AGENDA
SHAKOPEE PUBLIC UTILITIES COMMISSION
REGULAR MEETING
OCTOBER 5, 2020

Following the March 13, 2020 Declaration of Peacetime Emergency by Governor Walz (as amended), the Commission is holding its regular meeting on October 5, 2020 at 5:00pm by telephone or other electronic means (WebEx) according to MN Statutes, Section 13D.021. The Commission President has concluded that an in-person meeting is not practical or prudent because of the health pandemic declared under the Emergency Order and according to current guidance from the MN Department of Health and the CDC. The Commission President will be at the regular meeting location for the Commission. The public may monitor the meeting:

Call-In Phone Number 1-408-418-9388
Enter Access Code 126 405 8796
When Prompted for Password, enter #

1. **Call to Order** at 5:00pm in the SPUC Service Center, 255 Sarazin Street. (DA)

2. **Approval of Minutes**
   2a) September 21, 2020 Regular Meeting (JA)

3. **Communications**

4. **Approve the Agenda**

5. **Approval of Consent Business**

6. **Bills: Approve Warrant List**
   6a) October 5, 2020 (KW)

7. **Liaison Report** (JB)

8. **Reports: Water Items**
   8a) Water System Operations Report – Verbal (LS)
   8b) SEH Water Quality Summary Memo (LS)
   8c) Ehlers Water Development Fee Study (JA)

9. **Reports: Electric Items**
   9a) Electric System Operations Report – Verbal (GD)

10. **Reports: Human Resources**
    10a) Shared Services Between SPU and the City of Shakopee Memo (LK)
    10b) AEM Compensation Assumptions and Sub-Committee Recommendations (KW)
    10c) J. Crooks Separation Agreement (KB)

11. **Reports: General**
    11a) Ballot Question Regarding the future of the Shakopee Public Utilities Commission (LK)

12. **Potential Future Agenda Items** (fka New Business)

13. **Tentative Dates for Upcoming Meetings**
    - Mid Month Meeting -- October 19
    - Regular Meeting -- November 2
    - Mid Month Meeting -- November 16

14. **Adjourn** to 10/19/20 at the SPUC Service Center, 255 Sarazin Street

MINUTES

OF THE

SHAKOPEE PUBLIC UTILITIES COMMISSION
September 21, 2020
(REGULAR MEETING)

1. Call to Order. President Amundson called the September 21, 2020 meeting of the Shakopee Public Utilities Commission to order at the Shakopee Public Utilities meeting room at 5:00 P.M.

2. Roll Call. President Amundson, Vice President Mocol, Commissioner Brennan, Commissioner Fox, and Commissioner Meyer were present.

3. Approval of Minutes. Commissioner Brennan requested an addition to the minutes from September 3 stating her position that that the City finance and administration should provide interim leadership of Shakopee Public Utilities. With this addition, motion by Mocol, seconded by Meyer, to approve the minutes from September 3, 2020 and September 8, 2020. Ayes: Amundson, Mocol, Brennan, Fox, Meyer. Nays: None.

4. Approval of Agenda. President Amundson requested that the Utilities Management item be moved after the Liaison Report. With this change, motion by Meyer, seconded by Fox, to approve the agenda. Ayes: Amundson, Mocol, Brennan, Fox, Meyer. Nays: None.

5. Approval of Consent Business. The consent business consisted of items (8b) Monthly Dash Board; (11c) SPU Financials Posted on Website; (11d) Monthly Financial Results; and (11e) Dash Board – Metrics. Motion by Fox, seconded by Mocol, to approve the consent business. Ayes: Amundson, Mocol, Brennan, Fox, Meyer. Nays: None.

6. Approval of Warrant List. Motion by Meyer, seconded by Brennan, to approve the warrant list as presented. Ayes: Amundson, Mocol, Brennan, Fox, Meyer. Nays: None.

7. Liaison Report. Commissioner Brennan presented the liaison report. She provided an update as to the City's passing of a preliminary levy of $21,017,800.

8. Utilities Management Agreement. President Amundson presented the proposed Utilities Management Services Agreement between SPU and Minnesota Municipal Utilities Association (MMUA). She noted that Special Counsel Korine Land represented SPU (and MMUA was represented by its staff) in negotiating the agreement. Because Attorney K. Brennan and her firm had a conflict of interest, due to their general representation of MMUA, she played no role in the agreement. Jack Kegel, Executive Director of MMUA noted that MMUA has been providing these services for 10-15 years. He provided additional information concerning the proposed agreement. Larry Koshire, the individual MMUA has proposed to work with SPU under the agreement, introduced himself and provided background information in terms of his prior roles as General Manager of Rochester Public Utilities (for 17 years before his retirement), as General

Manager of Muscatine Power and Water in Muscatine, Iowa, and in working with MMUA to provide utility management services to other communities. Motion by Meyer, seconded by Fox to approve the Agreement. Ayes: Amundson, Mocol, Brennan, Fox, Meyer. Nays: None.

9. Water Report. Lon Schemel, Water Superintendent, presented the water report. He noted work on flushing the hydrants. Mr. Schemel also read a thank you note commending two employees of the water department for providing exceptional customer service in addressing a residential water issue.

The revised proposal from SEH for the Water Treatment Plant Feasibility Study (requested by staff to be re-labeled as the Comprehensive Evaluation for Municipal Water Treatment) was discussed. Commissioner Brennan suggested obtaining additional proposals. Joseph Adams, Interim Utilities Manager, explained that SPU had selected SEH as its designated planning consultant through an RFQ process. Mr. Adams also noted SEH's familiarity with SPU's system due to its past work. Commissioner Meyer noted that because the City had raised concerns about water quality, it created a sense of urgency. President Amundson commented that because water quality was a public issue, SPU should move forward with the qualified firm for public confidence. Commissioner Brennan noted that the results of the study would not be available before the election, and that she continued to recommend multiple proposals. Motion by Meyer, seconded by Amundson, to approve the SEH proposal for the Comprehensive Evaluation for Municipal Water Treatment. Ayes: Amundson, Mocol, Fox, Meyer. Nays: Brennan.

10. Electric Report. Mr. Drent, Electric Superintendent, presented the electric report. He described the three outages since the last Commission meeting, as well as current projects.

Mr. Adams presented the West Shakopee Substation Site Purchase Agreement. Commissioner Brennan proposed that this matter be tabled until mid-November. No other Commissioner spoke in favor of this approach. Mr. Adams described the need for a new substation in light of growth, including annexation from Jackson Township. He noted that a new substation is required, regardless of the governing board of the utilities. He noted the advantages of the proposed site, including access to transmission lines, physical connection factors, and the size of the parcel. Mr. Adams also described the appraisal and the funding parameters in the Commission-approved 2020 capital improvement plan. Motion by Meyer, seconded by Mocol, to approve the Purchase Agreement with R & J Breeggemann Family Limited Partnership, LP. Ayes: Amundson, Mocol, Fox, Meyer. Nays: Brennan.

Mr. Drent provided an update as to three apprentice-lineman-employees who are each expected to receive his journeyman certificate by the end of the year. Mr. Drent praised Tyler Hanson, Matt Kahle, and Jordan Schuettpelz for their hard work and dedication as employees. Motion by Fox, seconded by Mocol, that Mr. Hanson, Mr. Kahle, and Mr. Schuettpelz advance to journeyman when they have completed the required qualifications. Ayes: Amundson, Mocol, Brennan, Fox, Meyer. Nays: None.

11. Policies/Purchasing. Mr. Adams provided an informational overview of SPU policies, in the form of resolutions, motions, consensus, and formal policies. He noted that the Commission has over 1200 resolutions. Mr. Adams described two significant resolutions that adopted policies,

namely the Water Policy Manual and the Electric Rates and Regulations. Mr. Adams also addressed the purchasing of vehicles, the statutes as to competitive bidding, the SPU budget approval process, and the controls within SPU in approving purchases. Discussion ensued as to whether the Commission wished to change its policies, such as creating one central policy. President Amundson noted that a comprehensive policy overhaul should wait until the result of the referendum. Commission Fox noted that SPU is also in the position of having an Interim Utilities Manager. Commissioner Mocol agreed. Commissioner Brennan agreed that the policies should be kept in place for now, and that any revisions would benefit from guidance from a Finance Director and Utilities Manager.

12. Cold Weather Rule/ COVID-19. Sharon Walsh, Marketing/Customer Relations Director, provided an update as to the Cold Weather Rule and COVID-19 procedures. Ms. Walsh noted that the actions that SPU took in March 2020 in response to the COVID-19 pandemic exceed the requirements of the Cold Weather Rule, including requesting, but not requiring, payment plans and not disconnecting a customers after the failure to pay. Ms. Walsh described how other municipal utilities in the area have addressed the lobby space. Commissioner Meyer asked Mr. Koshire to consider these COVID-19 issues and prepare a recommendation. Commissioner Mocol noted that the lobby could be opened by appointment only with staff. Commissioner Fox noted no hurry to reopen the lobby, and that he preferred a payment plan in good faith for overdue accounts. Commissioner Brennan noted that the State of Minnesota delinquent housing policy offers funding for overdue utility bills, and that the City lobby is open for certain purposes, such as permits and questions. Motion by Fox, seconded by Mocol to direct staff to consider COVID-19 issues and report back to the Commission. Ayes: Amundson, Mocol, Brennan, Fox, Meyer. Nays: None.

13. Wages and Benefits Update. Commissioners Mocol and Fox provided an update as to preliminary discussions within the Wages and Benefits Working Group. They discussed employee morale, particularly in light of the COVID-19 pandemic, and the desire to maintain a 2.5% Cost of Living Adjustment for this year, and a potential decrease in health. Commissioner Mocol noted that City staff may be a helpful resource on certain projects, such as HR responsibilities and COVID-19 potential liabilities.

14. Adjourn. Motion by Mocol, seconded by Meyer, to adjourn to the October 5, 2020 regular meeting. Ayes: Amundson, Mocol, Brennan, Fox, Meyer. Nays: None.

