's 13.8 kV jumper conductors on the line side (Transmission Provider's upstream side) of Interconnection Customer's Air Switch No. 1083 (see Attachment 3 – One-line Diagram). Transmission Provider shall have the right to operate Air Switch No. 1083 and shall have key access to the air switch operating handle.

2) The point where Transmission Provider's 13.8 kV overhead conductors (1272 AAC) terminate at Interconnection Customer's Air Switch No. 163 at Switchyard No. 2 (see Attachment 3 – One-line Diagram). Transmission Provider shall have the right to operate Air Switch No. 163 and shall have key access to Switchyard No. 2 and Air Switch No. 163.

Description of Interconnection Facilities

Transmission Provider's Interconnection Facilities are those 13.8 kV distribution feeder facilities (Beacon 13T09) originating at the Beacon Substation and extending south across the Spokane River up to the Point of Interconnection, including the CTs, PTs, metering and associated communications to measure Project power.

Interconnection Customer's Interconnection Facilities are the 13.8 kV facilities from the high side of the generator step up transformers at Switchyard No. 1 and Switchyard No. 2 to the Point of

Avista: _____

City of Spokane: _____

Interconnection, including the two (2) 13.2 kV, 2000 Amp breakers on the high side of the generator step up transformers.

Point of Interconnection – Switchyard No. 1

At POI (1) listed above, Interconnection Customer's Interconnection Facilities include Air Switch No. 1083 and its associated pole, jumpers, insulators and connectors, and three (3) 15 kV cutouts (labeled 34C) installed with solid blade disconnects and their associated pole, jumpers, insulators, connectors, URD cable potheads, and lightning arresters. All such Interconnection Customer Interconnection Facilities between the Point of Interconnection and the URD cable potheads and lightning arrestors were installed by Transmission Provider but are owned by Interconnection Customer (such Interconnection Facilities, "City POI #1 Facilities"). Transmission Provider shall provide operation, maintenance, renewal and replacement services for and with respect to the City POI #1 Facilities, at Interconnection Customer's expense, in a manner consistent with Good Utility Practice and the operation, maintenance, renewal and replacement practices applied by Transmission Provider to its own Interconnection Facilities. Transmission Provider shall provide such maintenance, renewal and replacement services upon (i) any written request by Interconnection Customer or (ii) any determination by Transmission Provider, consistent with Good Utility Practice and the operation, maintenance, renewal and replacement practices applied by Transmission Provider to its own Interconnection Facilities, that any such maintenance, renewal or replacement services are reasonably necessary or advisable. Notwithstanding the foregoing, other than in the case of any Emergency Condition, Transmission Provider shall provide advance written notice to Interconnection Customer, along with a written evaluation and cost estimate for the proposed services and materials, prior to providing any such maintenance, renewal or replacement services for or with respect to the City POI #1 Facilities.

Point of Interconnection – Switchyard No. 2

At POI (2) listed above, Transmission Provider's Interconnection Facilities end where the 1272 AAC conductors terminate at the line side (upstream Transmission Provider side) of Air Switch No. 163 located inside Interconnection Customer's fenced Switchyard No. 2. The jumpers from the line to the Air Switch No. 163 were installed by Transmission Provider, but are owned by Interconnection Customer. Interconnection Customer's Facilities also include the 13.8 kV, 1200 Amp, non-load break gang-operated Air Switch No. 163 and steel mounting structure, and three (3) 15 kV solid blade disconnects mounted between Interconnection Customer's 2000 Amp breaker and Air Switch No. 163.

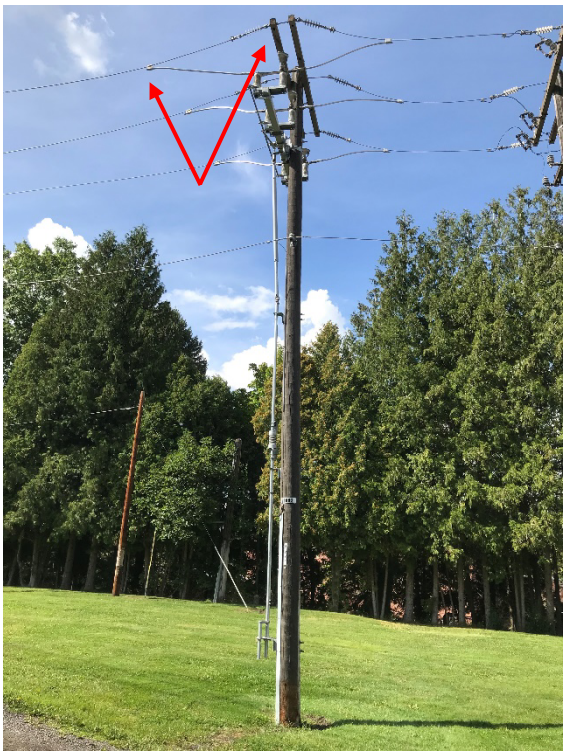
Description of Metering Equipment

All metering was installed and paid for by Interconnection Customer, but is owned by Transmission Provider. Metering maintenance responsibilities are defined in Article 1.6 of this Agreement.

Quantity	Description	Serial #	Manuf/Part #	Ownership
2	Current Transformers, SCV, 2.4kV, 2000 – 5A (Well Electric Feeder)	Unknown	Unknown	TP Owned – Paid for by IC
2	Current Transformers, SCV, 2.4kV, 2000 –5A (Parkwater Feeder)	Unknown	Unknown	TP Owned – Paid for by IC
2	Potential Transformers, VIY-60, 2.4kV, 20:1 (For Well Electric and Parkwater Meter)	Unknown	Unknown	TP Owned – Paid for by IC
3	Current Transformers, JCW-5, 15kV, 1200 – 5A (At Interconnection Point)	Unknown	Unknown	TP Owned – Paid for by IC
3	Potential Transformers, JVW-5, 15kV, 70:1 (At Interconnection Point)	Unknown	Unknown	TP Owned – Paid for by IC
1	JEMSTAR Meter (Pumping Load used for Multifunction Billing)	Unknown	JS-05R6010-B3	TP Owned – Paid for by IC
1	JEMSTAR Meter (City Generation used for Multifunction Billing)	Unknown	JS-09R6010-B3	TP Owned – Paid for by IC
1	Clock, Arbiter GPS	A1784	1088B-125V	TP Owned – Paid for by IC
2	Modems	SM-E-3036	SM-202-I-M	TP Owned – Paid for by IC
4	PLC Cards	Unknown 21024810900 21033606216 31022034874	140CPU11302 140CPU11303 140NOE77100 140CPS42400	TP Owned – Paid for by IC
1	Telephone Switch	190504	M-396-8-12	TP Owned – Paid for by TP

TP – Transmission Provider
IC – Interconnection Customer

Point of Interconnection Images



POI (1) at Switchyard No. 1

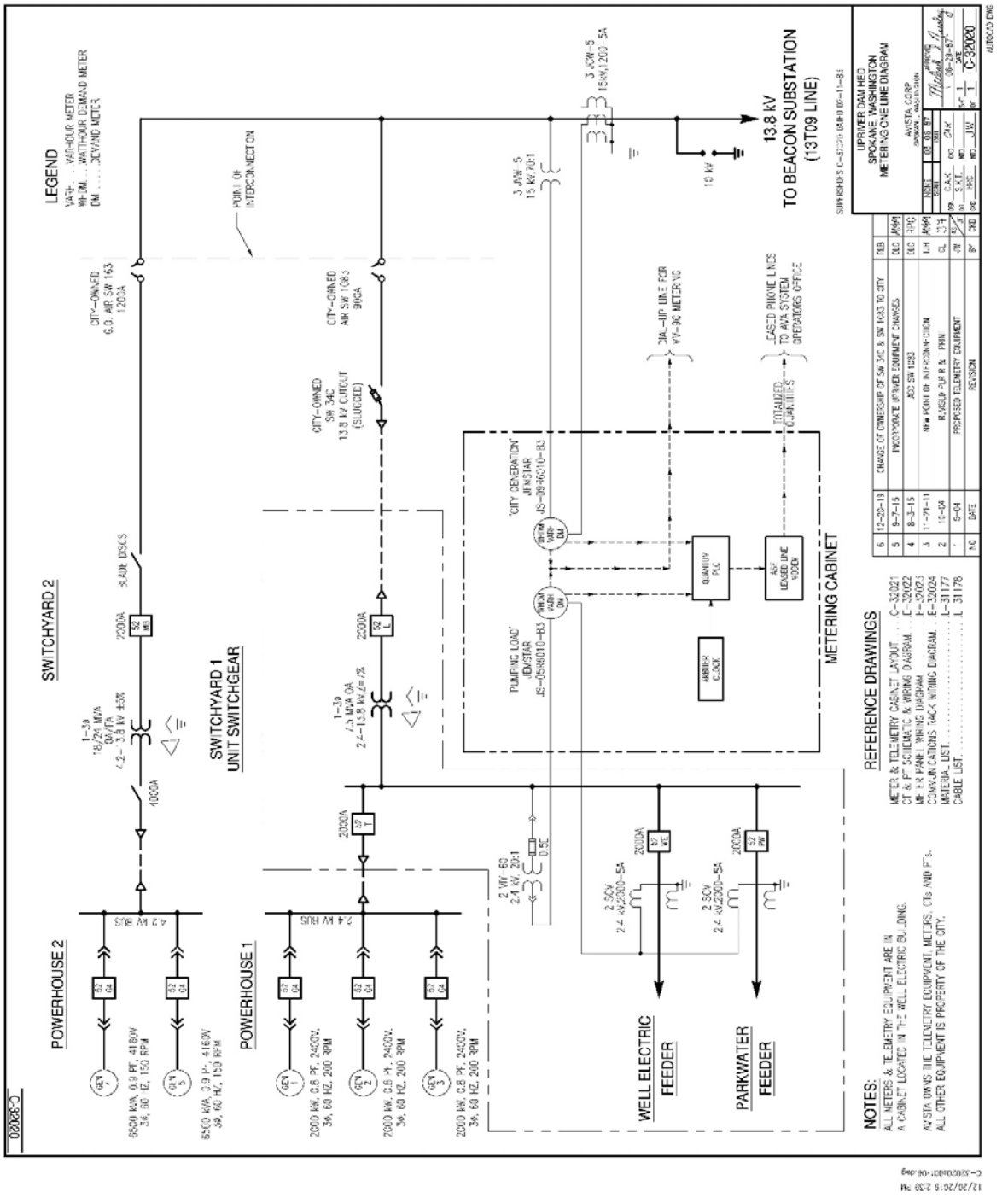
Arrows indicate the change of ownership at the line side (upstream Avista side) of Switch #1083 (shown for one of three phases).

POI (2) at Switchyard No. 2

Arrows indicate the change of ownership where Transmission Provider's 13.8 kV 1272 AAC conductor terminates at the line side of gang-operated Air Switch 163.

Attachment 3

One-line Diagram Depicting the Small Generating Facility, Interconnection Facilities and Metering Equipment



Attachment 3 – Revised March 30, 2020

Avista: _____

City of Spokane: _____

Briefing Paper
(PIES)

Division & Department:	Street
Subject:	SA Premier hot-pour rubberized sealant from Specialty Asphalt
Date:	4/27/2020
Contact (email & phone):	rhowerton@spokanecity.org / 625-7741
City Council Sponsor:	
Executive Sponsor:	Scott Simmons
Committee(s) Impacted:	
Type of Agenda item:	x Consent ☐ Discussion ☐ Strategic Initiative
Alignment: (link agenda item to guiding document – i.e., Master Plan, Budget, Comp Plan, Policy, Charter, Strategic Plan)	Strategic Plan
Strategic Initiative:	Infrastructure
Deadline:	
Outcome: (deliverables, delivery duties, milestones to meet)	

Background/History:

SA Premier hot-pour rubberized crack sealant is used to crack seal streets on an approximate five-year cycle. We plan to use about 144,000 lbs. on both the arterial and residential streets this year. The SA Premier Rubberized Crack Sealant cost is $0.834 per pound and is on State Contract #01211, not to exceed $125,000.

Executive Summary:

Impact

- The Street Department started a maintenance crack seal program in 2003 on arterial streets. The residential crack seal program started in 2012 as part of the Transportation Benefit District (TBD) funding.
  Crack sealing the life of pavement by reducing the amount of moisture that infiltrates the subgrade, which reduces the impacts of the freeze/thaw cycles during winter months.
  We plan to crack seal approximately 500,000 linear feet in 2020.

Action

- Approval of a one-year blanket order for SA Premier using State Contract #01211, on an "as needed" basis.

Funding

- Funding for this is included in the 2020 Street Operation and Maintenance Budget.

Budget Impact:

Approved in current year budget? ■ Yes ☐ No ☐ N/A
Annual/Reoccurring expenditure? ☐ Yes ☐ No ☐ N/A
If new, specify funding source:
Other budget impacts: (revenue generating, match requirements, etc.)

Operations Impact:

Consistent with current operations/policy? ■ Yes ☐ No ☐ N/A
Requires change in current operations/policy? ☐ Yes ■ No ☐ N/A
Specify changes required:
Known challenges/barriers:

Expenditure Control Form

1. **All requests being made must be accompanied by this form.**
2. **Route ALL requests to the Finance Department for signature.**
3. **If request is greater than $100,000 it requires signatures by Finance and the City Administrator. Finance Dept. will route to City Administrator.**

Today's Date: 4/9/20 **Type of expenditure:** Goods ◉ Services ○

Department: Street Department

Approving Supervisor: Clint Harris

Amount of Proposed Expenditure: $125,000

Funding Source: Arterial Street Budget and CTAB Residential Stre

Please verify correct funding sources. Please indicate breakdown if more than one funding source.

Why is this expenditure necessary now?

Create a value Blanket for the purchase of crack sealant for summer road maintenance.

What are the impacts if expenses are deferred?

Not able to complete road maintenance

What alternative resources have been considered?

None

Description of the goods or service and any additional information?

SA Premier hot-pour rubberized crack sealant used to crack seal streets. Sealant cost is $.0834 per pound on state contract # 01211. Department plans to use 144,000 lbs on arterial and residential streets this year.

Person Submitting Form/Contact: Clint Harris

FINANCE SIGNATURE:

DocuSigned by:
Tonya Wallace
CBC812B631244E9...

CITY ADMINISTRATOR SIGNATURE:

DocuSigned by:
Wes Grago
9C36E3376992442...

Briefing Paper
(PIES)

Division & Department:	Public Works, 4100 Water & Hydroelectric Services
Subject:	Water Conservation Master Plan adoption.
Date:	4/27/2020
Contact (email & phone):	kzimmer@spokanecity.org / 625-6573
City Council Sponsor:	
Executive Sponsor:	Scott Simmons, Director-Public Works
Committee(s) Impacted:	PIES
Type of Agenda item:	x Consent ☐ Discussion ☐ Strategic Initiative
Alignment: (link agenda item to guiding document – i.e., Master Plan, Budget, Comp Plan, Policy, Charter, Strategic Plan)	Council Ordinance (C35630)
Strategic Initiative:	Innovative Infrastructure
Deadline:	
Outcome: (deliverables, delivery duties, milestones to meet)	A drafted resolution and movement to advanced agenda for Council's consideration of adoption.

Background/History:

The development of a Water Conservation Master Plan is a joint Mayor/Council initiative supported both by state requirement and Council Ordinance (C35630) and was developed with the support of two internal committees. The draft Water Conservation Master Plan was briefed during Council Study Session on March 5th, review and feedback on the draft plan was received by Council on April 3rd and has been incorporated into the latest draft plan.

Executive Summary:

Impact

Conservation is particularly important to the Spokane Community because:

- The river is one of our greatest assets, and we view it as our responsibility to protect it and maintain it well into the future
- Conservation can address level demand issues, minimize safety and public health risks, and allow us to avoid further expansion of the distribution system and related capital expenses.
- Conservation efforts put us in the best position to maintain our self-determination status in the event of water right adjudication by demonstrating growth preparation and responsible water consumption.
- Conservation planning efforts and measures meet the City's legal obligations to conserve and also provide us with better guidance to meet our goals and
- Conservation provides us with sustainability and resiliency planning given anticipated climate variability.

Action

- Next steps include drafting a resolution and movement to advanced agenda for Council's consideration of adoption.
- Funding for the conservation program is included in the 2020 Water Department Budget.

Budget Impact:

Approved in current year budget? ■ Yes ☐ No ☐ N/A

Annual/Reoccurring expenditure? ■ Yes ☐ No ☐ N/A

If new, specify funding source:

Other budget impacts: (revenue generating, match requirements, etc.)

Operations Impact:

Consistent with current operations/policy?	■ Yes	☐ No	☐ N/A
Requires change in current operations/policy?	☐ Yes	■ No	☐ N/A

Specify changes required:

Known challenges/barriers:

CITY OF SPOKANE

WATER CONSERVATION MASTER PLAN

City of Spokane
Water Department

Executive Summary

Plan Overview

The Water Conservation Master Plan presents goals, targets, strategies and actions to conserve our water supply and to sustainably manage it for future generations. The variety of water conservation activities provides an opportunity to reduce demand while minimizing customer sacrifice and have been selected based on their pumping reduction potential for a reasonable cost.

Water system operation improvements to reduce distribution system loss, to improve meter accuracy, and to utilize tiered rate structuring are included in the Spokane Water System Plan. The Water Conservation Master Plan builds on those strategies, focusing on utility sponsored programs that help customers reduce their water use (programmatic conservation). The savings that occur due to plumbing codes/standards when customers replace older, less-efficient fixtures are considered within the strategies of this plan.

Activities that reduce indoor water use primarily impact the year-round base water use, while efforts that reduce outdoor water use target the peak season increased use. Both indoor and outdoor efforts will impact the peak season water use by lowering the base and assisting in shaving the peak. Figure 1 shows how the peak season water use can be impacted by either "shaving the peak" or "shaving the base".

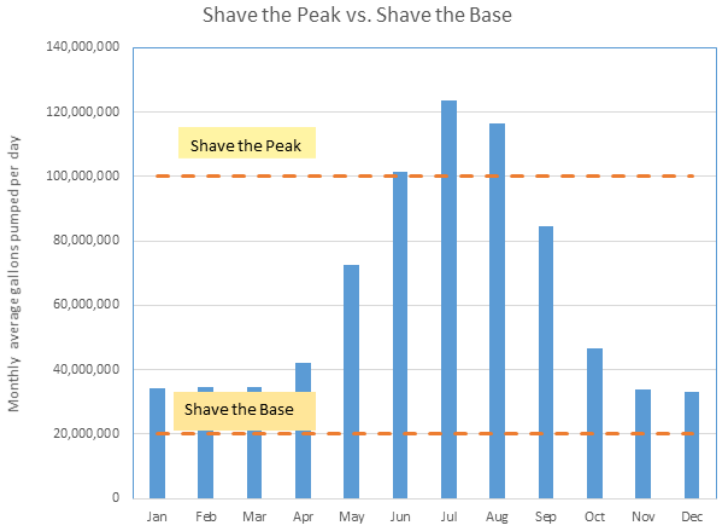


Figure 1: Shave the Base vs. Shave the Peak

Overarching Goals and Targets

The Water Conservation Master Plan centers on the achievement of the following overarching goals:

1. **Growth without Additional Pumping:** balance increasing number of connections system-wide with reductions in consumption to ultimately eliminate or defer potential capital expense.

2. **Reduction in Seasonal Demand Peaks:** peak seasonal demand relies on the distribution capacity of our system and in some areas, requires just-in-time water service. Keeping demand within the storage capacity of our system is safer, more reliable, and more cost-effective.

As our community's priorities shift, technologies change, and new knowledge is revealed, the plan will undergo a continual process of monitoring, evaluation, and evolution to keep pace with changing needs.

Water Use Efficiency

The City of Spokane addresses water efficiency through both the supply and demand sides of the water system. Water loss control programs (supply) fall under the umbrella of evaluation and reduction of Distribution System Loss (DSL). Components of this strategy include: pipe condition assessment, leak detection, system water audits, meter replacement program, and measurement of water consumption through authorized and unauthorized use from hydrants.

Our current conservation program addresses consumer water demand in the following ways: education, facility efficiency improvements, rebate programs, operational standards, a wastewater conservation credit for the lowest 20% of indoor water users and an inclined block water consumption rate structure.

In order to ensure a reliable, sustainable, resilient water supply while our economy and population grow, new policy will be needed. Regulations, ordinances and permitting policies have proven to significantly reduce water use throughout the nation. An overview of successful municipal irrigation restrictions has been provided in the appendix. To significantly address current and future water consumption, implementing water wise policies will effectively protect and sustain our water supply.

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Introduction

A River Runs Through It

Living in the Inland Northwest provides us with four beautiful seasons, year-round recreational opportunities and a stunning backdrop of low-slung mountains, coniferous forest and, during certain times of the year, a fierce and roaring river.

The Spokane River supported the early life of tribes and settlers with food, commerce and drinking water. As our small town grew and many others around it, our supply became degraded by human contamination.

Discovery of a prolific aquifer beneath our feet changed our source of water in 1907. It wasn't until recently that we began to understand the aquifer and its interdependent relationship with the river. Substantial studies from the USGS and the region's public water providers show us that the Spokane River is the largest recharge source of the aquifer and it is also its largest point of outflow.

For many years, our water supply was thought of as "infinite" and the quality "too pure".

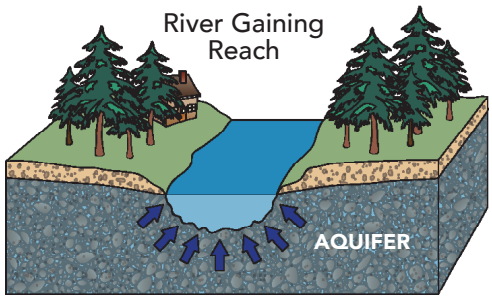


Figure 2: Water flows into the river through the bottom or through springs on the banks of the river.

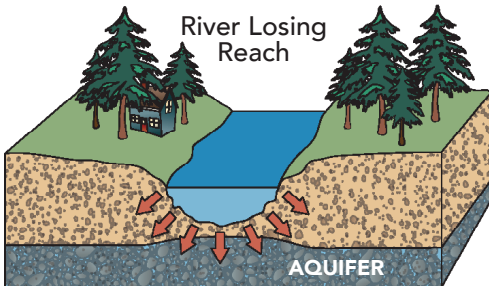


Figure 3: In these areas the water seeps out of the bottom of the river and recharges the SVRP aquifer.

Our water system has grown to accommodate population growth and the community's love of green landscapes. We now recognize that we don't have an endless supply of water, and we and we are not the same community that we first served when the Water Department was created more than 135 years ago.

Spokane is characterized as a high-desert climate, and during the summer months of the year, we can experience long periods without precipitation with high temperatures. The year 2015 brought us our worst case example: a significantly decreased snow-pack, abnormally warm spring temperatures, and an early runoff meant that we saw our river at its lowest level during the summer critical demand period. We also experienced difficulty pumping water from some of our more shallow wells.

Let us use 2015 as the impetus to use our natural resources more wisely and recognize their value. Each time we use water is an opportunity to make a deliberate choice to use this precious resource responsibly.

The availability of this resource ensures we will have clean and sufficient water to drink, trees to shade our streets, gardens to grow, and parks to play in. The water that flows from our taps makes our life in Spokane bountiful.

Spokane Water Today

Our Water Source:

The Spokane Valley Rathdrum Prairie (SVRP) aquifer is the sole source of water to more than 600,000 residents in the Inland Northwest. It underlies the eastern, central, and northern portions of the City and primarily flows from the east to the west and north, following the general topographic surface of the Spokane valley. Recharge of the SVRP aquifer is primarily from the Spokane River, area lakes and infiltration of rainfall. Given that the City of Spokane is directly dependent upon supply from the aquifer, it is critical for the City to understand and plan for the risks associated with potential changes in aquifer levels and water quality.