Joseph Adams, Interim Secretary

SHAKOPEE PUBLIC UTILITIES COMMISSION

WARRANT LISTING

October 5, 2020

By direction of the Shakopee Public Utilities Commission, the Secretary does hereby authorize the following warrants drawn upon the Treasury of Shakopee Public Utilities Commission:

56629	Void	0.00
56630	Allstream	2486.59
56631	Altec Industries, Inc.	939.62
56632	American Water Works Assn	214.00
56633	Nighthawk	250.00
56634	AAR Building Service Co.	3,610.00
56635	APPA	1,505.00
56636	Arrow Ace Hardware	91.16
56637	B & B Commercial Coating, LLC	19,240.00
56638	Bell Lumber & Pole Company	10,034.18
56639	Robert Berndtson	189.18
56640	Best Buy Business Advantage Account	27.96
56641	Border States Electric Supply	29,239.55
56642	CDW Government LLC	637.72
56643	Choice Electric Inc.	8,729.95
56644	Cintas Corp. #754	832.21
56645	City of Shakopee	3,222.24
56646	City of Shakopee	192,000.00
56647	Customer Contact Services	368.62
56648	Delta Dental Plan of MN	5,328.80
56649	DGR Engineering	13,620.33
56650	DitchWitch of Minnesota	521.87
56651	Cooper Power Systems	88,883.95
56652	Ferguson Enterprises, LLC	392.05
56653	Ferguson Waterworks #2516	32.35
56654	FS3 Inc.	5,937.84
56655	Further	227.43
56656	Global Industrial	412.31
56657	Grainger Inc.	174.58
56658	Matthew Griebel	79.93
56659	Tyler Hanson	63.83
56660	Hawkins Inc.	15.00
56661	HealthPartners	80,460.66
56662	Interstate All Battery Center	165.04
56663	Ideal Service Inc.	3,015.00
56664	Innovative Office Solutions LLC	1,055.78
56665	Integrated Process Solutions Inc.	1,384.00
56666	JT Services	1,726.45
56667	Locators & Supplies Inc.	719.73
56668	McGrann Shea Carnival Straughn & Lamb, Chartered	37,232.50
56669	Cindy Menke	365.22
56670	Midwest Safety Counselors, Inc.	167.56
56671	Minn Valley Testing Labs Inc.	450.00
56672	Minnesota Life	4,984.59
56673	Nagel Companies LLC	65,580.00
56674	Napa Auto Parts	21.45
56675	Gerry Neville	83.95
56676	Computex Technology Solutions	1,095.74
56677	Cindy Nickolay	196.65
56678	Northwestern Power Equipment Co. Inc.	30,601.88
56679	PLIC - SBD Grand Island	3,338.38
56680	Paymentus Corporation	14,832.25
56681	Ramada	1,194.84
56682	R.W. Beck Group, Inc.	4,434.03
56683	Specialty Solutions, LLC	315.00
56684	Tierney Brothers Inc.	59,456.46
56685	Gregory Triplett	143.76
56686	University of MN Twin Cities	1,000.00
56687	Uline, Inc.	206.41

SHAKOPEE PUBLIC UTILITIES COMMISSION

WARRANT LISTING

October 5, 2020

By direction of the Shakopee Public Utilities Commission, the Secretary does hereby authorize the following warrants drawn upon the Treasury of Shakopee Public Utilities Commission:

56688	UPS Store #4009	107.38
56689	UW-Eau Claire	500.00
56690	Verizon Connect NWF Inc.	498.70
56691	Voigt Smith Innovation LLC	4,215.00
56692	Jaime Von Bank	97.20
56693	Water Conservation Service Inc.	1,479.00
56694	WESCO Receivables Corp.	880.37
56695	Xcel Energy	2,962.77
	TOTAL	714,276.00

Interim Commission Secretary

Commission President

Interim Director of Finance & Administration

SHAKOPEE PUBLIC UTILITIES COMMISSION

WARRANT LISTING

October 5, 2020

By direction of the Shakopee Public Utilities Commission, the Secretary does hereby authorize the following warrants drawn upon the Treasury of Shakopee Public Utilities Commission:

56629	Void	0.00	Voided check for signature testing
56630	Allstream	2486.59	Shak Sub, Pike Lake, South Sub. Communication
56631	Altec Industries, Inc.	939.62	Elec. Dept. repair hydraulic leak rear axel
56632	American Water Works Assn	214.00	Renewal membership 12/1/20-11/30/21 for Tony Myers
56633	Nighthawk	250.00	Qtrly fees - Web hosting 10/1-12/31/20
56634	AAR Building Service Co.	3,610.00	October cleaning service
56635	APPA	1,505.00	eSafety Tracker 1 year subscription & 2020 RP2 Application Fee - Medium Utilities
56636	Arrow Ace Hardware	91.16	Water dept. - brush, valve, flashlight, pipe, tape
56637	B & B Commercial Coating, LLC	19,240.00	Sand/Vapor blast & recoat hydrants - 104 hydrants
56638	Bell Lumber & Pole Company	10,034.18	Poles - 35' & 40' - 20 total poles
56639	Robert Berndtson	189.18	Mileage reimb.
56640	Best Buy Business Advantage Account	27.96	Otterbox phone case
56641	Border States Electric Supply	29,239.55	$4028.89 - WO#2344 Meters, $9134.95 24 splicing kits, $7679.01 - 3 Pad box regulators, $4402.35- WO#2344 16 meters, $3994.35 WO#2344 - meters
56642	CDW Government LLC	637.72	10 Head sets & Toner for printers
56643	Choice Electric Inc.	8,729.95	Elec. Disconnect saver switch $112.00, the remainder are for water dept. pump houses, replace wall pack, coil, core & ballast, low voltage run from scales, pull wire and take down soffit lights
56644	Cintas Corp. #754	832.21	Replenish first aid boxes
56645	City of Shakopee	3,222.24	August gas usage
56646	City of Shakopee	192,000.00	October transfer fee
56647	Customer Contact Services	368.62	Answering service 9/22-10/19/20
56648	Delta Dental Plan of MN	5,328.80	September Dental premiums
56649	DGR Engineering	13,620.33	RTU replacements $2571.00 for WO # 2352, $9065.83 for WO #2239Levee Dr. Duct Bank, Dean Lake #2 Switcher Replacement $1983.50 for WO#2392.
56650	Ditch Witch of Minnesota	521.87	Elec. Dept. install shaft & seal kit and excavator oil leak
56651	Cooper Power Systems	88,883.95	3 pad mounted switchgear - 367.00.01.00.00
56652	Ferguson Enterprises, LLC	392.05	Coil, propex ring, connectors, copper tube all for water dept.
56653	Ferguson Waterworks #2516	32.35	Plug for water dept.
56654	FS3 Inc.	5,937.84	Pipe Innderduct for inventory
56655	Further	227.43	Sept. Adm. Fee for $217.00 and Flex dental claim reimbursement
56656	Global Industrial	412.31	Antibacterial wipes
56657	Grainger Inc.	174.58	Cable ties and door knob bags
56658	Matthew Griebel	79.93	Reimbursement for meals when at school
56659	Tyler Hanson	63.83	Reimbursement for meals when at school
56660	Hawkins Inc.	15.00	Chlorine Cylinder
56661	HealthPartners	80,460.66	Sept. Health ins. Premiums
56662	Interstate All Battery Center	165.04	Battery for Unit #650 - Water dept.
56663	Ideal Service Inc.	3,015.00	$1680.00 KVAR Cap, Well #3 harmonic filter - $875.00 Install board and calibration and $460.00 - Troubleshoot well #20 TCI Filter - All Water dept.
56664	Innovative Office Solutions LLC	1,055.78	Office supplies
56665	Integrated Process Solutions Inc.	1,384.00	WIN 911 Email, Pump house relays for chlorine detector
56666	JT Services	1,726.45	Swivel pulling cables
56667	Locators & Supplies Inc.	719.73	Red marking paint - Elec. Dept.
56668	McGrann Shea Carnival Straughn & Lamb	37,232.50	West substation - Purchase agreement $2,113.75 WO#2377, $27,053.75 - Municipal & Regulatory Matters, $8,065.00 - Repayment Plan and Employment Separation Negotiations
56669	Cindy Menke	365.22	Job posting on Indeed for Project Eng. Position - reimbursement
56670	Midwest Safety Counselors, Inc.	167.56	Exam gloves
56671	Minn Valley Testing Labs Inc.	450.00	Coliform, Nitrate & Nitrite, Sodium, Iron, Mag.
56672	Minnesota Life	4,984.59	July, Aug. and Sept. Life insurance premiums
56673	Nagel Companies LLC	65,580.00	12" Boring, dig pit for splicing, backfill & restore - WO#2325
56674	Napa Auto Parts	21.45	Diesel exst fluid
56675	Gerry Neville	83.95	Mileage reimb.
56676	Computex Technology Solutions	1,095.74	License only - Adobe Renewal Subscription Exp. 10/22/20
56677	Cindy Nickolay	196.65	Mileage reimb.
56678	Northwestern Power Equipment Co. Inc.	30,601.88	Altitude valve for Two-way flow - Tower #3, Epoxy coating - WO#2355
56679	PLIC - SBD Grand Island	3,338.38	Long term. Disability for Oct. premiums
56680	Paymentus Corporation	14,832.25	Transaction fees for Aug.
56681	Ramada	1,194.84	Rooms for elec. Dept. guys - T.H., C.S., M.G. & J.V. to attend schooling
56682	R.W. Beck Group, Inc.	4,434.03	Aug. Invoice - SPU Dean Lake Sub. - WO#2376
56683	Specialty Solutions, LLC	315.00	Grass seed 50lb bags for electric dept.
56684	Tierney Brothers Inc.	59,456.46	Update Commission room R2(SC), A-Update Commission Room R2(NC) and replacing new TesiraForte AVB CI - Line 5 CIP
56685	Gregory Triplett	143.76	Mileage reimb.
56686	University of MN Twin Cities	1,000.00	Tom Bovitz award to Parth Dipesh Purani
56687	Uline, Inc.	206.41	Folding table - Water dept.
56688	UPS Store #4009	107.38	Fault wizard return by Elec. Dept.
56689	UW-Eau Claire	500.00	Tom Bovitz award to Jacqueline Danielle Macht
56690	Verizon Connect NWF Inc.	498.70	Vehicle service for Elec. Water and Eng. Dept.

SHAKOPEE PUBLIC UTILITIES COMMISSION

WARRANT LISTING

October 5, 2020

By direction of the Shakopee Public Utilities Commission, the Secretary does hereby authorize the following warrants drawn upon the Treasury of Shakopee Public Utilities Commission:

56691	Voigt Smith Innovation LLC	4,215.00	Jet Agitated Hydro seeder - Electric dept.
56692	Jaime Von Bank	97.20	Reimbursement for meals when at school
56693	Water Conservation Service Inc.	1,479.00	August 2020 Partial water leak survey, leak locate crossing Blvd. & Hansen
56694	WESCO Receivables Corp.	880.37	Ball marker for Elec. Dept..
56695	Xcel Energy	2,962.77	$58.36 Gas usage at Amberglen for 8/20-9/21/20 and Electric charge$2904.41 for Valley Park Dr. for same time frame
	TOTAL	714,276.00	

Interim Commission Secretary

Commission President

Interim Director of Finance & Administration

8b

SPU
Shakopee Public Utilities

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shakopee, mn 55379
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www.shakopeeutilities.com

TO: Larry Koshire, Interim Utilities Manager

FROM: Lon R. Schemel, Water Superintendent

SUBJECT: SEH Water Quality Summary

DATE: October 1, 2020

To begin the process of developing the Comprehensive Evaluation for Municipal Water Treatment study, staff and the consultant needed to know where we are currently. The consultant, Short Elliott Hendrickson, Inc. (SEH), has created a summary of our water quality that covers the years 2018, 2019, and 2020. This summary will be the foundation for the evaluation.

This summary covers Nitrates, Manganese, Radium, Arsenic, Iron, Sodium, and Hardness. It also includes a statement about the Contaminant Candidate List from the U. S. EPA. This list is for unregulated contaminants that might require regulation in the future. This list is published every 5 years.

SEH **MEMORANDUM**

TO: Joe Adams, Shakopee Public Utilities
Lon Schemel, Shakopee Public Utilities

FROM: Christopher Larson, P.E., SEH
Ryan Hanson, SEH

DATE: October 2, 2020

RE: Water Quality Summary

This memo presents a current summary of the drinking water quality from the Shakopee Public Utilities (SPU) water system. A summary of findings is presented in the following paragraph.