Although the SVRP aquifer is highly productive and highly transmissive, it is not inexhaustible. The Spokane River and SVRP aquifer are hydraulically connected. The gaining reaches of the Spokane River are the largest outflow source of the aquifer, while the losing reaches of the Spokane River remains the largest source of water to the SVRP aquifer. This gain in flow is vital for the ecological function of the river, supports recreation and tourism, and protects historic and cultural resources. Pumping less water from the aquifer, especially during summer months, could potentially mean more water available for the gaining reaches of the river.

Spokane Water System

The water system has seven well stations with 14 wells and 27 well pumps, 25 booster pump stations with 72 booster pumps, 22 pressure zones with 34 reservoirs, and more than 1,000 miles of water main. Well stations draw drinking water directly from the aquifer. The water is pure enough to be pumped directly from the ground without any treatment. Chlorine is added to the water to ensure that quality is maintained throughout the distribution system.

To pump water up to storage tanks and reservoirs, booster stations are used to help move the well water from lower elevations. To meet customer needs, the system has more than 100 million gallons of water storage capacity. The amount of water stored in a given tank depends both on the demand for the area as well as the fire protection requirements.

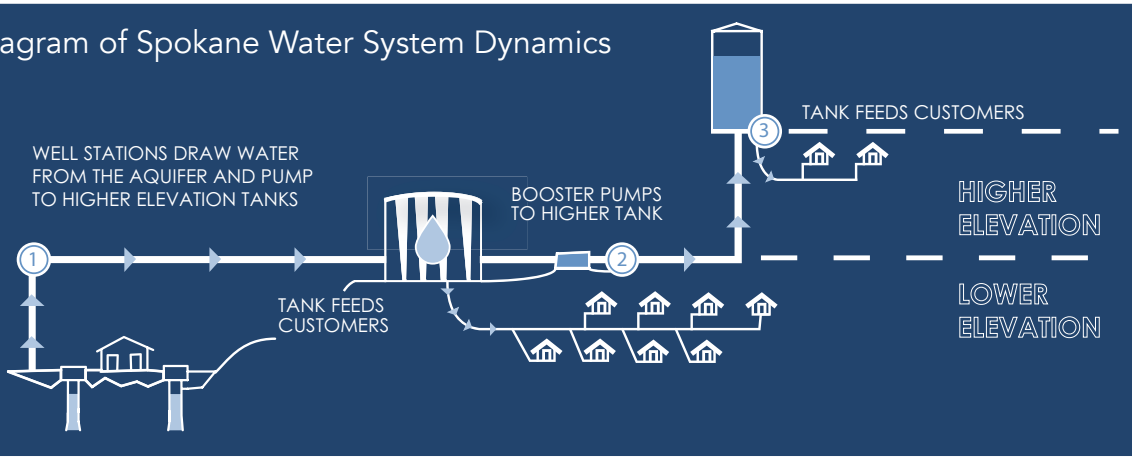
The wide variety of geographical features and substantial elevation changes found in and around the City, create the need for numerous water system pressure zones.

Within the City's service area, the south side of the City (South Hill) rises from the Spokane River to Moran Prairie and the western slopes of Browne's Mountain. Elevations range from the valley floor at 1,870 feet above sea level to about 3,000 feet. To the West, elevations vary from a low of 1,735 feet in the Latah (Hangman) Creek-Vinegar Flats area to 2,580 feet on the West Plains. The North side of the City (generally north of the Spokane River) experience elevations that range from 1,683 feet to 2,145 feet. Also on the North side is a plateau known as the Five Mile Prairie, a prominent geographical feature. Elevations of the prairie range from 2,145 feet at its base, to 2,400 feet on the plateau.

Aquifer Levels Impact on Pumping

Water supply is reliant upon the aquifer levels at our wells, which are at a fixed depth - based on well construction. Low aquifer levels impact our ability to distribute water efficiently throughout the system. These system characteristics make water conservation an even more critical component of the City of Spokane's long-term goals of sustainability, social responsibility, and affordability (Triple Bottom Line).

Figure 4: Diagram of Spokane Water System Dynamics



Customer Profile

Water Use Characteristics

Water use characteristics and customer sectors are important in designing a water conservation program that fits our customer base and consumption patterns. Water consumption for the City of Spokane Water Service Area is 53% single family, 14% multi-family, 24% commercial, 5% institutional, and 4% City parks and recreation facilities.

- The single family sector includes residential detached homes, duplexes, planned developments and mobile home parks.
- Multi-family consists of residential buildings with 3 units or more.
- Commercial sector includes a wide variety of buildings and water use from small restaurants to large industrial complexes and private golf courses.
- Institutional accounts include city/county/state/federal governmental buildings and grounds, public and private educational facilities, non-city owned private parks and play-fields.
- Park accounts include all city-owned parks and golf courses.

Table 1: Customer Sector Accounts & Consumption

	Sector	Number of Accounts	2018 Annual Consumption (mg)
	Single Family (SF)	66,482	9,553
	Multi-Family (MF)	2,504	2,564
	Commercial/Industrial	5,848	4,410
	Institutional	643	988
	Parks	277	716
	Total	**75,754**	**18,105**

Figure 5: Accounts Sector Split

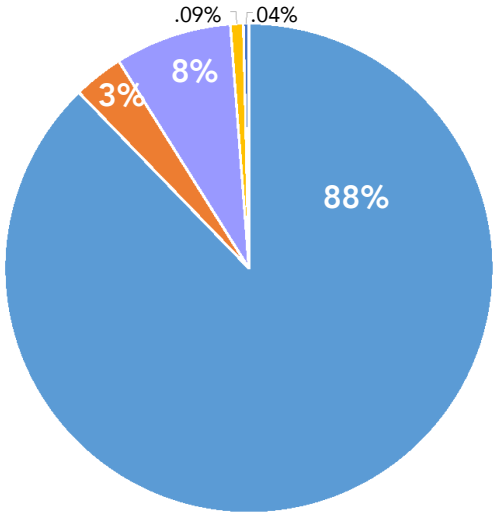
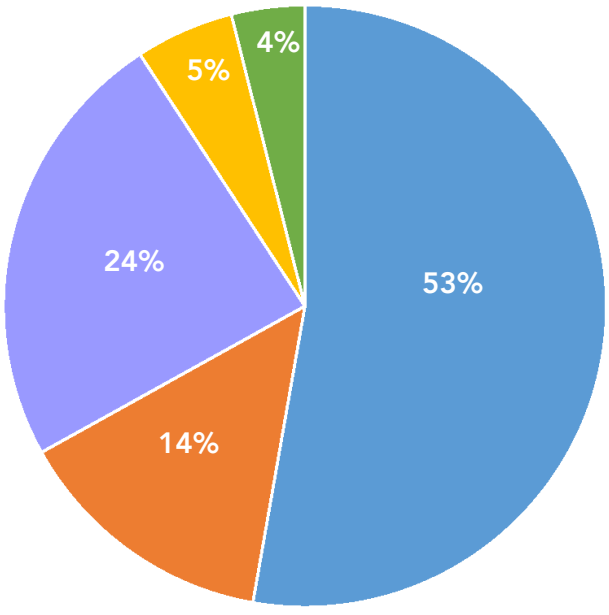


Figure 6: Consumption Sector Split



Characteristics Analysis

- The single family sector is a great target for the conservation program because it represents the largest portion of consumption (53%) and the vast majority of accounts (88%) and has a large savings potential.
- The multi-family sector has a much smaller percent of accounts (3%) compared to its consumption (14%) and could provide a good return on investment of resources.
- The commercial/industrial sector is a good target for the conservation program because of its sizable portion of consumption (24%).
- Together, the institutional and parks accounts make up 9% of the consumption and just over 1% of customer accounts. However small, conservation activities in this sector have the ability to visibly demonstrate government's commitment to natural resource conservation and influence decision making.

Housing Stock Characteristics

The type and age of housing in the Spokane service area is important to choosing appropriate water conservation hardware and identifying behavior changes to promote throughout the program. National toilet and showerhead standards first took effect in 1994, and buildings constructed before this period could have pre-code hardware. Information on housing type and age was provided from the U.S. Census Bureau 2013-2017 American Community Survey 5-year estimates. Note that due to the complexity of our entire service area, only data reported for the City of Spokane have been reviewed.

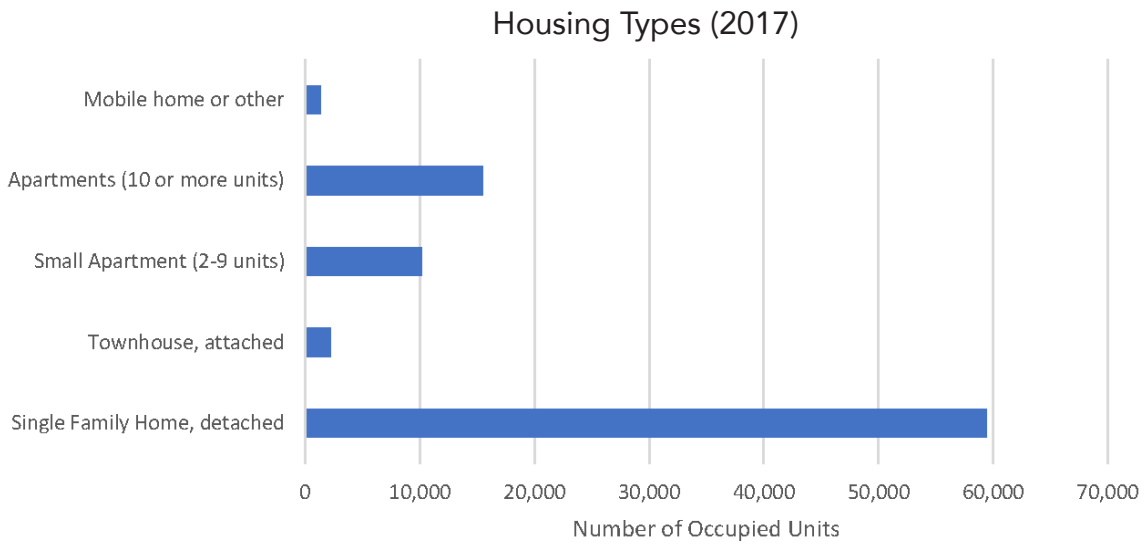


Figure 7: Housing Types

Single family homes are the predominant housing type, followed by larger apartment buildings.

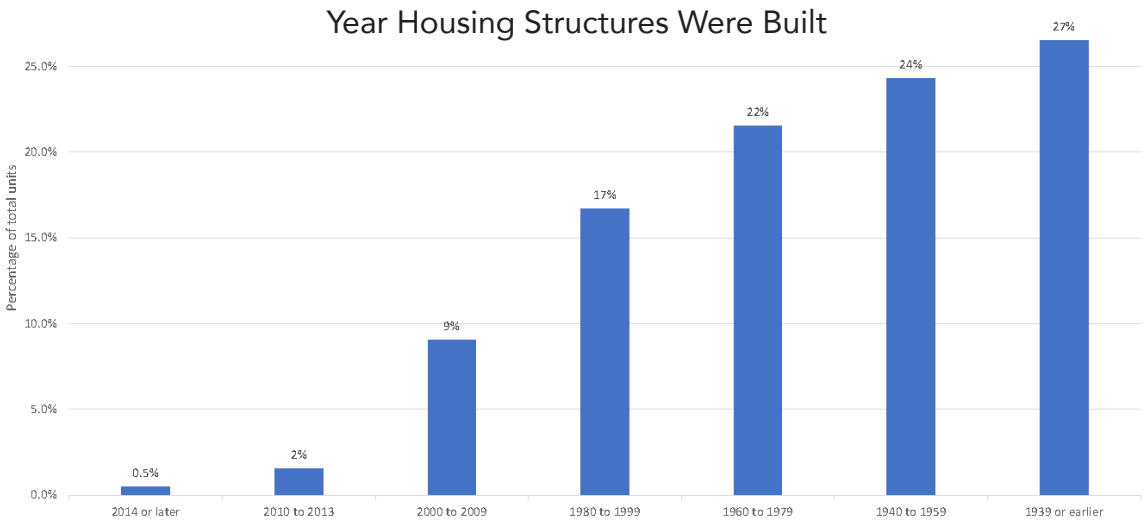


Figure 8: Housing Age

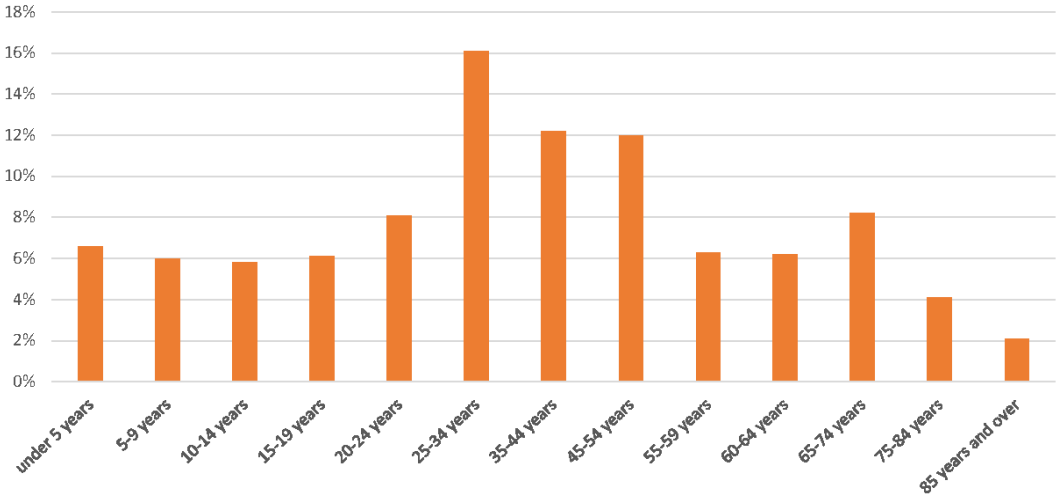
Most of the existing housing stock was built before the plumbing code was updated, 73% of housing structures were built before 1980.

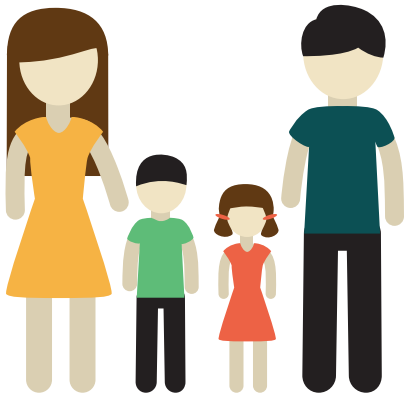
Customer Profile

Customer Demographics

The demographics of our customers is paramount to designing a water conservation program and activities that fit those characteristics. Data was obtained from the U.S. Census Bureau 2013-2017 American Community Survey 5-year estimates.

Figure 9: Age Distribution





Age: The 25-54 age groups each represented a higher percentage of the population than youth and senior groups.

Figure 10: Educational Attainment of Population ≥ 25yrs old

Education: Customers that have a high-school diploma and/or attended but did not complete college represent the majority of our adult population.

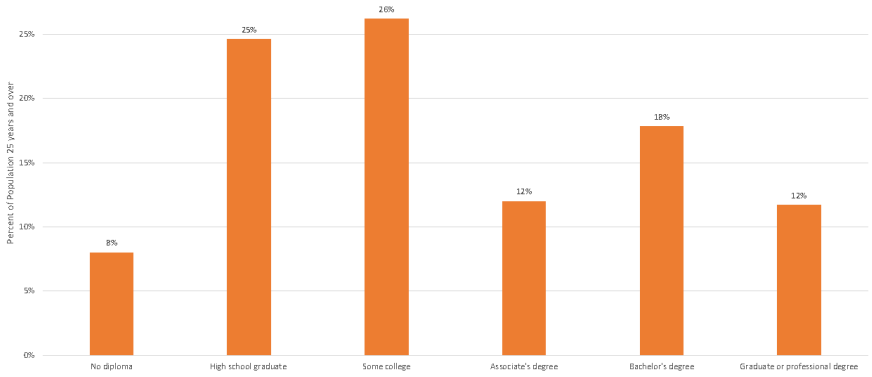
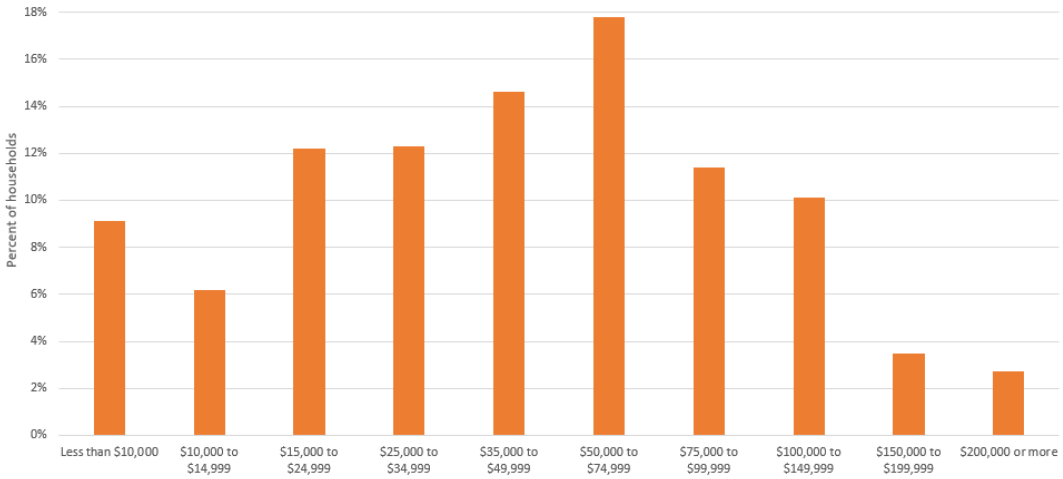


Figure 11: Household Income



Income: The average household income in Spokane is $62,092 compared to the United States' average of $77,713. Income plays a significant role in an individual's motivation or ability to participate in conservation activities. Providing financial and technical assistance will help customers at all income levels participate.

Historic Conservation Efforts

Original Conservation Driver

Since 2003, State municipal water laws have asked public water systems in Washington to maintain or create a water use efficiency program in order to demonstrate to the State that the purveyor is being a responsible steward of their inherent water rights. The City of Spokane has complied with the law by publicly establishing water savings goals, striving to meet a standard of no more than 10% system water loss, metering all connections, performing leak detection, establishing conservation rate structures and implementing customer education.

In 2006, the City adopted the Water Stewardship Strategic Plan, which set goals as a per capita (per person) seasonal reduction in pumping. The goals were based on total pumpage for all uses including residential, commercial, industrial, and government, and are expressed on a per capita basis. Goals were specified for seasonal periods of October through March, April through June, and July through September.

Current Goals and Program

In 2014, the City of Spokane updated the annual water use efficiency goals based on metered consumption instead of measured pumping and are associated with a specific customer segment (RES 2014-0043). The indoor residential goal has been consistently met since 2014, and in most years the outdoor goals have not been met.

Table 2: 2014 Water Use Efficiency Goals

	Reduction Goal	Time Measured
1	0.5% Reduction in SF Residential Indoor	Dec 15 – February 14
2	2% Reduction in SF Residential Outdoor	July 15 – September 14
3	2% Reduction in Commercial /Industrial Outdoor	July 15 – September 14
4	2% Reduction in Governmental Outdoor	July 15 – September 14

Table 3: Water Use Efficiency Goal Results 2014-2019. Goal is measured as daily gallons consumed per connection.

Year	1 Goal / Actual (gal/day)	2 Goal / Actual (gal/day)	3 Goal / Actual (gal/day)	4 Goal / Actual (gal/day)
2014	122 / 122	516 / 513	4,318 / 4,325	4,921 / 4,759
2015	121 / 120	516 / 562	4,232 / 3,837	4,822 / 4772
2016	121 / 119	492 / 564	4,147 / 3,975	4,726 / 5,822
2017	120 / 118	479 / 638	4,064 / 4,602	4,631 / 5,410
2018	119.6 / 115	467 / 617	3,983 / 4,088	4,539 / 5,745
2019	119 / 113	455 / 553	3,904 / 3,947	4,448 / 5,189

City of Spokane Water Department's current conservation efforts include:

Water System: Leak detection, distribution system loss (reduction 1.75 bg/year from 2012-2018), water audits, improved meter accuracy, tiered rate structure.

City Owned Parks: Indian Canyon (16.8 mg saved in 2019) and Esmeralda golf course irrigation improvements, Manito Park turf reduction and irrigation system, converting Manito Koi Pond to recirculating system, controls for splash pads that limit the run time, irrigation design standards.

Customer Program: the City offers education and technical assistance, giveaways in the form of efficient showerheads (limiting flow to 2 gpm), kitchen sink aerators (1 gpm), bathroom sink aerators (1 gpm), and toilet dye tabs to test for leaks. Outdoor water saving tools include: SpokaneScape Turf Replacement Rebate Program, soil moisture meters, hose timers, rain barrels, and garden hose nozzles with repair parts.

Conservation Master Plan Development Strategy

Water conservation is important to the Spokane community for many reasons:

- Conservation programming could delay or eliminate the need for system expansion and capital costs.
- Conservation measures have potential to impact river flows during dry months.
- Conservation provides us with sustainability and resiliency planning given anticipated climate variability.
- Conservation planning efforts and activities meet the City's legal obligations to conserve and also provide us with better guidance to meet our goals (WAC 246-290-830).
- The development of a Water Conservation Master Plan is a joint Mayor/Council initiative supported both by state requirement and Council Ordinance (C35630).

The Conservation Master Plan has been developed with the support of two internal committees and the Sustainability Action Subcommittee (SAS).

- Advisory Committee: The advisory committee is comprised of cross-departmental leadership engaged to provide guidance and strategic oversight of the program's direction, attainability, and financial sustainability.
- Technical Committee: The technical committee has been engaged to provide cross-departmental review of cost and operations inputs.
- SAS: Sustainability Action Sub-Committee is a council-appointed advisory group comprised of volunteer stakeholders around the Spokane community.
- Table 4 shows the additional stakeholders/influencers and variables that were considered in creating the Water Conservation Master Plan.

Table 4: Plan Development Considerations

Stakeholder	Interest in Conservation Plan
Customers/ Rate Payers	*Assistance with utility bills *Increases in population *Desire to keep bills low
Spokane City Council	*Desire for sustainability and affordability throughout the City of Spokane *Positive customer feedback
State Department of Health	*Requirements for compliance *Can change requirements
Tribes	*Water for aquatic life and habitat protection
Environmental Groups	*Sustainable water supply, water conservation
Influence	**Consideration in Conservation Plan**
Plumbing Code	*Continuously improving efficiency standards for fixtures; as homes are updated, efficiency improves over time
Avista's conservation programming	*Partnering on showerhead distribution and education outreach
MySpokane Customer Service	*Tools to help promote conservation through billing, website, and customer interactions
Climate Variability	*Has the potential to affect water supply and demand
Large areas in Spokane County for development	*Newer homes will have more efficient plumbing *Opportunities to install low-water use landscaping *Population growth could support more commercial growth *West Plains PDA - if developed without conservation in mind could cause costly capital improvements
Rates	*Rates influence the amount of water consumed

The program has been designed under the following criteria:

- SAVES WATER: Each element is reasonably expected to contribute to water savings in the near-term or longer-term.
- ALL CUSTOMERS: The program will have offerings for all customer classes to participate.
- FIXTURE UPGRADES & BEHAVIOR: The program should maximize efficiency by promoting new technology and behavior changes.
- INDOOR & OUTDOOR: The program will have offerings to achieve both indoor and outdoor efficiencies.
- CUSTOMER COST SHARE: Financial incentives can provide the motivation for individuals to participate in efficiency measures and reward positive behavior.
- BEYOND-CODE: Move customers to levels that are more efficient than current plumbing code to maximize water savings.
- PARTNERSHIPS: The program will work to leverage partnerships that help increase participation and reduce costs. Potential partners include other water and energy utilities, home-improvement stores, and community-based organizations.
- See Appendix for a list of all considered incentivized conservation activities.