Summary of Findings

A current summary of water quality findings is as follows:

- SPU water quality meets all Environmental Protection Agency (EPA) standards for safety.
- The aesthetic water quality (primarily iron and manganese) in SPU wells is very good. Most metro area communities using groundwater need to construct iron and manganese water treatment plants to achieve the levels of iron and manganese naturally present in SPU water.
- Any blending that is done and reported within the SPU water system is done at the wellhouse prior to being delivered to any SPU customer.
- Nitrate (a primary contaminant) has historically been present in most SPU wells. The EPA Maximum Contaminant Level (MCL) for nitrate is 10 milligrams per liter (mg/L), below which the water is considered safe to drink. The levels of nitrate in SPU wells has ranged from 0.53 mg/L to 7.3 mg/L in the past 3 years. The wells with higher nitrate levels are blended with other wells to reduce levels delivered to customers. Nitrate levels, in all of Shakopee's wells, have mostly stayed the same or gotten lower over the past 20 years.
- Manganese has an EPA advisory level of 0.3 mg/L and a Minnesota Department of Health (MDH), Health Based Value (HBV) of 0.1 mg/L. In general, the level of manganese in SPU wells is well below the MDH HBV. Only one sample out of the 18 SPU wells in the past 3 years has exceeded the MDH HBV of 0.1 mg/L. The average sample results from this well (Well 15) is below the HBV of 0.1 mg/L. None of the SPU wells are close to the EPA advisory level of 0.3 mg/L for manganese.
- The water from the SPU wells is hard. If customers desire, they can remove hardness with a home water softener. Municipal scale water softening is very expensive both from a capital and operation and maintenance cost.

Summary of SPU Water System

The SPU water system serves the City of Shakopee, which is a community of approximately 42,000 people located in northern Scott County. SPU provides water to its customers via eighteen (18) groundwater wells, located throughout the water system. The SPU water system also includes four (4) elevated storage tanks, three (3) ground storage facilities and two (2) booster stations. SPU maintains nearly 200 miles of transmission and distribution water mains ranging in size up to 30 inches in diameter. Approximately 3,000 people of Shakopee's residential population is on private wells and does not receive SPU supplied water.

SPU does not currently utilize a drinking water treatment plant. Drinking water is supplied directly from wells where it is treated with the addition of chlorine, fluoride, and phosphates (some wells).

Water Supply Sources

SPU utilizes three different groundwater aquifers for their eighteen (18) groundwater wells listed in Table 1. These aquifers are the Prairie du Chien-Jordan, Tunnel City-Wonewoc, and Mt. Simon/Hinckley aquifers.

The Prairie du Chien-Jordan aquifer supplies a significant quantity of water to the City's water system, and is expected to provide the majority of the water in the future. As shown on Table 1, Wells #4 - #9, #11 thru #17, #20, and #21 utilize water from the Prairie du Chien-Jordan aquifer.

Wells #2, and #14 utilize water from the Tunnel City-Wonewoc aquifer (formerly known as the Franconia-Ironton-Galesville aquifer).

Wells #3 and #10 draw water from the Mt. Simon aquifer; however, SPU does not normally use these wells.

Table 1 – Existing Supply Facilities

Facility	MN Unique Well #	Year Installed	Pressure Zone	Capacity (gpm)	Well Depth (Feet)	Status	Aquifer
Well 2	206803	1944/2002	Normal	300	525	Active	Tunnel City-Wonewoc
Well 3	205978	1956	Normal	900	755	Out of Service	Mount Simon Aquifer
Well 4	206854	1971	Normal	715	254	Active	Jordan
Well 5	206855	1971	Normal	850	253	Active	Jordan
Well 6	180922	1981	Normal	1175	222	Active	Jordan
Well 7	415975	1986	Normal	1100	218	Active	Jordan
Well 8	500657	1989	Normal	1100	262	Active	Jordan
Well 9	554214	1994	1st High	1050	315	Active	Jordan
Well 10	578948	2001	Normal	1125	800	Active (minimal use)	Mount Simon Aquifer
Well 11	611084	2001	1st High	1000	312	Active	Jordan
Well 12	626775	2001	1st High	810	352	Active	Jordan
Well 13	674456	2002	1st High	1036	338	Active	Jordan
Well 14	694904	2004	1st High	381	597	Emergency	Tunnel City-Wonewoc
Well 15	694921	2005	Normal	1150	295	Active	Jordan
Well 16	731139	2006	Normal	1450	285	Active	Jordan
Well 17	731140	2007	Normal	1400	290	Active	Jordan
Well 20	722624	2005	1st High	1142	275	Active	Jordan
Well 21	722625	2005	1st High	1175	275	Active	Jordan

Water Pumping
Table 2 presents water pumping data for Shakopee's supply wells. Based on pumping records, approximately 97% of the water supplied to Shakopee is from the Prairie du Chien-Jordan aquifer and less than 3% from the Tunnel City-Wonewoc aquifer.

Table 2 – Supply Well Pumping Data

Well No.	2018		2019		2020	
	TOTAL (1,000 GAL)	% OF TOTAL	TOTAL (1,000 GAL)	% OF TOTAL	TOTAL (1,000 GAL)	% OF TOTAL
2	47,675	2.6%	39,631	2.4%	35,544	2.8%
3	0	-	0	-	0	-
4	50,745	2.8%	102,669	6.2%	52,944	4.2%
5	154,146	8.4%	102,042	6.1%	54,448	4.3%
6	114,322	6.2%	153,619	9.2%	136,162	10.7%
7	198,541	10.8%	173,743	10.4%	177,041	13.9%
8	285,218	15.5%	205,578	12.4%	178,292	14.0%
9	181,998	9.9%	37,118	2.2%	78,683	6.2%
10	5,489	0.3%	186	0.0%	94	0.0%
11	101,831	5.5%	64,237	3.9%	65,758	5.2%
12	66,115	3.6%	78,390	4.7%	64,885	5.1%
13	89,528	4.9%	94,647	5.7%	111,153	8.7%
14	23	-	0	-	0	-
15	54,056	2.9%	107,141	6.4%	32,401	2.5%
16	137,825	7.5%	184,210	11.1%	94,446	7.4%
17	113,720	6.2%	130,532	7.8%	56,192	4.4%
20	105,617	5.7%	67,810	4.1%	91,646	7.2%
21	133,750	7.3%	122,357	7.4%	45,123	3.5%
TOTAL (1,000 GAL)	**1,840,599**		**1,663,910**		**1,274,812**	

As Table 2 demonstrates, Wells #3, #10, and #14 have essentially not been used in the last 3 years. Some of the wells pump to a common wellhouse prior to entering the water distribution system. This allows for blending of the water. Any blending that is done and reported within the SPU water system is done at the wellhouse prior to being delivered to any SPU customer.

Water Quality Standards
The EPA has established regulatory levels that set mandatory water quality standards for drinking water contaminants. These are enforceable standards called "maximum contaminant levels" (MCLs) which are established to protect the public against consumption of drinking water contaminants that present a risk to

human health. An MCL is the maximum allowable amount of a contaminant in drinking water which is delivered to the consumer.

In addition, EPA has established Secondary Standards that set non-mandatory water quality standards for 15 contaminants. EPA does not enforce these "secondary maximum contaminant levels" (SMCLs). They are established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These contaminants are not considered to present a risk to human health.

Separate from EPA standards, MDH developed health-based rules and guidance to evaluate potential human health risks from exposures to chemicals in groundwater. Health-Based Values (HBVs) and Health Risk Limits (HRLs) are developed by toxicologists at MDH using the best science and public health policies available at the time of their development. An HBV or HRL is the level of a contaminant that can be present in water and pose little or no health risk to a person drinking that water. HBVs and HRLs are developed to protect sensitive or highly exposed populations. HBVs and HRLs are guidance used by the public, risk managers, and other stakeholders to make decisions about managing the health risks of contaminants in groundwater and drinking water.

Table 3, 4, and 5 present general water quality parameters for the SPU wells for the years 2018, 2019, and 2020 respectively. Table 6 presents nitrate data for the SPU wells.

Table 3 – 2018 Water Quality Summary

Parameter	Well No. 2	3	4	5	6	7	8	9	10	HBV	Secondary Standard	EPA MCL
Copper (mg/L)	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		1	1.3
Arsenic (µg/L)	< 1		< 0.5	< 0.5	< 1	< 0.5	< 1	< 2	1.81			10
Chloride (mg/L)	32		113	147	87.6	139	55.4	77	13.7		250	
Iron (mg/L)	< 0.015		< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.03	**0.422**		0.3	
Manganese (mg/L)	< 0.005		< 0.005	< 0.005	0.025	< 0.005	< 0.005	< 0.005	0.008	0.1	0.05	
Sulfate (mg/L)	19.3		11.8	15	10.5	10.4	13.8	21.1	6.9		250	
Alkalinity, Total (as $CaCO_3$)	269	NA	249	260	250	271	258	328	207			
Calcium (mg/L)	83.2		93.2	103	76.2	86.4	87.3	110	39.4			
Magnesium (mg/L)	33.6		32.3	35.4	31	34.7	35.5	46.8	15.8			
Sodium (mg/L)	13.1		39.3	46.4	35.2	63.6	19.2	20.8	32.1			
Zinc (mg/L)	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	2	5	
Hardness, Total	346		366	403	318	359	364	467	163			

Parameter	Well No. 11	12	13	14	15	16	17	20	21	HBV	Secondary Standard	EPA MCL
Copper (mg/L)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		1	1.3
Arsenic (µg/L)	< 2	< 0.5	< 1	**25.3**	< 1	< 1	< 1	< 1	< 1			10
Chloride (mg/L)	32.8	16.3	23.5	< 3	32.5	48.6	44.3	32.8	34.7		250	
Iron (mg/L)	< 0.015	< 0.015	< 0.015	**1.2**	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015		0.3	
Manganese (mg/L)	< 0.005	**0.076**	0.013	0.041	0.036	< 0.005	0.037	< 0.005	< 0.005	0.1	0.05	
Sulfate (mg/L)	20	15.3	15.9	42.8	11.8	15.4	16	7.69	14.4		250	
Alkalinity, Total (as $CaCO_3$)	336	315	315	280	274	292	294	230	283			
Calcium (mg/L)	100	81.5	86.5	87.4	82.9	93.4	91.3	70.2	88.9			
Magnesium (mg/L)	44	35.3	37.6	29.2	34.9	36.8	39.4	24.8	35			
Sodium (mg/L)	12.1	8.35	11.6	8.97	15.3	17.5	17.4	11.4	11			
Zinc (mg/L)	< 0.01	< 0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	2	5	
Hardness, Total	431	349	371	338	351	385	390	277	366			

* EPA has set forth a lifetime health advisory value of 0.3 mg/L for manganese

Table 4 – 2019 Water Quality Summary

Parameter	Well No. 2		3	4		5		6		7		8		9		10		HBV	Secondary Standard	EPA MCL
Copper (mg/L)	<	0.005		<	0.005	<	0.005	<	0.005	<	0.01	<	0.005	<	0.005	<	0.005		1	1.3
Arsenic (µg/L)	<	0.5		<	0.5	<	0.5	<	0.5	<	0.5	<	0.5	<	0.5		1.95			10
Chloride (mg/L)		37.1			155		72.7		76.3		124		48.2		63.6		12.1		250	
Iron (mg/L)	<	0.03		<	0.015	<	0.015	<	0.03	<	0.015	<	0.03	<	0.015		0.417		0.3	
Manganese (mg/L)	<	0.005		<	0.005	<	0.005		0.026	<	0.005	<	0.005	<	0.005		0.006	0.1	0.05	
Sulfate (mg/L)																			250	
Alkalinity, Total (as $CaCO_3$)		266	NA		259		240		256		262		261		329		200			
Calcium (mg/L)		73.7			83.4		105		73.8		85.4		76.8		97.9		42.8			
Magnesium (mg/L)		32.6			29.6		34.7		32.6		36.6		34.4		43		16.8			
Sodium (mg/L)		14.7			26.7		54		32.6		56.3		15.3		18.2		24.9			
Zinc (mg/L)	<	0.01		<	0.01	<	0.01	<	0.01	<	0.01	<	0.01	<	0.01	<	0.01	2	5	
Hardness, Total		318			330		405		319		364		333		422		176			
Radium 226/228 (pCi/L)																	**6.2**			5 (combined)
Radon 222 (pCi/L)																	280			300

Parameter	Well No. 11		12		13		14		15		16		17		20		21		HBV	Secondary Standard	EPA MCL
Copper (mg/L)	<	0.005	<	0.01	<	0.01	<	0.005	<	0.01		0.005	<	0.005	<	0.005	<	0.005		1	1.3
Arsenic (µg/L)	<	0.5	<	0.5	<	0.5		**18.4**	<	0.5	<	0.5	<	0.5	<	0.5	<	0.5			10
Chloride (mg/L)		42.1		14		21.4	<	3		43.5		51.7		43		34.2		36.2		250	
Iron (mg/L)	<	0.015	<	0.015	<	0.015		**0.633**	<	0.015	<	0.015	<	0.03	<	0.03	<	0.03		0.3	
Manganese (mg/L)	<	0.005		**0.082**		0.01		0.032		**0.118**	<	0.005		0.036	<	0.005	<	0.005	0.1	0.05	
Sulfate (mg/L)																				250	
Alkalinity, Total (as $CaCO_3$)		338		323		329		289		279		299		295		214		259			
Calcium (mg/L)		95		83.3		85.6		78.6		82.2		95.4		82.9		62.7		73.6			
Magnesium (mg/L)		43.2		40		41.8		28.6		35.4		38.4		38.5		22.7		30			
Sodium (mg/L)		14.7		8.42		10.5		8.16		17.3		17.9		16		12.4		12.2			
Zinc (mg/L)	<	0.01	<	0.01	<	0.01	<	0.01	<	0.01	<	0.01	<	0.01	<	0.01	<	0.01	2	5	
Hardness, Total		415		373		386		314		351		396		366		250		307			
Radium 226/228 (pCi/L)								**7.2**													5 (combined)
Radon 222 (pCi/L)								274													300

* EPA has set forth a lifetime health advisory value of 0.3 mg/L for manganese

Table 5 – 2020 Water Quality Summary

Parameter	Well No. 2	3	4	5	6	7	8	9	10	HBV	Secondary Standard	EPA MCL
Copper (mg/L)	< 0.005	0.017	< 0.01	< 0.01	< 0.005	< 0.01	< 0.005	< 0.01	0.046		1	1.3
Arsenic (µg/L)	< 0.5	2.21	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	4.8			10
Chloride (mg/L)	16.5	11	83	158	63.1	123	56.9	70.8	13.7		250	
Iron (mg/L)	< 0.015	1.75	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	**1.98**		0.3	
Manganese (mg/L)*	< 0.005	0.034	< 0.005	< 0.005	0.033	< 0.005	< 0.005	< 0.005	0.009	0.1	0.05	
Sulfate (mg/L)	14.7	13.1	8.8	11.2	9.8	13.3	10.4	18.2	9		250	
Alkalinity, Total (as $CaCO_3$)	271	267	243	261	256	270	250	337	205			
Calcium (mg/L)	77	62.3	80.6	102	76.7	89.4	78.9	104	46.4			
Magnesium (mg/L)	30.8	25.6	29.6	34.7	31	34.9	31.4	45.2	18.5			
Sodium (mg/L)	14.4	20.8	33.4	61.9	26.3	53.9	19.1	18.7	13.6			
Zinc (mg/L)	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	2	5	
Hardness, Total	319	261	323	398	319	367	326	446	192			

Parameter	Well No. 11	12	13	14	15	16	17	20	21	HBV	Secondary Standard	EPA MCL
Copper (mg/L)	< 0.005	< 0.01	< 0.005	< 0.005	< 0.01	0.005	< 0.005	< 0.01	< 0.005		1	1.3
Arsenic (µg/L)	< 0.5	< 0.5	< 0.5	**19.4**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5			10
Chloride (mg/L)	41.7	18.3	24.3	< 3	44.6	46.4	51.4	34.6	35.9		250	
Iron (mg/L)	< 0.015	< 0.015	< 0.015	**0.776**	< 0.015	< 0.015	< 0.03	< 0.015	< 0.015		0.3	
Manganese (mg/L)*	< 0.005	**0.074**	0.006	0.036	**0.084**	< 0.005	0.029	< 0.005	< 0.005	0.1	0.05	
Sulfate (mg/L)	17.4	15	17.6	62.7	11.2	14	14.9	5.1	< 5		250	
Alkalinity, Total (as $CaCO_3$)	337	326	334	287	286	305	303	231	242			
Calcium (mg/L)	99.8	87.3	86.7	81.2	88.5	89.7	92.7	72.3	72.5			
Magnesium (mg/L)	45.3	37.7	38.6	28.5	34	34.6	36.1	24.2	26.7			
Sodium (mg/L)	15.1	8.92	10.3	8.27	16.8	15.7	16.6	12.5	12.9			
Zinc (mg/L)	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	2	5	
Hardness, Total	436	373	375	320	361	366	380	280	291			

* EPA has set forth a lifetime health advisory value of 0.3 mg/L for manganese

Table 6 – Nitrate Water Quality Summary

Well No.	2018			2019			2020			HBV (mg/L)	EPA MCL (mg/L)
	Nitrate Conc. (mg/L)			Nitrate Conc. (mg/L)			Nitrate Conc. (mg/L)				
	MIN.	AVG.	MAX.	MIN.	AVG.	MAX.	MIN.	AVG.	MAX.		
2	2.30	3.41	5.30	2.52	3.78	5.50	2.36	4.12	5.18	10	10
4	-	2.40	-	3.11	4.16	6.50	3.12	4.19	6.69		
5	5.70	6.46	7.30	6.10	6.67	7.42	5.82	6.24	6.69		
6	4.30	4.75	5.10	4.48	4.98	5.40	5.13	5.44	5.60		
7	4.30	4.60	4.90	4.10	4.55	4.80	4.84	5.05	5.30		
8	4.89	5.45	5.72	5.08	5.35	5.60	4.85	5.08	5.25		
9	1.87	3.55	4.29	2.23	3.10	3.68	2.99	3.35	3.81		
10	N/D			< 0.05			N/D				
11	2.25	2.58	2.95	2.31	2.73	3.07	2.40	2.61	2.86		
12	0.58	0.60	0.62	0.53	0.65	0.74	0.62	0.68	0.73		
13	1.08	1.16	1.28	0.95	0.99	1.01	1.08	1.10	1.11		
14	< 0.05			N/D			N/D				
15	4.74	5.01	5.54	4.70	4.96	5.11	4.90	5.10	5.54		
16	4.60	4.89	5.09	3.99	4.54	6.50	3.90	4.03	4.20		
17	5.00	5.67	6.13	4.77	5.56	6.56	4.98	5.68	6.20		
20	1.24	1.28	1.30	1.15	1.48	1.79	1.59	1.77	1.94		
21	2.13	3.25	3.60	0.33	2.04	2.82	2.08	2.15	2.30		
6, 7, & 10 Blended	2.59	3.15	3.68	2.96	3.32	3.89	3.29	4.68	5.52		
12, 13, & 14 Blended	0.67			0.78			0.86				

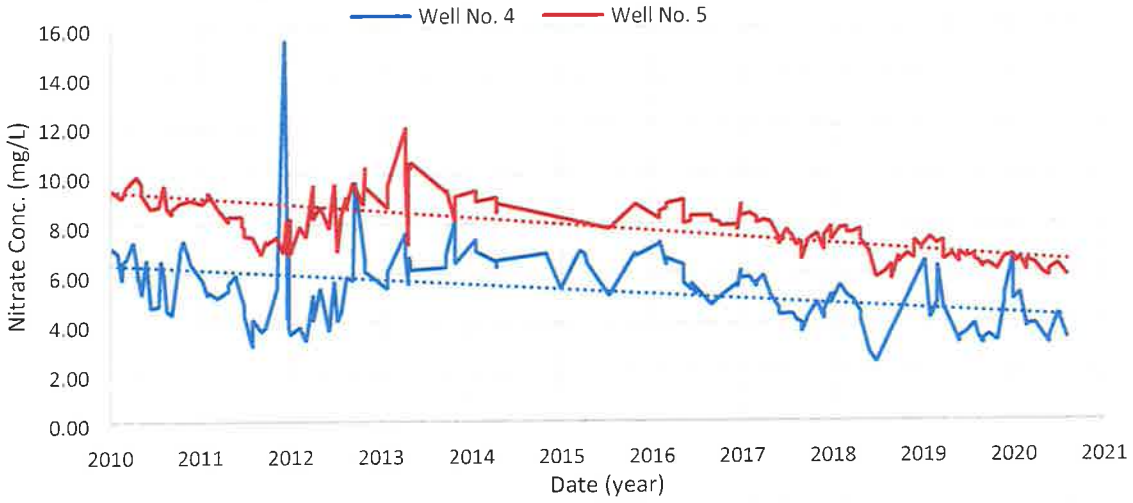
Nitrate

Nitrate contamination is often attributed to runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits and livestock waste. The EPA MCL for nitrate is 10 mg/L. Consuming levels of nitrate above 10 mg/L can affect how blood carries oxygen and can cause methemoglobinemia (also known as blue baby syndrome). Other symptoms connected to methemoglobinemia in infants include decreased blood pressure, increased heart rate, headaches, stomach cramps, and vomiting.

Wells utilizing water from the Jordan Sandstone aquifer have detected levels of nitrates and have been closely monitored over the years. This is especially predominant in areas of the City lower elevations due to the decrease in soil cover between the ground surface and the aquifer. As Table 6 indicates, the levels of nitrate in the majority of SPU wells has ranged from 0.53 mg/L to 7.3 mg/L. Wells #10 and #14 do not have nitrate, but these wells are not used much due to other water quality issue. It should be noted that none of the wells are currently exceeding the EPA's MCL of 10 mg/L.

In Shakopee, Wells #5, historically been the most problematic wells related to water quality with monitored nitrate levels ranging from 5.7 – 7.3 mg/L from 2018 to 2020. SPU has managed the use of this well by blending water pumped from this well with Well #4, which has a monitored level of nitrate ranging from 2.4 – 6.7 mg/L from 2018 to 2020. Both wells have been trending downward with regards to monitored nitrate levels (see Figure 1).

Figure 1 - Nitrate Concentration in Well 4 & 5



Manganese

Manganese occurs naturally in rocks and soil across Minnesota and the upper Midwest and is often found in groundwater sources. Your body needs some manganese to stay healthy, but too much can be harmful. Studies have found that children and adults who drink water with high levels of manganese for a long time may have problems with memory, attention, and motor skills. Infants (babies under one year old) are much more susceptible to acute exposure, which may lead to development of learning and behavior problems if they drink water with too much manganese in it.