The variety of water conservation activities provides an opportunity to reduce demand while minimizing customer sacrifice and have been selected based on their pumping reduction potential for a reasonable cost.

VISION: Reliable, Sustainable, Resilient Water Supply
Spokane water customers and City facilities are using water efficiently, new development construction is designed to minimize water use, and fixtures in existing developments have been upgraded to maximize water efficiency.

Goals	Key Performance Indicators	Strategies
Service Area Growth without Additional Pumping (total overall base consumption). *Annual consumption decreases from 2018 levels despite population and economic growth.*	Annual: 10 million gallons conserved for all participants	S2-S5
	Annual Residential (SF/MF): 5,000 gallon reduction per participating connection	S3-S4
	Annual City: 2 million gallon reduction for all city-owned properties	S5
	Annual Commercial: 200,000 gallon reduction per participating connection	S4
	Annual: 30 education events	S8
	Annual: 1,400 rebates issued	S2-S4, S8
	Long-Term: Conserved 500 million gallons by 2030	S1-S8
	Long-Term: 5% reduction in per capita consumption by 2030	S1-S8
Reduction in Seasonal Demand Peaks (outdoor consumption)	Annual: Reduction in MDD (maximum day demand) during active growing season	S1-S3, S5-S8
	Long-Term: 15% reduction in seasonal peak demand by 2030	S1-S8

MDD: Maximum day demand is the quantity of water supplied during the highest-use day of the year

CORRESPONDING STRATEGIES	
S1	Target pressure zones with highest impact (could be due to cost of distribution, risk exposure, system capacity, redundancy, etc)
S2	Work with high water users within all customer classes to maximize results
S3	Financial Incentives for Outdoor Conservation
S4	Financial Incentives for Indoor Conservation
S5	City-Owned Facility Program
S6	Development Policies Targeting Responsible and Consistent Growth
S7	Technological Advancements: Enhanced data accuracy and monitoring
S8	Education and Technical Assistance

S1: Target pressure zones with highest impact.

Outlying pressure zones have the highest peaking factors and the highest cost to the City to provide water service. As demand or connection accounts increase within the pressure zone over time, more existing storage must be dedicated to emergency storage. Outreach activities will be focused in the high cost/high risk pressure zones identified below.

Priority Actions

S1-A	Target high risk pressure zones (just in time delivery and/or extremely high per capita consumption) with educational outreach, technical assistance, incentive opportunities.
S1-B	Target high cost pressure zones (determined by pumping): Southview, Eagle Ridge 1 & 2, Woodridge, Glennaire, West Plains, Kempe.
S1-C	Landscaping and irrigation standards for new development.

S2: Work with high water users within all customer classes to maximize water use efficiency.

High water users present substantial opportunities for water conservation; identify impediments and barriers for customers to use water wisely.

Priority Actions

S2-A	Evaluate the top 50 users per customer sector on a biannual basis, comparing lot size and water use to determine if efficiency improvements could be made.
S2-B	Make contact with top 50 users annually with technical assistance and incentive opportunities.
S2-C	Implement water use efficiency incentives (See S3 and S4) with a minimum of 5 customers per sector annually.

S3: Residential, Multi-Family, Commercial Financial Incentives for Outdoor Conservation

The Alliance for Water Efficiency (AWE) Water Conservation Tracking Tool version 3.0 (Tracking Tool) was used to evaluate the benefit and costs for utilities in implementing water conservation activities. The Tracking Tool has a library of 30 defined water conservation activities. These activities have 21 parameters. These parameters have predefined values that can be supplemented with utility specific data if they are available. The following activities have been selected for water customers based on cost effectiveness, staff availability and impact on peak demand:

Priority Actions

S3-A	Implement financial incentive program using utility inserts, press releases, outreach events and social media avenues to advertise. (Cross-cutting strategy: S2-B)
S3-B	Irrigation Controller Rebate (Single Family): Residential customers who purchase a WaterSense approved irrigation controller can submit a receipt and receive a $100 credit on their utility bill post verification of installation.
S3-C	Irrigation Controller Rebate (Multi-Family): Customers who purchase a WaterSense approved irrigation controller can submit a receipt and receive a $500 credit on their utility bill post verification of installation.
S3-D	SpokaneScape Turf Replacement Program: Residential customers who remove turf and replace with drought tolerant plants, low-volume irrigation and mulch are eligible for a credit of $0.50/sq ft, up to $500.
S3-E	SpokaneScape Turf Replacement for Commercial Properties: customers who remove turf and replace with drought tolerant plants, low-volume irrigation and mulch are eligible for a credit of $0.50/sq ft, up to $2,500.
S3-F	Efficient Nozzle Replacement: Single Family customers that swap out sprinkler heads for rotary nozzles with built in pressure regulation are eligible for a $4/nozzle credit.

Table 5: Outdoor Conservation Financial Incentives

ACTIVITY	ANNUAL WATER SAVINGS PER UNIT (gallons)	ANNUAL NUMBER OF UNITS	REBATE AMOUNT	ANNUAL PROGRAM COST	TOTAL ANNUAL GALLONS SAVED	WATER SAVINGS/ INVESTED DOLLAR (gallons)
Irrigation Controller -SF	10,805	100	$100	$10,000	1,080,500	108
Irrigation Controller- MF	43,221	10	$500	$5,000	432,210	86
SpokaneScape - SF	11,440	100	$500	$50,000	1,144,000	23
SpokaneScape- MF/ COM	28,600	10	$2,500	$25,000	286,000	29
Efficient Nozzles -SF	300	1,000	$4	$4,000	300,000	75
TOTALS	**94,366**	**1,220**	**-**	**$94,000**	**3,242,710**	

SF: Single Family Customers; MF: Multi-Family Customers; COM: Commercial

S4: Residential, Multi-Family, Commercial Financial Incentives for Indoor Conservation

Both indoor and outdoor efforts will impact the peak season water use, by effectively lowering the base and assisting in shaving the peak. Indoor conservation will reduce flow to the wastewater collection systems and provide interceptor relief, allowing for more capacity at the treatment plant and at critical points in the collection system. The following activities have been selected using the AWE Water Conservation Tracking Tool based on cost effectiveness, staff availability and impact on year-round consumption:

Priority Actions

S4-A	Implement financial incentive program using utility inserts, press releases, outreach events and social media avenues to advertise. (Cross-cutting strategy: S2-B, S3-A)
S4-B	Low-Flow Showerheads (SF/MF): WaterSense labeled showerheads (1.5 gpm) will be purchased and available for customers at the customer service counter in City Hall, community events, and other locations.
S4-C	High-Efficiency Toilets (SF/MF): Customers who purchase a WaterSense approved toilet (1.28 gpf or less) can submit their receipt and receive a $100 credit on their utility bill post verification of installation.
S4-D	High-Efficiency Toilets (COM): Customers who purchase a WaterSense approved toilet or urinal (1.28 gpf or less) can submit their receipt and receive a $100 credit on their utility bill post verification of installation.
S4-E	Cooling Tower Conductivity Controller: Customers who purchase and install a conductivity controller (increases the amount of times water will re-circulate through cooling tower) are eligible for a $695 credit.

Table 6: Indoor Conservation Financial Incentives

ACTIVITY	ANNUAL WATER SAVINGS PER UNIT (gallons)	ANNUAL NUMBER OF UNITS	REBATE AMOUNT	ANNUAL PROGRAM COST	TOTAL ANNUAL GALLONS SAVED	WATER SAVINGS/ INVESTED DOLLAR (gallons)
Low-Flow Showerhead-SF/MF	2,062	500	$6	$3,000	1,031,000	344
High Efficiency Toilets- SF	9,541	500	$100	$50,000	4,770,500	95
High Efficiency Toilets-MF	13,644	500	$100	$50,000	6,822,000	136
High Efficiency Toilets-COM	13,020	100	$100	$10,000	1,302,000	130
Cooling Tower Conductivity Controller - COM	209,880	10	$695	$6,950	2,098,800	302
TOTALS:	**248,147**	**1,610**	**-**	**$119,950**	**16,024,300**	

SF: Single Family Customers; MF: Multi-Family Customers; COM: Commercial Customers

S5: City-Owned Facility Program

Establish the City of Spokane as a model within our community and to other communities by implementing, practicing, and demonstrating water efficiency on all City properties. This will demonstrate our commitment to conservation and to a sustainable future.

Priority Actions

S5-A	Develop landscape and irrigation standards for City properties and projects.
S5-B	Conduct facility water audits - inventory existing equipment to identify and plan efficiency upgrades.
S5-C	Offer financial incentives for efficiency upgrades.
S5-D	Continue to build relationships with Parks and Grounds maintenance crews to foster a positive attitude toward conservation.
S5-E	Offer educational courses and irrigation efficiency trainings/certifications for appropriate City staff.
S5-F	Nozzles: Irrigated City properties will swap out sprinkler heads for rotary nozzles with built in pressure regulation. Ordered in bulk can cost $3.50/ nozzle, labor costs of installation are not included
S5-G	Irrigation Controllers for Parks: Large landscape controllers that use technologies to improve efficiency (ie: centralized computer control, moisture sensor, rain shut-off switches).
S5-H	High Efficiency Toilets: Replacement of 3.5 gpf toilets with WaterSense approved toilet or urinal (1.28 gpf or less). Cost includes installation.
S5-I	Sink Aerators: City facilities will be inventoried and existing aerator that is >1.5 gpm will be replaced.
S5-J	SpokaneScape Demo Gardens: Turf replacement at existing, high traffic landscaped areas with drought tolerant plants, low-volume irrigation and mulch.
S5-K	Facility Audit: Private contractor will analyze 5-8 city facilities, provide minute reads on water consumption and identify resolutions to eliminate water waste.

See next page for table of activities.

Currently the full program is in development and the intention of the conservation team is to dedicate resources annually to this body of work. The first year's slate of activities are listed below:

Table 7: City-Owned Facility Activities

ACTIVITY	ANNUAL WATER SAVINGS / UNIT (gallons)	ANNUAL NUMBER OF UNITS	INCENTIVE	ANNUAL PROGRAM COST	TOTAL ANNUAL GALLONS SAVED	WATER SAVINGS/ INVESTED DOLLAR
Nozzles	300	500	-	$2,000	150,000	75
Irrigation Controllers	43,221	2	$10,000	$20,000	86,442	4
Toilet-Replace & Install	13,020	100	250	$25,000	1,302,000	52
Sink Aerators	*Data collection in process*			$3,000	-	-
SpokaneScape Demo Gardens	Varies/sf	1	-	$30,000	-	-
Facility Audit	-	-	-	$50,000	-	-
TOTALS:	**-**	**-**	**-**	**$130,000**	**-**	**-**

S6: Development Policies Targeting Responsible and Consistent Growth

Adopting cost-effective water use efficiency codes and standards are a critical component of the City of Spokane's long-term goals of sustainability, social responsibility, and affordability.

Priority Actions

S6-A	Evaluate, update or establish building, planning, landscape, irrigation, and stormwater codes for water efficiency.
S6-B	Evaluate options and viability for water conservation and reuse through stormwater management or advanced wastewater treatment.
S6-C	Engage SAS in water use policy review and potential regulation development.

S7: Technological Advancements

Enhanced data accuracy and monitoring is a valuable tool for all customers to help manage their water consumption.

Priority Actions

S7-A	Conduct a forensic billing analysis annually. Identify billing system anomalies and systematic data handling errors to target high users and to reduce unauthorized consumption.
S7-B	Evaluate options for smart meter technology to improve customer self monitoring and leak detection.