EPA has set forth a lifetime health advisory value of 0.3 mg/L for manganese, which is based acute exposure for an adult consumption of 2 litres of water per day for 10-days and an infant consumption for

one-day. The EPA believes that a lifetime health advisory value of 0.3 mg/L will protect against concerns of potential neurological effects.

To further keep household drinking water safe, the MDH has developed a guidance value or HBV of 0.10 mg/L, which was developed to be a safe level of manganese for bottle fed babies. However, if everyone in your household is more than one year old or an infant who never drinks tap water or formula made with tap water, the MDH believes that a safe level of manganese in your water is 0.30 mg/L or less. This coincides with the EPA's lifetime health advisory level.

To reduce the potential of staining and taste concerns in the water supply, the EPA has also set a Secondary Standard for manganese of 0.05 mg/L. Public water systems are not required to meet this value; however, it can serve as a helpful guideline to reduce customer complaints.

In general, the SPU wells have minimal levels of manganese. Well #15 at 0.08 mg/L and Well #12 at 0.07 mg/L are the only wells that currently have moderate levels of manganese. In 2019, Well #15 saw a spike in manganese levels slightly above the MDH's HBV, but the average manganese level in Well #15 is below the MDH HBV. Both of these wells are used on a somewhat regular basis, but more sparingly than the wells with more favorable water quality, only making up for under 10% of water supplied to the system.

Radium

Radium becomes an issue when naturally occurring deposits erode. Certain rock types have naturally occurring trace amounts of "mildly radioactive" elements (radioactive elements with very long half-lives) that serve as the "parent" of other radioactive contaminants ("daughter products"). These radioactive contaminants, depending on their chemical properties, may accumulate in drinking water sources at levels of concern. The "parent radionuclide" often behaves very differently from the new element, the "daughter radionuclide" in the environment. The U.S. EPA set the MCL for Radium 226/228 to be 5 pCi/L.

Well #14 and Well #3, which SPU uses as emergency wells only, as well as Well #10 have a history of containing moderate concentrations of combined radium 226/228. All three wells have been observed to have radium levels that exceed the EPA MCL of 5.4 pCi/L. Since Well #3 and Well #14 are not currently in use, they are less of a concern. Well #10 is used very sparingly and is the last well turned on as demands in the system increase and is blended with water from Well #6 and Well #7. The concentration of radium in the blended water that enters the distribution system is well below the MCL. As show in the table above (Table 2), the past several years Well #10 has pumped less than 1% of the system total.

Arsenic

Arsenic occurs naturally in rocks and soil across Minnesota. Small amounts can dissolve into groundwater that may be used for drinking water. Drinking water with low levels of arsenic over a long time is associated with diabetes and increased risk of cancers of the bladder, lungs, liver, and other organs. The enforceable standard for arsenic is a MCL of 10 µg/L.

Well #14 has concentration of arsenic that exceed the EPA MCL of 10 ug/L. As explained above, SPU regards Well #14 an emergency well and does not use it.

Iron

Much like manganese, iron occurs naturally in rocks and soil across Minnesota and is often found in most groundwater sources. However iron is not a health risk but can cause discolored water, stained plumbing fixtures, and an unpleasant metallic taste to the water. This can lead to customer complaints about the water. Iron deposits can also buildup in pressure tanks, storage tanks, water heaters, and pipelines, causing decrease capacity, reduce pressure, and increase maintenance for the utility and user. The EPA's secondary standard for iron is 0.3 mg/L.

Only two of SPU's existing wells have monitored iron levels above the secondary standard of 0.3 mg/L. Well #14, with iron levels of 0.8 mg/L is not run on a regular basis as it is available for emergency use. Additionally, when this well is operated, the water is blended with water from Well #12 or Well #13 which have very low levels of iron. This allows for the water to be combined to produce a finished water effluent with very minimal iron concentration.

Well #10 has iron levels at 1.98 mg/L. This well is considered a peaking well, meaning it is used sparingly, and is only operated to supplement large water use days. Additionally, when this well is operated it is blended with water from either Well #6 or Well #7. This type of well use management limits the use of the wells that contain iron, though they are still available to supplement quantity shortages during large water use days. Even with elevated iron levels, the iron content in these wells is relatively low, and at levels that can be managed by limiting well use and chemical treatment (sequestration with a polyphosphate) and blending with other low iron concentration wells.

Sodium

Sodium is a naturally occurring element that is found widely throughout the environment. Due to issues with hypertension and other health concerns, some people have a sodium restricted diet. A goal of 2,400 mg per day of dietary sodium has been proposed by several government and health agencies. Drinking water containing between 30 and 60 mg/L is unlikely to be perceived as salty by most individuals and would contribute only 2.5% to 5% of the dietary goal if tap water consumption is 2 liters per day.

The sodium concentrations in SPU's wells has ranged from 8.27 mg/L to 63.6 mg/L over the past three years. These sodium concentrations indicate that SPU's water is not likely to contribute a significant amount of sodium to a resident's diet.

Hardness

Water above 100 mg/L of hardness is considered hard. The hardness in the water from the SPU wells ranges from 163 mg/L to 446 mg/L. Hardness levels in these ranges are very common to groundwater supplied systems across the Midwest.

Municipal scale water softening is very expensive from a capital and operations and maintenance standpoint. Some metro area communities including Minneapolis, St. Paul, Richfield, Eden Prairie, White Bear Lake, Bloomington, Tonka Bay, and Forest Lake soften their water. However the majority of the metro area communities do not soften their water and leave the choice of softening up to the individual residents.

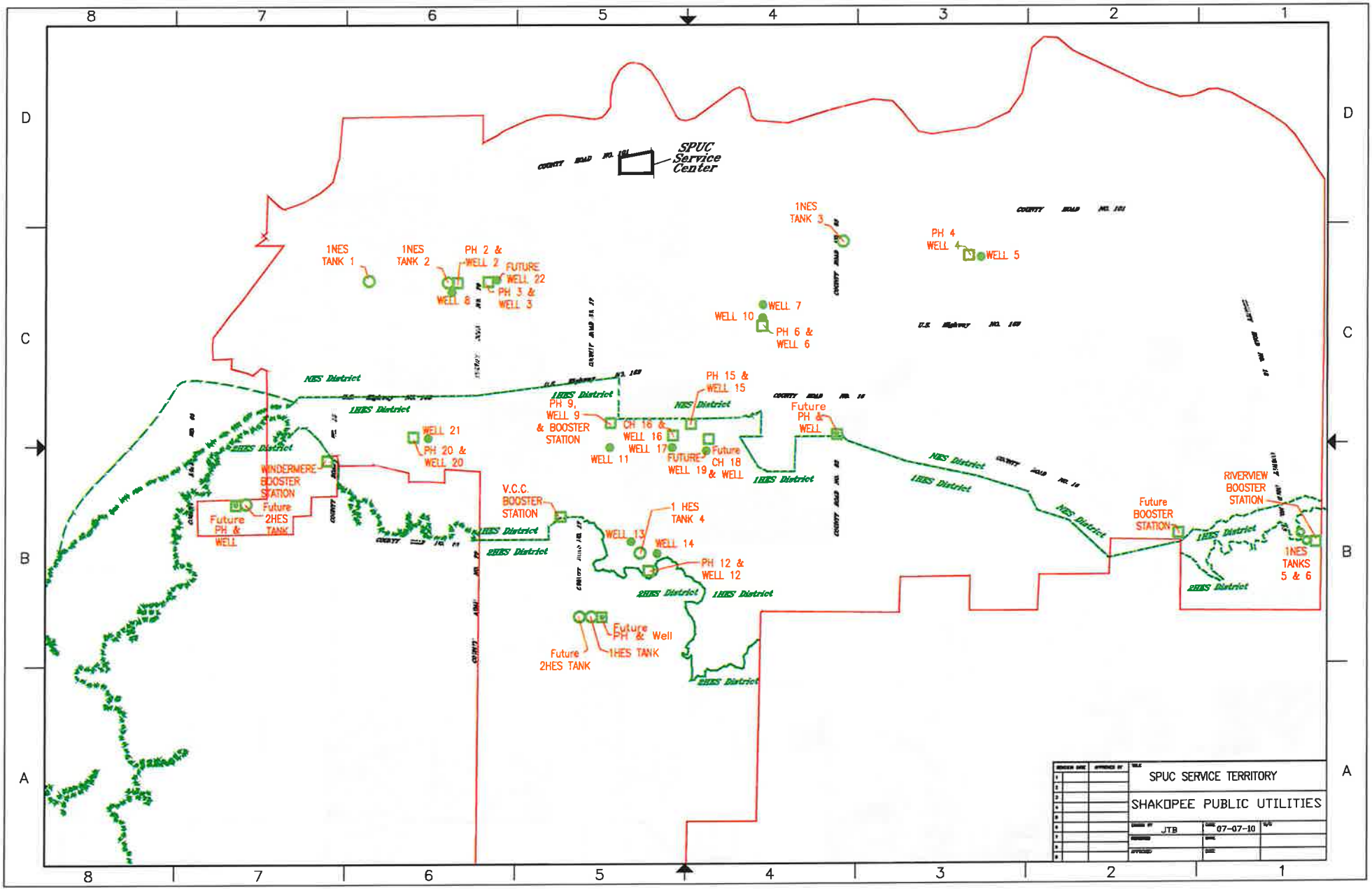
Future Regulations

The US EPA maintains a Contaminant Candidate List (CCL) for contaminants that may need to be regulated, which is updated and published every five years. The current CCL includes 97 chemicals or chemical groups and 12 microbiological contaminants. The list includes chemicals used in commerce, pesticides, biological toxins, disinfection byproducts, and waterborne pathogens. The contaminants on the list are not currently regulated by existing Primary drinking water standards. It should also be noted that the US EPA reviews existing regulated contaminants. If existing standards are modified, they are typically lowered (i.e. arsenic) and not raised.

Along with the CCL, the Unregulated Contaminant Monitoring Rule (UCMR) is used by the EPA to collect data for contaminants that are suspected to be present in drinking water, but do not have health-based standards set under SDWA. Occurrence data are then used to determine whether particular contaminants should be regulated in the interest of protecting public health. Monitoring under UCMR is conducted every five years for no more than 30 contaminants, and is required for all community water systems over 10,000 people, and for a representative sample of systems with populations less than or equal to 10,000 people. Selection of contaminants to be monitored is determined through existing

prioritization processes, including contaminants previously monitored under UCMR, and the CCL. Other contaminants of interest may also be chosen. Since the promulgation of UCMR, there have been four rounds of sampling with the fourth round (UCMR4) currently underway. Among the four rounds of UCMR sampling, some of the contaminants include:

- Pesticides
- Volatile Organic Compounds (VOCs)
- Synthetic Organic Compounds (SOCs)
- Metals
- Hormones
- Flame Retardants
- Perfluorinated Compounds (PFAS)
- Disinfection Byproducts
- Cyanotoxin Chemicals
- Other chemicals used in industrial and manufacturing practices


SPUC Service Center
1NES TANK 1
1NES TANK 2
PH 2 & WELL 2
FUTURE WELL 22
PH 3 & WELL 3
WELL 8
1NES TANK 3
PH 4 WELL
WELL 5
WELL 7
WELL 10
PH 6 & WELL 6
NES District
IHES District
PH 15 & WELL 15
PH 9, WELL 9 & BOOSTER STATION
CH 16 & WELL 16
WELL 17
WELL 11
FUTURE WELL 19
Future CH 18 & WELL
Future PH & WELL
WELL 21
PH 20 & WELL 20
WINDERMERE BOOSTER STATION
Future PH & WELL
Future 2HES TANK
V.C.C. BOOSTER STATION
1 HES TANK 4
WELL 13
WELL 14
PH 12 & WELL 12
2HES District
Future PH & Well
1HES TANK
Future 2HES TANK
Future BOOSTER STATION
RIVERVIEW BOOSTER STATION
1NES TANKS 5 & 6
SPUC SERVICE TERRITORY
SHAKOPEE PUBLIC UTILITIES
JTB
07-07-10

SHAKOPEE PUBLIC UTILITIES
MEMORANDUM

TO: Larry Koshire, Interim Utilities Manager

FROM: Joseph D. Adams, Planning & Engineering Director

SUBJECT: Ehlers Water Development Fee Study

DATE: October 1, 2020

ISSUE

Ehlers' Jessica Cook would like to present her findings to date and request direction from the Commission on some options she has developed for their consideration.

BACKGROUND

The Commission's water development fees are the Water Capacity Charge fka Water Connection Charge and the Trunk Water Charge.

The Water Capacity Charge or WCC funds the initial cost of water supply wells, pump houses, treatment plants, pressure booster stations and pressure reducing facilities. The WCC uses as its basic unit an "equivalent" SAC unit. A Sewer Availability Charge unit or SAC unit is equal to 274 gallons per day (based on a single living unit) as defined by the Met Council for measuring sanitary sewer flows expected from new construction, expansion through re-modeling of existing buildings or re-purposing spaces. SPU uses the same unit of measure for the WCC calling it "equivalent" SAC units (274 gallons/day of water demand).

The WCC rate was last adjusted at the end of 2018 and increased from $5,730 to $6,039 per equivalent SAC unit for 2019. No WCC rate adjustment was made for 2020.

The Trunk Water Charge or TWC funds the over sizing (enlarging diameter) of lateral water mains into trunk water mains. The Commission's water main design criteria require all property newly receiving "water availability" to, among other requirements, install a lateral water main distribution system extension that meets design criteria including minimum flow based on each parcel's dimensions, minimum pipe diameter size by zoning, extension across the parcel in two directions e.g. N-S and E-W and "looping," which means leaving no dead ends. Over sizing accomplishes the goal of increasing fire flow to all areas of the system by increasing lateral pipe diameter sizes to 12-inch every ½ mile N-S and E-W. The TWC uses a net acre as its basic unit of measure. Net acres have been defined by the Commission to be total area minus dedicated road right of way, minus delineated wetlands that remain unfilled and minus dedicated city parks. One difference of note from the

Commission's definition of net area and the city of Shakopee's is storm water ponding areas are included in the TWC calculation vs for city trunk area fees i.e., sanitary and storm water they are not. Multiple parties have requested SPU to adjust its definition of net area to align with the city of Shakopee's.

The TWC rate was last adjusted at the end of 2018 and increased from $3,749 to $4,451 per net acre for 2019. No TWC rate adjustment was made for 2020.

DISCUSSION

Ehlers' analysis of historic water usage by apartment buildings vs single family homes in Shakopee supports the idea that water use is less per living unit in apartment buildings than in single family houses.

Should the Commission determine that a reduction in the WCC rate is warranted as the study suggests, the Commission should discuss if it wishes to consider the possibility of refunds to anyone who paid the higher rate in the preceding year(s)? If so, how far back would that apply? Since any refunds would affect the assumed beginning fund balance for the purpose of the current study, the final recommended 2021 rate would have to be re-calculated.

Developers and city staff would prefer that SPU use the same definition of net area when calculating the TWC. The advantage would be consistency of course. As long as the TWC rate is derived using the assumption that storm water ponding areas would not be included there is no disadvantage that comes to mind. Staff understands that this most recent study has subtracted an allowance for the expected storm water ponding areas.

RECOMMENDATIONS

Staff is in agreement with Ms. Cook's conclusions and makes the following recommendations re the WCC and TWC rates:

1. Prorating the apartment living units by a factor of 0.80 is appropriate.

2. Adjusting the WCC down 5.5% to $5,707 (option #2) now with steady increases of 1% in the future is appropriate, with the final rate adjustment tbd pending direction on possible refunds.

3. Adjusting the TWC up now by 4.75% to $4,662 with steady increases of 4.75% in the future is appropriate.

4. Align SPU's definition of net area with the city of Shakopee's for the purpose of calculating the TWC.

5. Plan to revisit the WCC and TWC rates model more frequently moving forward, so that the rates are more based on actual recent development activities rather than long term projections.

REQUESTED ACTION

Staff requests the Commission provide direction on the following items:

1. Should apartment developments pay the WCC for the number of SAC units as determined by the Met Council or should the number of SAC units be pro-rated by a factor of 80% for the number of apartment living units?

2. If the WCC rate is reduced for 2021, should any refunds be made available for fees paid at the current rate in previous years?

3. Should the TWC be determined using the city of Shakopee's definition of net area (also subtracting storm water ponding areas)?

EHLERS
LEADERS IN PUBLIC FINANCE

Water Development Fee Study

For Shakopee Public Utilities

Agenda

Snapshot of 2020: Existing Fees and Community Comparison

Study Approach and Assumptions

Recommendations

- Water Trunk Fees
- Water Capacity Charge Options

Discussion

Why do development fees differ?

Infrastructure Costs

- Terrain
- Aquifers and Water Quality
- Development Patterns

Philosophy

- Should growth pay for itself?

Degree of Analysis

- Has a fee study been completed?

2020 Water Development Fee Structure

Trunk Water Fees (paid at plat)

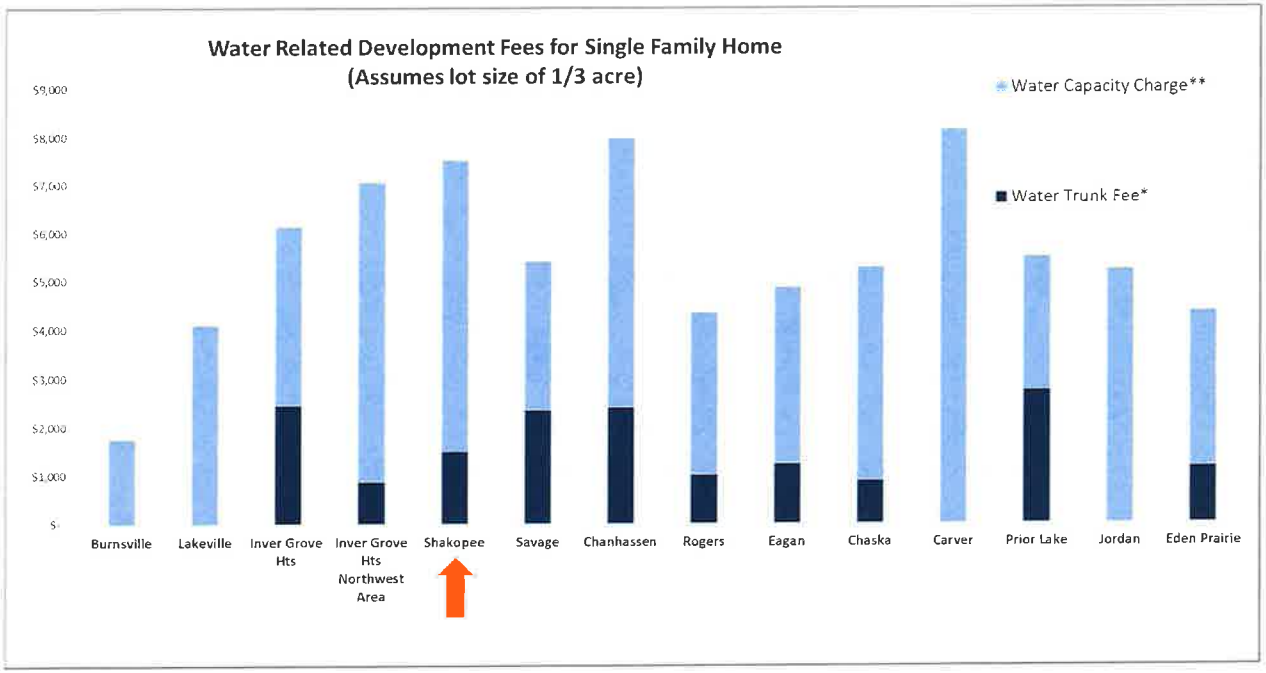
- $4,451/acre
- Developers prefer paying fees with building permit
- Collecting fees at plat financially protects SPU
- Matches timing of revenues with expenses

Water Capacity Charge (paid with building permit)

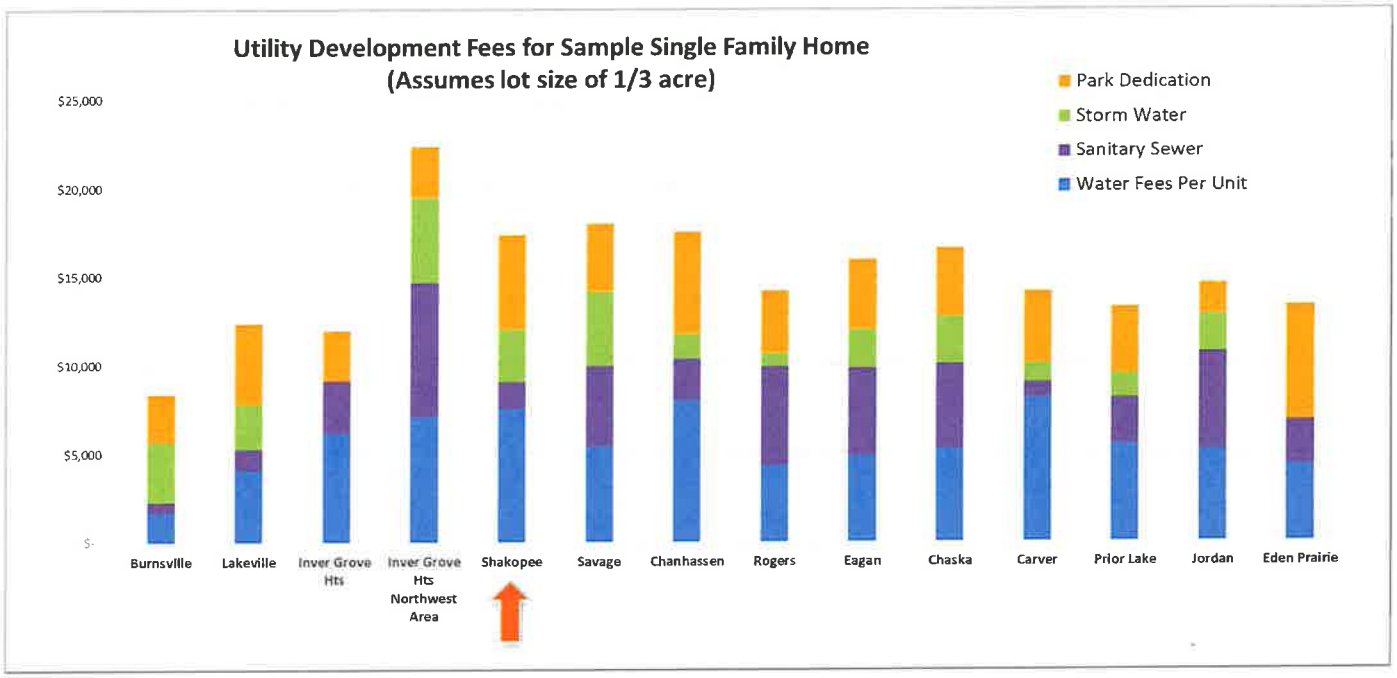
- $6,039 per SAC unit + 14.2 cents/sq. ft. for industrial
- Builders prefer fees paid with plat; developers do not