S8: Education and Technical Assistance

Education is key to changing societal norms and behaviors toward conservation, and technical assistance can provide customers the tools needed to accomplish conservation activities.

Priority Actions

S8-A	Partner with high water users in all customer sectors to maximize water efficiency.
S8-B	Facilitate public education of all ages on water conservation at community events, neighborhood meetings, classrooms and city-hosted classes.
S8-C	Utilize social media platforms to facilitate communication about water conservation per capita goals and strategies. Recognize and promote leaders in conservation and showcase businesses, schools and individuals that are taking action.
S8-D	Implement education campaign related to water conservation and utilize it to grow participation and awareness of City financial incentive programs.
S8-E	Encourage voluntary drought response measures to the public through social media platforms and campaign activities by communicating low river flows and strategies to reduce consumption and improve river health.
S8-F	Research low or no-cost leak detection and repair for low-income customers.
S8-G	Update the City's "Slow the Flow" conservation webpage to provide pertinent information on rebate incentives and other program components.
S8-H	Develop and update the City's "SpokaneScape" turf-removal rebate webpage to encourage water-wise landscaping in the community.
S8-I	Collaborate with existing community groups to effectively implement strategies and spread awareness. Potential partners include other water utilities, energy utilities, home-improvement stores, community-based organizations and professional organizations.
S8-J	Expand upon the City's Environmental Programs dashboard to track internal water use and increase efficiency awareness across all City departments.
S8-K	Develop and facilitate water conservation courses for City staff and host annually.
S8-L	Develop and implement a water-wise or SpokaneScape commercial and industrial certification program.
S8-M	Design and construct SpokaneScape demonstration gardens throughout service area.
S8-N	Develop and distribute a guide for enhancing water-use efficiencies on landscapes and irrigation systems.
S8-O	Develop and distribute a water-wise plant list specific to Spokane's climate and soil conditions.
S8-P	Develop and distribute landscape template guide for commercial, residential and institutional properties.
S8-Q	Utilize utility billing software to show the relationship between water consumption and entire utility bill.

Conservation Budget, Staffing, Evaluation & Reporting

Budget:

The annual budgets for a 6-year program are shown below. It is divided into FOUR categories: Rebates, O&M (conservation staff), City Facility Program conservation activities and Contractual Services. The budget is all inclusive and pays for City conservation staff time, rebates to customers, contractors, marketing, and all other expenses.

YEAR	REBATES	O&M	CITY FACILITY PROGRAM	CONTRACTUAL SERVICES	TOTAL
2020	$213,950	$125,000	$130,000	$50,000	$518,950
2021	$213,950	$125,000	$130,000	$50,000	$518,950
2022	$213,950	$125,000	$130,000	$50,000	$518,950
2023	$213,950	$125,000	$130,000	$50,000	$518,950
2024	$213,950	$125,000	$130,000	$50,000	$518,950
2025	$213,950	$225,000	$130,000	$50,000	$618,950

Staffing:

The City of Spokane currently has two full-time staff members assigned to the conservation program. Moving forward, Utility Billing Staff will play a large supporting role facilitating residential rebate processing and reporting. Existing Conservation Staff positions are shown below.

#	TITLE	POSITION DESCRIPTION
1	Water Conservation Coordinator	Overall program planning and management, commercial rebates and education/ technical assistance, evaluation, marketing, research, data analytics
2	Water Efficiency Specialist	Landscape rebates, education/technical assistance, landscape program evaluation and planning

Evaluation:

The Water Conservation Team will monitor the progress of the Water Conservation Master Plan implementation on an ongoing basis, evaluating and tracking the progress of key performance indicators.

Progress Reporting:

In accordance with State (WAC 246-290-810) and Council requirements (ORD C35630), the Water Department will provide an annual written report each February that provides for the previous 5 years the following information:

- Total number of gallons pumped to each customer sector with its associated revenue and costs. Sectors include: Single family, multi-family, commercial, institutional, government, permitted hydrant use, and intertie accounts.
- Total budget dollars used in the Conservation Program and estimated water savings
- Percentage and number of gallons lost by the water distribution system
- Per capita consumption for all customers in the water service area

Plan Updates:

Within one year of adoption, each defined strategy will be further developed following a SMART logic model (Specific, Measurable, Achievable, Realistic, Time-bound) and actions will be assigned City of Spokane staff ownership.

Implementation Plan

Within 20 months of adoption of the Water Conservation Master Plan, a council appointed Water Conservation Taskforce will develop community drought response measures which will be presented to council for its inclusion to the plan.

The Water Department will work with internal staff and community members to update the plan every 5 years. This five-year update schedule will ensure that the plan can respond to environmental changes and reflect actual results. Any updates to the Water Conservation Master Plan will go through the City Council approval process before taking effect.

2020 Implementation Plan:

The 2020 Water Conservation Master Plan was developed and reviewed by City of Spokane staff, in conjunction with the Sustainability Action Sub-Committee (SAS). Once the plan has been adopted by Spokane City Council with a public hearing, a press-release will be issued to inform the public. Following Council adoption, water conservation staff will attend neighborhood community council meetings to share the content of the plan, and continue to educate the community on the goals and associated activities established by the plan.

2020 Pilot Program Timeline:

	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
CONTENT DEVELOPMENT							
Create Rebate Platform/ Update Website							
Research Target Customers							
Build Partnerships							
MARKETING & ADVERTISING							
Press Release							
Blog Posts							
Social Media Platforms							
Water Wise Spokane Ad Campaign							
OUTREACH							
Neighborhood Council Meetings							
Community Events							
City-Hosted Online Landscaping Classes							
CITY-OWNED FACILITY PROGRAM							
Facility Inventory Audits							
Identify Irrigation Projects							
REPORTING							
3rd Quarter KPI's							
Report to Council (Feb 2021)							

Table 8: Subtotal of all Incentivized Conservation Activities

ACTIVITY	ANNUAL WATER SAVINGS PER UNIT (gallons)	ANNUAL NUMBER OF UNITS	REBATE AMOUNT	ANNUAL PROGRAM COST	TOTAL ANNUAL GALLONS SAVED	WATER SAVINGS/ INVESTED DOLLAR (gallons)	ANNUAL WASTE-WATER IMPACT (gallons)
Low-Flow Showerhead-SF/MF	2,062	500	$6	$3,000	1,031,000	344	1,031,000
High Efficiency Toilets-SF	9,541	500	$100	$50,000	4,770,500	95	4,770,500
High Efficiency Toilets-MF	13,644	500	$100	$50,000	6,822,000	136	6,822,000
High Efficiency Toilets-COM	13,020	100	$100	$10,000	1,302,000	130	1,302,000
Cooling Tower Conductivity Controller - COM	209,880	10	$695	$6,950	2,098,800	302	2,098,800
Irrigation Controller -SF	10,805	100	$100	$10,000	1,080,500	108	-
Irrigation Controller-MF	43,221	10	$500	$5,000	432,210	86	-
SpokaneScape- SF	11,440	100	$500	$50,000	1,144,000	23	-
SpokaneScape- MF/COM	28,600	10	$2,500	$25,000	286,000	11	-
Efficient Nozzles -SF	300	1,000	$4	$4,000	300,000	75	-
CITY OWNED PROPERTY PROGRAM							
Efficient Nozzles	300	500		$2,000	150,000	75	-
Irrigation Controllers	43,221	2	$10,000	$20,000	86,442	4	-
Toilet-Replace & Install	13,020	100	250	$25,000	1,302,000	52	1,302,000
Sink Aerators	*Data collection in process*			$3,000	-	-	
SpokaneScape Demo Gardens	Varies by sq footage	TBD		$30,000	-	-	-
Facility Audit	-	-	-	$50,000	-	-	-
SUBTOTAL OF KNOWN VALUES:	399,054	3,433	-	$343,950	20,805,452	-	17,326,300

SF: Single Family Customers; MF: Multi-Family Customers; COM: Commercial Customers

Activities Considered:

The Alliance for Water Efficiency (AWE) Water Conservation Tracking Tool version 3.0 (Tracking Tool) was used to evaluate the benefit and costs for the utilities in implementing water conservation activities. The Tracking Tool has a library of 30 defined water conservation activities. These activities have 21 parameters. These parameters have predefined values that can be supplemented with utility specific data if it is available.

The following 12 activities were considered, using the model, for inclusion in the new conservation program:

Table 9: Conservation Activities Considered

ACTIVITY	ANNUAL WATER SAVINGS PER UNIT (gallons)	ANNUAL NUMBER OF UNITS PROGRAMMED	ANNUAL PROGRAM COST	ANNUAL TOTAL GALLONS SAVED	ANNUAL WASTEWATER IMPACT
LF Showerhead- SF	2,062	500	$3,000	1,031,000	1,031,000
LF Showerhead -MF	1,898	250	$1500	474,500	474,500
HE Toilets- SF	9,541	500	$50,000	4,770,500	4,770,500
HE Toilets- MF	13,644	500	$50,000	6,822,000	6,822,000
HE Toilets- CII	13,020	100	$10,000	1,302,000	1,302,000
Clothes Washers -SF	5,000	50	$12,500	250,000	250,000
Cooling Tower Conductivity Controller - COM	209,880	10	$6,950	2,098,800	2,098,800
Irrigation Controller -SF	10,805	100	$10,000	1,080,500	-
Irrigation Controller- MF	43,221	10	$5,000	432,210	-
Irrigation Controller- Parks	43,221	2	$20,000	86,442	-
Turf Replacement- SF	11,440	100	$50,000	1,144,000	-
Efficient Nozzles -SF	300	1000	$4,000	300,000	-

SF: Single Family Customers; MF: Multi-Family Customers; COM: Commercial Customers

Appendix

Municipal Irrigation Restricitons & Demand Reduction Summary

The table below summarizes the research from the Alliance for Water Efficiency's study, *Use and Effectiveness of Municipal Irrigation Restrictions During Drought*. Within this study, voluntary conservation did not generate statistically significant savings and messaging and enforcement were found to be best practices and essential components to achieving a significant reduction in seasonal water demand. Case study participants successfully reduced annual demand by 18%-30% and peak monthly demand by 20%-42% through a combination of mandatory demand management measures. In two case studies, demand reductions achieved during the drought were maintained with little rebound through the on-going implementation of restrictions.

This study recommends that the design of irrigation restrictions be specific to the local region; in Texas 2 days/week restrictions are only mildly constraining because they receive more, evenly distributed frequent rainfall and most customers were already watering at that frequency. In parts of California 3 days/week restrictions are considered mildly constraining and 2 days/week restrictions saw large reductions in demand.

An executive summary of the study can be found here: www.allianceforwaterefficiency.org/sites/www.allianceforwaterefficiency.org/files/assets/AWE_Drought_Restrictions_Study_Executive_Summary_Final.pdf

City/State	Mandatory Watering Restrictions	Intensity of Restrictions & Demand Reduction Average Spring/Fall	Intensity of Restrictions & Demand Reduction Average Summer
Austin, TX Annual Precip: 32-34" Population: 1 million	Seasonal irrigation restrictions with enforcement; restrictions limit the number of days/week irrigation is allowed.	2008-2016: 2 days/week: 10% reduction 1 day/week: 14% reduction	2008-2016: 2 days/week: 11% reduction 1 day/week: 21% reduction
Plano, TX Annual precip: 22-40" Population: 1.7 million	Seasonal irrigation restrictions with enforcement; restrictions limit the number of days/week irrigation is allowed.	2011-2015: 2 days/week: Did not produce savings 1 day/week: 17% reduction **1 day/ 2 weeks: 18% reduction**	2011-2015: 2 days/week: Did not produce savings 1 day/week: 17% reduction **1 day/ 2 weeks: 32% reduction**
Hayward, CA Annual precip: 18" Population: 160,000	Seasonal irrigation restrictions with enforcement; restrictions limit the number of days/week irrigation is allowed. Water Waste Prohibition *(non-essential uses: irrigation runoff, washing of outdoor hardscapes, hoses w/o shut-off nozzle, etc)*	2014-2017: 2 days/week:15% reduction	2014-2017: 2 days/week: 21% reduction Mandatory Prohibition of Water Waste: 15% reduction
Los Angeles, CA Annual precip: 15" Population: 4 million	Seasonal irrigation restrictions with enforcement; restrictions limit the number of days/week irrigation is allowed.	2014-2017: 3 days/week: 13% reduction	2014-2017: 3 days/week: 15% reduction
Sacramento, CA Annual precip: 20" Population: 500,000	Seasonal irrigation restrictions with enforcement; restrictions limit the number of days/week irrigation is allowed.	2014-2017: 2 days/week: 25% reduction	2014-2017: 2 days/week: 29% reduction
Visalia, CA Annual precip: 11" Population: 145,000	Seasonal irrigation restrictions with enforcement; restrictions limit the number of days/week irrigation is allowed.	2014-2017: 3 days/week: 9% reduction 2 days/week: 16% reduction	2014-2017: 3 days/week: 18% reduction 2 days/week: 22% reduction

ORD C35630

ORDINANCE NO. C35630

An ordinance relating to future and renewed water intertie agreements; enacting a new chapter 13.045 to the Spokane Municipal Code.