No increase to fees in 2020

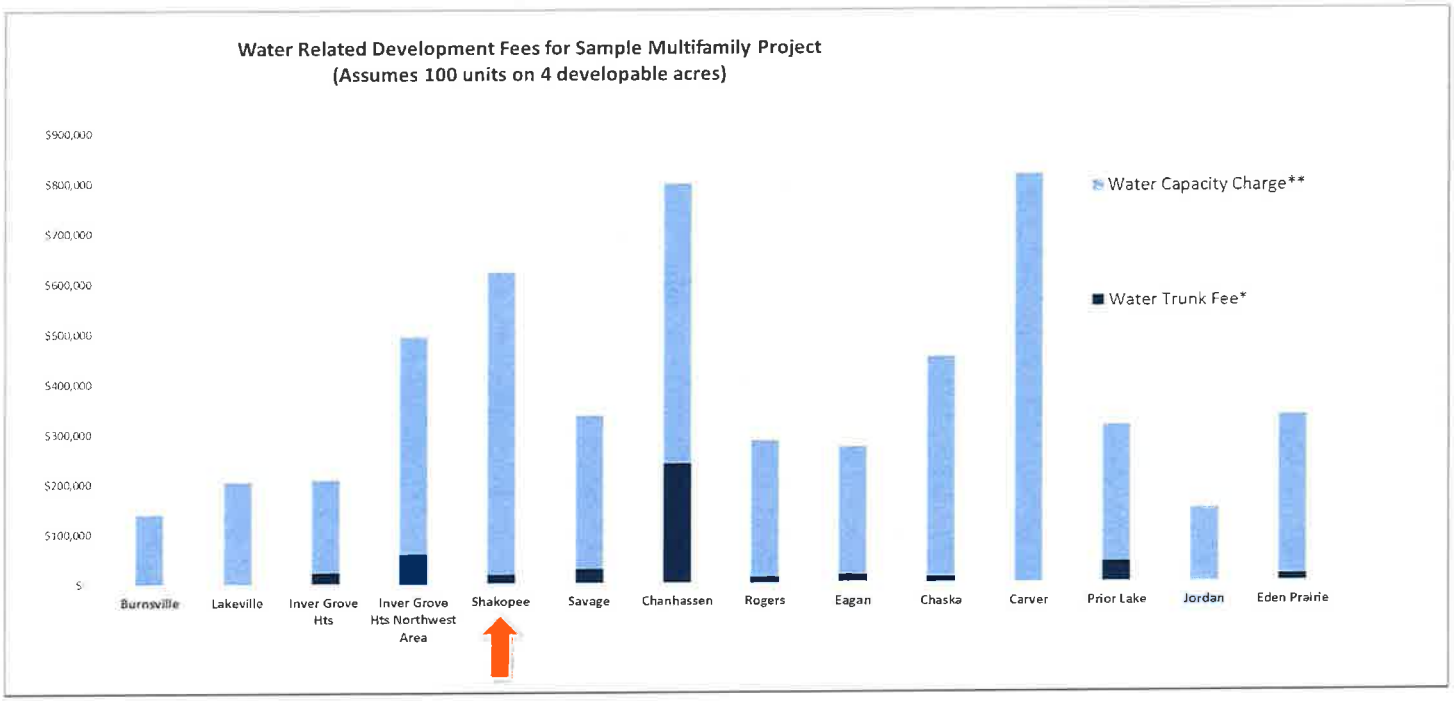
Water Dev. Fee Comparison – Single Family Home



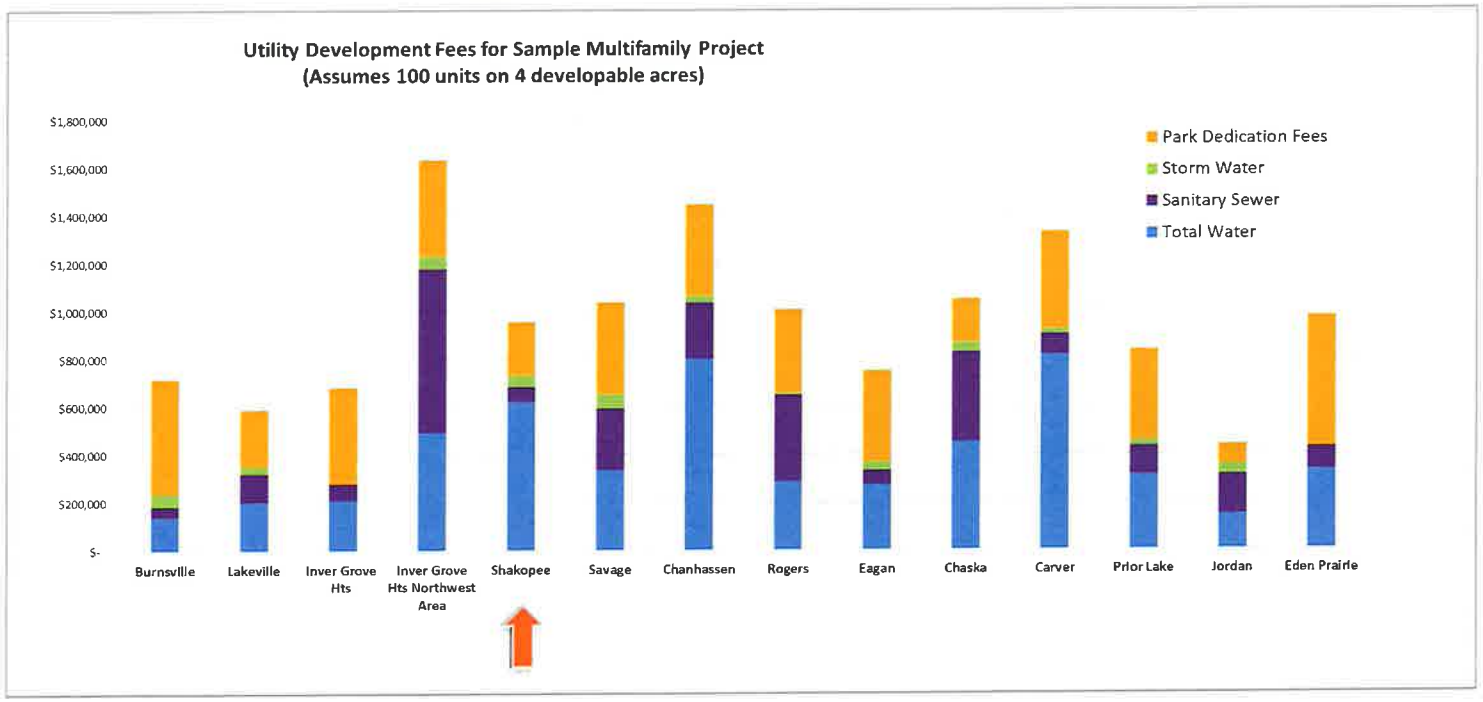
Total Dev. Fee Comparison – Single Family Home



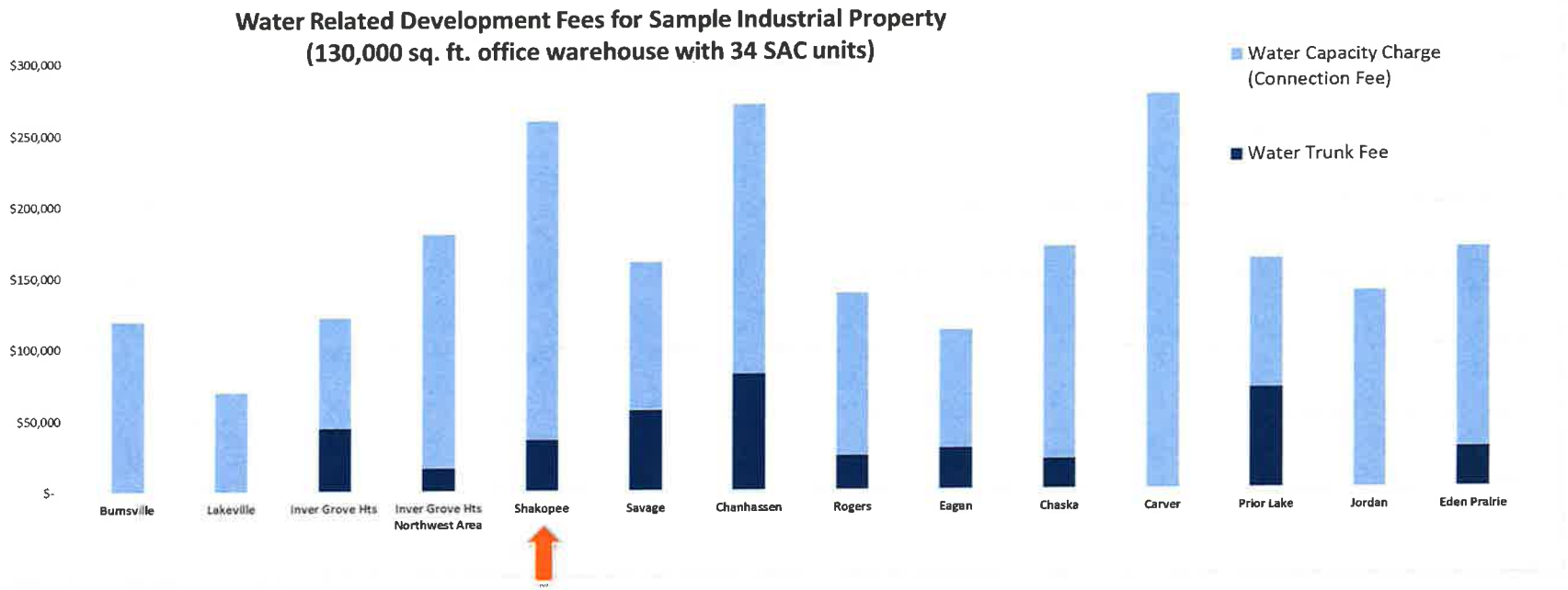
Water Dev. Fee Comparison – Multifamily Project