WHEREAS, the City of Spokane is a regional water purveyor pursuant to the Spokane County Coordinated Water System, Washington State Department of Health, the City of Spokane Comprehensive planning documents and state law; and

WHEREAS, wholesale water supply exchanges between local water purveyors are anticipated by the Washington State Department of Health's Office of Drinking Water, the Spokane County Coordinated Water System, the City of Spokane Comprehensive Plan, and the City of Spokane Comprehensive Water System Plan; and

WHEREAS, state law provides that such wholesale water supply where appropriate can be used for: long-term water supply, to supplement a limited supply of water, to provide water when there is limited capacity, to provide water to meet a peak, or to assist during an emergency situation; and

WHEREAS, state law requires that a coordinated water resource and system plan for an area "shall provide for maximum integration and coordination of public water system facilities consistent with the protection and enhancement of the public health and well-being;" and

WHEREAS, neighboring water purveyors can protect the public by establishing intertie agreements to help ensure the continuous availability of a safe and reliable drinking water supply to all customers; and

WHEREAS, the City currently has intertie agreements with six water purveyors identified within the County Coordinated Water System; these agreements will need to be updated over time, and the potential for other interties exists; and

WHEREAS, the City of Spokane is the largest water purveyor with the most complex system in the region and, as such, has the ability to efficiently and effectively provide water to adjoining purveyors that is safe, reliable, and protects the national resource and environment, allowing the City to assist its smaller water system neighbors; and

WHEREAS, the City is committed to good stewardship practices for its water resources to protect not only the quantity but the quality of water in our region; the City also has identified a strategy and goal around "Smart Use of Water Resources for Economic Growth" as part of its City Council adopted Joint Administration-Council 6-Year Strategic Plan; and

WHEREAS, the City also is committed to enhancing resiliency, and through its Comprehensive Plan, encourages working with adjacent jurisdictions and other water purveyors to facilitate consistent provision of water services and coordinated responses to emergencies; and

WHEREAS, the City recognizes that it derives 100% of its water from the Spokane Valley Rathdrum Prairie Aquifer ("SVRPA"); and

WHEREAS, pumping from the SVRPA may, at certain low flow times of the year, reduce water in the form of ground (aquifer) water inputs to the Spokane River in gaining reaches; and

WHEREAS, aquifer inflow into the Spokane River is important for maintaining the health, wellbeing and viability of the Spokane River and the overall water resource; and,

WHEREAS, an increasing population and climate variability creates competition for scarce water resources that would normally flow through the Spokane River; and

WHEREAS, the Spokane River has experienced decreased flows in late Summer and early Fall months; and

WHEREAS, reducing or limiting new well development that taps into the Aquifer will preserve ground water and prevent contamination of the water supply which is a benefit of providing wholesale water supply to neighboring purveyors; and

WHEREAS, the City recognizes the importance of encouraging and implementing long term conservation measures to support and protect the water resource as well as the health of the Spokane River; where such flows support related wildlife, recreational, and economic activity associated with the River; and

WHEREAS, in order to meet these goals, the City of Spokane intends to be a leader of efforts by all SVRPA pumpers in reducing water use and preserving River flows; and

WHEREAS, the City is pursuing its goal to support sufficient flows in the Spokane River during certain low flow times of the year and encourages prudent conservation measures that will provide resiliency to all water supplies in the greater Spokane region; and

WHEREAS, the City also strives to have consistent and understandable policies when dealing with neighboring jurisdictions and water purveyors.

NOW, THEREFORE, the City of Spokane does ordain:

Section 1. That there is adopted a new chapter 13.045 of the Spokane Municipal Code to read as follows:

Chapter 13.045 Intertie Agreements and Water Rights

Section 13.045.010 Purpose

The purpose of this Chapter is to codify a consistent and predictable approach to renewed, revised, or new water intertie agreements to ensure ongoing conservation and protection of water resources, especially in the Spokane Valley and Rathdrum Prairie Aquifer.

Section 13.045.020 Definitions

A. Emergency Water Supply means unanticipated or unexpected and sudden event requiring additional short term supply of water from the City of Spokane under terms and conditions as specified in the Agreement between the parties as to duration and volume.

B. In-stream Flow Rule means the Instream Flow rule for the Spokane River as established by Washington State Department of Ecology in Chapter 173- 557 WAC.

C. Supplemental Water Supply means long term supply of water which is an addition to a wholesale water purveyor's existing water supply to provide additional water on a routine basis.

Section 13.045.030 Intertie Contract Components

All renewed, revised or new water intertie agreements shall include the following provisions:

A. A maximum term no longer than twenty years for supplemental supply and five years for emergency supply, inclusive of renewal options;

B. Required five year agreement reviews within any term for supplemental supply and two years for any emergency supply, including the right of the City to cancel agreements after such review if the water purveyor is not in compliance with the terms of the agreement, including contractually required conservation measures;

C. Definition of maximum water flow rates and maximum annual water volumes for supplemental and emergency water supply;

D. A description of the historical and current water supply situation that forms the basis of the terms of the agreement and the proposed future water supply planning. ;

E. Water provided under the contract is for the use in the water purveyor's designated service area and the water purveyor shall not wheel or wholesale any water received from Spokane beyond what is set out in their water system plan or an agreement existing at the time the contract is signed without first obtaining written permission from the City of Spokane.

F. Provisions regarding collaboration on system loss and efficiency measures within the wholesale water purveyor's infrastructure that meets state standards;

G. All Parties must have an existing written water conservation plan with specific reasonable goals and are required to implement and maintain annual water conservation, reduction of system loss in accordance with Chapter 246-290 WAC and efficiency measures with a measurable goal of reducing the annual amount of water consumed per capita year over year especially during Summer and early Fall consistent with state law. The plan will include program effectiveness consultations at least every three years, including documentation of changes in total gallons used and per capita use on an annual and seasonal basis by customer class;

H. All Parties shall participate in any drought response water conservation measures triggered by weather conditions and/or Spokane River flows as may be developed and adopted by the City for all retail and wholesale customers with a methodology for reasonable notice included in the contract; and

I. A written acknowledgement in the contract that the wholesale water supply may be curtailed or interrupted due to drought, low flows in the Spokane River, or shortage pursuant to such reasonable rules and measures adopted by the water department that are consistent with city code, adopted plans, and state law.

Section 13.045.040 Water Charges

A. Charges for water will be as established by the wholesale purveyor rate set out in SMC 13.04.2014.

B. Intertie agreements shall include clear delineation of costs that are the responsibility of the water purveyor, including capital and construction costs, and those that are the responsibility of the City of Spokane.

Section 13.045.050 Water Rights and Seasonal Flow Goals

A. The City of Spokane shall not sell or transfer any water rights without the approving vote of City Council. The City upon approval of City Council may acquire available water rights if it would be prudent to do so for the purpose of protecting the resource for system resiliency purposes, and/or operational efficiency as provided by Chapter 35.21 RCW.

B. The City Council will use the best available evidence and science to set written appropriate minimum seasonal river flow goals for the portion of the Spokane River flowing through the City of Spokane in respect to City operations only. Appropriate minimum flow goals set by the City Council may exceed the minimum standard as established by Washington State Department of Ecology in Chapter 173- 557 WAC. Such goals are not intended to overlap the legal jurisdiction of the State of Washington.

C. The City is committed through its policies and environmental sustainability plan to substantially conserve water and reduce per capita consumption across the City's water distribution system as set out in the City's Water System Plan and water use efficiency goals that are established by City Council Resolution. In order to achieve the City's water use efficiency goals, the City will provide budget support for the following operational and maintenance efforts and policy framework that will improve and protect the regional delivery system's natural water resources, efficiency and effectiveness, including flows in the Spokane River:

1. Conservation educational programming and technical advice;
2. Implementation of conservation measures on city owned property;
3. Programs supporting water conservation equipment and irrigation reduction for all customers;
4. Water re-use programs;
5. Seasonal irrigation efficiency and reduction measures; and
6. Other innovations that will support water conservation goals and increased flows in the Spokane River.

D. The City's policy is to adhere to its river flow goals by following its conservation measures and efficiency plans developed by the water department, which may include implementing seasonal irrigation measures in accordance with the City's policies and procedures. Within twenty months of the adoption of this chapter, the City shall develop and periodically update a comprehensive plan and clear policies and procedures applicable to all customers and classes to achieve its water conservation goals.

Section 13.045.060 Reporting

The Water Department shall provide a written report each February to the City Council that provides for the previous five years, the total number of gallons pumped by the City to each class of customer, including but not limited to residential, commercial and intertie agreements; the revenue from each class of customer and associated costs; the amount of money spent on conservation; the estimated number of gallons of water saved on an annual basis from new City of Spokane conservation efforts; the percentage and number of gallons lost by the water distribution system; the per capita consumption for all customers of the City's water service; and other information that will assist the Council in evaluating the goals of increasing river flows and decreasing the amount of water consumed per capita each year across the City of Spokane's water distribution system.

Passed by City Council July 9, 2018
Delivered to Mayor July 12, 2018

WAC 246-290-810

WAC 246-290-810 Water use efficiency program. (1) Water system plans and small water system management programs submitted for approval for the first year after the effective date of this rule, must describe the municipal water supplier's existing water use efficiency program. The municipal water supplier must continue existing levels of water use efficiency.

(2) Subsections (3) and (4) of this section apply to:

(a) Water system plans submitted to the department for approval under WAC 246-290-100 one year after the effective date of this rule.

(b) Small water system management programs developed and implemented or submitted to the department for approval one year after the effective date of this rule.

(3) Municipal water suppliers shall develop and implement a water use efficiency program which includes sufficient cost-effective water use efficiency measures to meet the water use efficiency goals developed under WAC 246-290-830.

(4) Municipal water suppliers shall complete the following items in the water use efficiency program:

(a) Describe the current water use efficiency program;

(b) For systems serving one thousand or more total connections, estimate the amount of water saved through implementation of the water use efficiency program over the prior six or more years; the estimate may include the entire approval period of the most recent water system plan required under WAC 246-290-100;

(c) Describe the chosen water use efficiency goals and document the goals were established in accordance with WAC 246-290-830;

(d) Evaluate water use efficiency measures to determine if they are cost-effective as follows:

(i) Evaluate or implement, at a minimum, the number of water use efficiency measures specified in Table 13 based on the system's total number of connections.

(ii) Evaluate or implement water use efficiency measures from the following categories of measures if they are applicable: Indoor residential, outdoor, and industrial/commercial/institutional.

(iii) For systems serving less than one thousand total connections, describe the evaluation process used to select water use efficiency measures.

(iv) For systems serving one thousand or more total connections, include the following criteria when evaluating water use efficiency measures:

(A) Quantitatively evaluate water use efficiency measures to determine if they are cost-effective from the system's perspective including the marginal costs of producing water.

(B) Address whether the water use efficiency measures are cost-effective if the costs are shared with other entities.

(C) Quantitatively or qualitatively evaluate water use efficiency measures to determine if they are cost-effective from the societal perspective.

Table 13

Number of connections	Less than 500	500-999	1,000-2,499	2,500-9,999	10,000-49,999	50,000 or more
Water use efficiency measures	1	4	5	6	9	12

(e) Describe all water use efficiency measures to be implemented over the next six or more years, including a schedule and a budget that demonstrates how the water use efficiency measures will be funded. Purveyors may submit a schedule and budget for the entire water

system plan approval period, if the approval period is longer than six years;

(f) Describe how consumers will be educated on water use efficiency practices;

(g) Estimate projected water savings from selected water use efficiency measures;

(h) Describe how the water use efficiency program will be evaluated for effectiveness;

(i) Evaluate water distribution system leakage as follows:

(i) Include distribution system leakage annual totals in accordance with WAC 246-290-820 for each of the past six or more years. Purveyors shall submit distribution system leakage annual totals for the entire water system plan approval period if the approval period was longer than six years.

(ii) If necessary, include a copy of the water loss control action plan in accordance with WAC 246-290-820(4).

(iii) If all or portions of transmission lines are excluded when determining distribution system leakage, estimate the amount of leakage from the excluded portion of the transmission mains and describe how it is maintained to minimize leakage.

[Statutory Authority: RCW 43.20.050 and 70.119A.080. WSR 17-01-062, § 246-290-810, filed 12/14/16, effective 1/14/17. Statutory Authority: RCW 70.119A.180. WSR 07-02-025B, § 246-290-810, filed 12/22/06, effective 1/22/07.]

Briefing Paper
Public Infrastructure, Environment and Sustainability

Division & Department:	Public Works Division / Integrated Capital Management
Subject:	NSC –Rowan Force Main/Wilson & Company Contract
Date:	4/20/20
Author (email & phone):	nanunson@spokanecity.org, (509) 625-6894
City Council Sponsor:	
Executive Sponsor:	
Committee(s) Impacted:	PIES
Type of Agenda item:	☒ Consent ☐ Discussion ☐ Strategic Initiative
Alignment: (link agenda item to guiding document – i.e., Master Plan, Budget , Comp Plan, Policy, Charter, Strategic Plan)	Comprehensive Plan, 6-Year Wastewater & Stormwater Utility Program
Strategic Initiative:	Innovative Infrastructure
Deadline:	5/15/2020
Outcome: (deliverables, delivery duties, milestones to meet)	Contract with the BNSF required Inspection firm in support of the NSC – Rowan Force Main construction work performed within the BNSF ROW.

Background/History:

The construction of the NSC-Rowan Force Main project requires work within BNSF property. As required by BNSF a licensing agreement with BNSF was acquired for this work. The BNSF agreement requires the presence of Wilson & Company onsite for inspection at all times work takes place on BNSF property. The cost associated with the Wilson & Company Inspection is the responsibility of the project. 1/3 of this cost will be funded by the City of Spokane Water Utility funds for betterment work while the remaining 2/3 will be funded by WSDOT.

Based on the daily inspection rate of $1250, and the contractors anticipated days worked on BNSF property a contract in the amount of $75,900 is requested. An admin reserve of 20% will be added if additional inspection days are required. WSDOT will be responsible for $50,600 and City of Spokane for $25,300. Days requiring inspection will be billed utilizing a purchase order with the City. If the full amount of anticipated days are not utilized the payment amount will be reduced accordingly.

Executive Summary:

- *NSC – Rowan Force Main Project requires work within BNSF Property*
- *The required BNSF Licensing Agreement requires utilization of Wilson & Company*
- *Wilson & Company must be onsite when inside the BNSF ROW*
- *1/3 of cost will be City of Spokane responsibility 2/3 cost WSDOT responsibility*
- *Contract amount of $75,900 with 20% additional administrative reserve*
- *Wilson will only charge for days worked*
- *We are requesting a Council Sponsor*

Budget Impact:

Approved in current year budget? ☒ Yes ☐ No

Annual/Reoccurring expenditure? ☐ Yes ☒ No

If new, specify funding source:

Other budget impacts: (revenue generating, match requirements, etc.)

Operations Impact:

Consistent with current operations/policy? ☒ Yes ☐ No

Requires change in current operations/policy? ☐ Yes ☒ No

Specify changes required:

Known challenges/barriers:

Expenditure Control Form

All Expenditures $100,000 or more

Today's Date: 4/23/2020	**Type of expenditure:** Services

Department: Integrated Capital Management

Approving Supervisor: Katherine Miller

Amount of proposed Expenditure: $60,659.00 WSDOT Reimbursement, $30,421.00 City Water

Funding Source: $60,659.00 WSDOT Reimbursement, $30,421.00 City Water

Please verify correct funding sources. Please indicate breakdown if more than one funding source.

Why is this expenditure necessary now?

The Rowan Force Main Construction project is currently under contract and scheduled to begin construction in early May. This expenditure is necessary to support construction

What are the impacts if expenses are deferred?

Construction will be delayed causing increased expense to the City and delays to follow on North Spokane Corridor construction projects

What alternatives resources have been considered?

None

Description of the goods or service and any additional information.

Expenditure of $91,080 to Wilson & Company for BNSF required inspection services for work taking place within BNSF property. 2/3 of the expense will be reimbursed by WSDOT.

Person Submitting Form/Contact: Nathan Anunson, nanunson@spokanecity.org

CITY ADMINISTRATOR APPROVAL:	BUDGET APPROVAL:
Yes ☐ No ☐	Yes ☐ No ☐

Briefing Paper
PIES

Division & Department:	Public Works, Engineering
Subject:	2020 Residential Grind & Overlay Projects
Date:	4-27-20
Contact (email & phone):	Dan Buller (dbuller@spokanecity.org 625-6391)
City Council Sponsor:	
Executive Sponsor:	Scott Simmons
Committee(s) Impacted:	PIES
Type of Agenda item:	☒ Consent ☐ Discussion ☐ Strategic Initiative
Alignment: (link agenda item to guiding document – i.e., Master Plan, Budget , Comp Plan, Policy, Charter, Strategic Plan)	This project is in the 6 year street plan
Strategic Initiative:	Innovative Infrastructure
Outcome: (deliverables, delivery duties, milestones to meet)	Approval of construction contract

Background/History:

- The project described herein is the annual grind and overlay project funded by the transportation benefit district.

Executive Summary:

- Refer to the attached exhibit for the streets included in this year's project.
- Curb ramps will also be upgraded.
- Public involvement consisted of sending a letter to the property owners fronting the streets indicated on the attached exhibits during the design phase as well as the neighborhood councils where the work will take place. Also, a flyer will placed on adjacent resident front doors just prior to construction subject to COVID-19 restrictions in place at the time.
- Residents will have access to their homes during construction which will occur this summer.

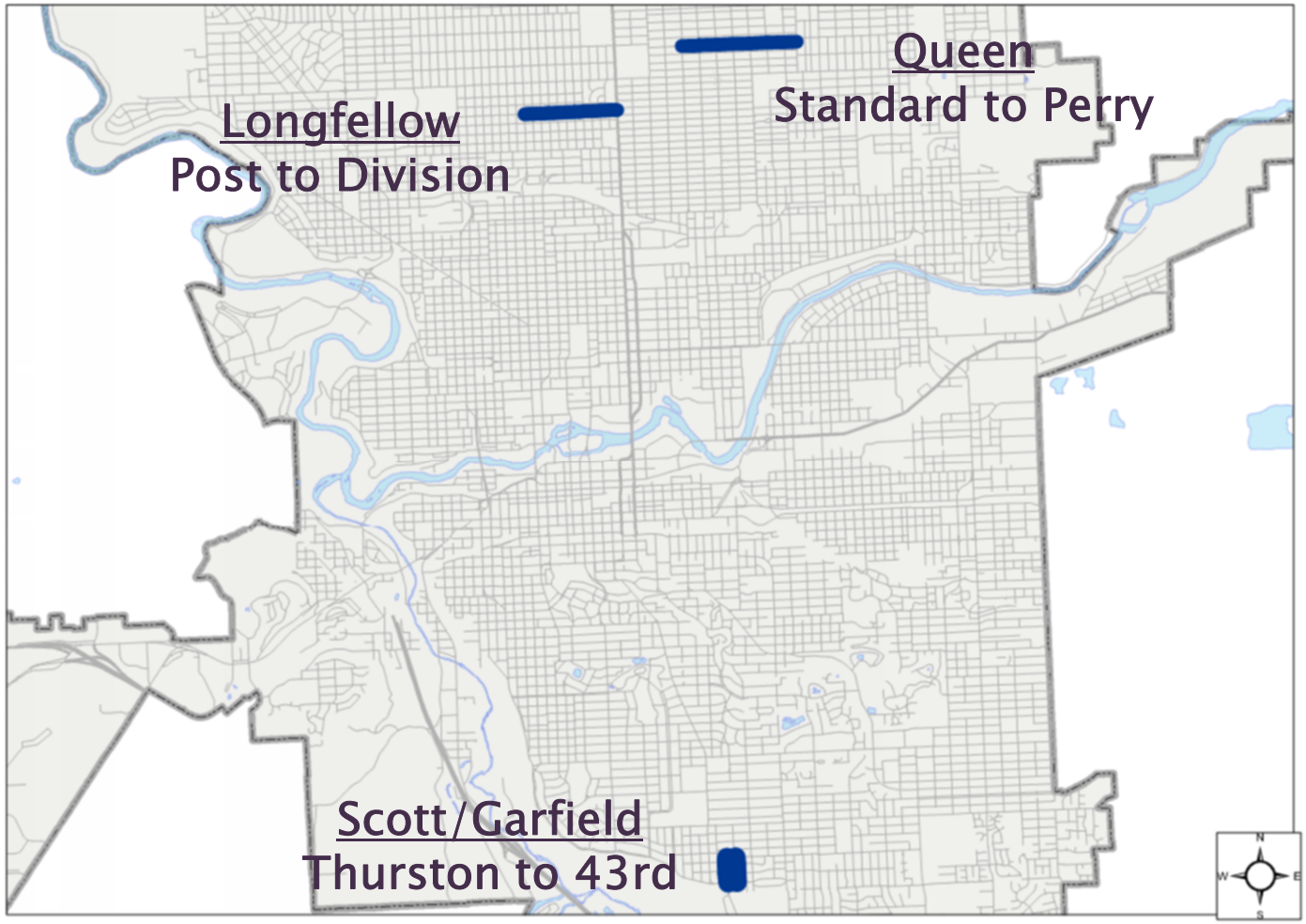
Budget Impact:

Approved in current year budget? ☒Yes ☐No ☐N/A
Annual/Reoccurring expenditure? ☐Yes ☒No ☐N/A
If new, specify funding source:
Other budget impacts: (revenue generating, match requirements, etc.)

Operations Impact:

Consistent with current operations/policy? ☒Yes ☐No ☐N/A
Requires change in current operations/policy? ☐Yes ☒No ☐N/A
Specify changes required:
Known challenges/barriers:

2020 Residential Grind & Overlay
2020044



CITY OF SPOKANE

Expenditure Control Form

1. **All requests being made must be accompanied by this form.**
2. **Route ALL requests to the Finance Department for signature.**
3. **If request is greater than $100,000 it requires signatures by Finance and the City Administrator. Finance Dept. will route to City Administrator.**

Today's Date: 4/8/20 **Type of expenditure:** Goods ○ Services ◉

Department: Engineering

Approving Supervisor: Kyle Twohig

Amount of Proposed Expenditure: $1,100,000

Funding Source: Local funds

Please verify correct funding sources. Please indicate breakdown if more than one funding source.

Why is this expenditure necessary now?

This project is the annual residential grind and overlay project

What are the impacts if expenses are deferred?

Street maintenance will be delayed.

What alternative resources have been considered?

There are none.

Description of the goods or service and any additional information?

Street grind & overlay.

Person Submitting Form/Contact: Dan Buller

FINANCE SIGNATURE: _____

CITY ADMINISTRATOR SIGNATURE: _____