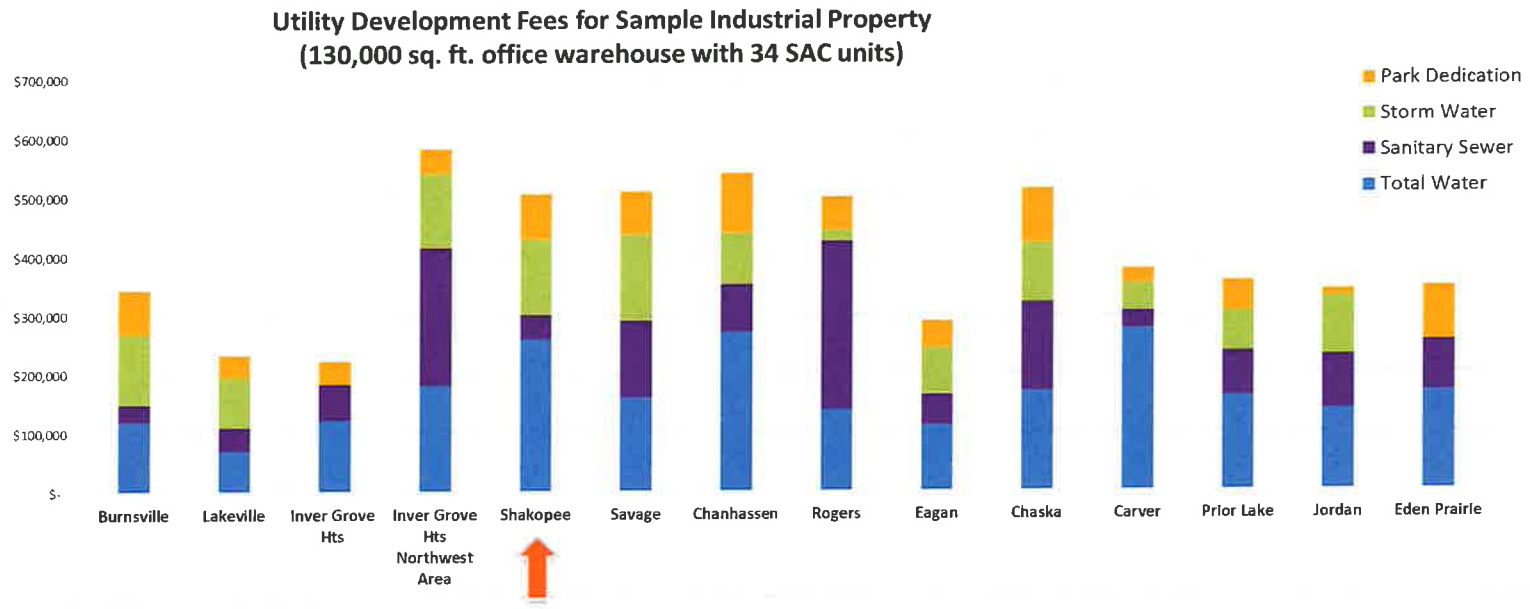
Total Dev. Fee Comparison – Multifamily Project



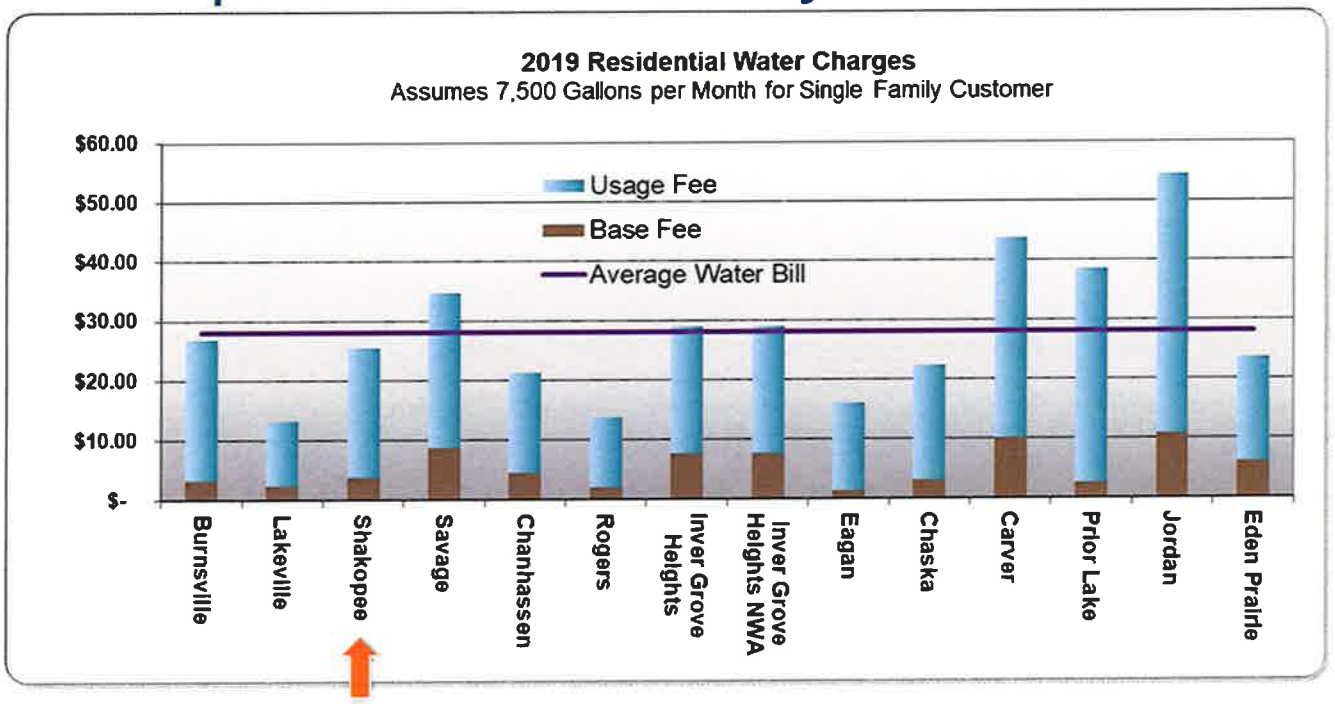
Water Dev. Fee Comparison – Mixed Use Industrial



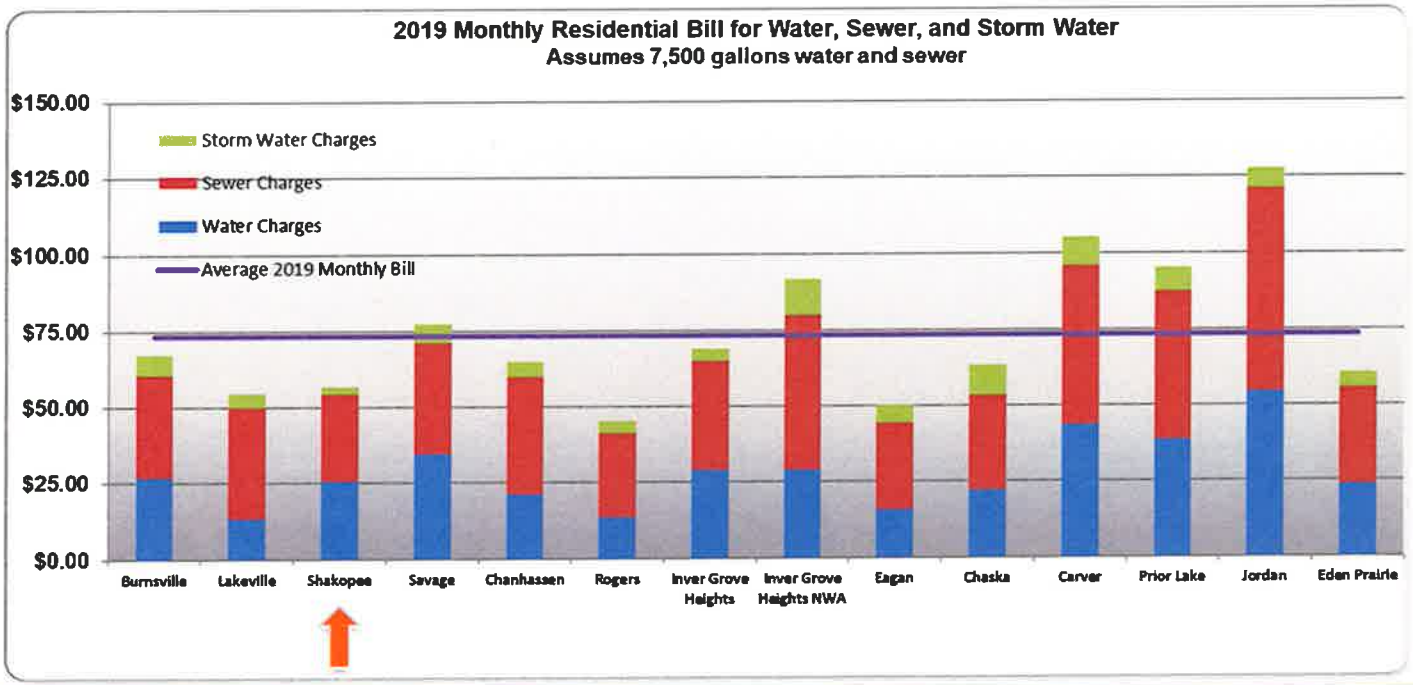
Total Dev. Fee Comparison – Mixed Use Industrial



2019 Comparison of Monthly Water Bill



2019 Comparison of Monthly Utility Bill



Trends in Development Fees

Developer Push-back

Cities reducing fees for multi-family development by counting 1 multifamily unit as < 1 SAC unit

Water Development Fee Study

Last completed in 2008

Philosophy: Growth pays for itself

Historically, fees have produced cash balances sufficient to fund capital projects without bonding

Fund	2019 Year-End Cash Balance
Water Capacity Fund	$14,781,889
Water Trunk Fund	$79,599

Significant Changes since 2008

Per capita water use is down

More land purchased and served by Tribe

Higher density development patterns

Jackson Township annexation

Bluff area protections expanded to preserve bluff

2020 Study Approach

Assumes growth should pay for itself

Water Capacity Fund pays for pumping, treatment, storage

Water Capacity Charge = Total Costs/Total SAC Units

Trunk Fund pays for trunk lines and oversizing

Trunk Fee = Total Costs/Total Net Acres

Key Assumptions: Growth

Full development by 2040

- Growth patterns consistent with City's comp plan and AUAR
- **Assumed 75% of growth in comp plan to be conservative**
- Growth spread evenly
- 304 SAC Units per year
- 116 Acres platted per year
- Assumed existing rural residential units will NOT hook-up by 2040

Key Assumptions: Capital Costs

Full system build out by 2040

- Consistent with Comprehensive Water System Plan Update
- Construction costs inflate 4% annually
- Assumes two satellite treatment plants
- Includes trunk costs to serve existing rural residential areas

Major Capital Projects

Improvement	Timing	Inflated Cost
Trunk Lines and Oversizing	2020-2040	$16,600,000
.75MG Elevated Tank	2020-2021	$3,900,000
Wells #22 and #23	2021-2022	$1,371,000
Pump Houses Tank #8 Site	2022-2024	$2,600,000
Pump Houses #2 and #4	2024 - 2025	$7,425,000
Water Treatment Plant	2025	$10,580,000
Water Treatment Plant	2030	$14,400,000
Booster Station	2032	$4,200,000
Central Elevated Tank	2035	$3,000,000
Well #24	2037	$1,250,000

Prudent Use of Debt

Assumed two financings for Water Capacity Fund

- $7,000,000 in 2030 for 2nd Treatment Plant
  - ✓ Assumes 15-year term
  - ✓ About 50% of project costs financed
- $2,500,000 in 2032 for Booster Station
  - ✓ Assumes a 10-year term
  - ✓ About 60% of project costs financed

Ensures future users pay for improvements

Bond payments made with future Water Capacity Charge revenue

Water Trunk Fees

Trunk fund has limited reserves

Need steady fee income to pay for planned extensions

Recommend 4.75% annual fee increases

Fee increase from $4,451 per acre to $4,662 per acre in 2021 ($211 increase)

Water Capacity Charges

Option #1: Maintain Current Rate Structure

Rate Impacts: Reduce Charges 11% in 2021
$664 reduction per SAC Unit
Increase rates 1% annually thereafter

Option #1: Maintain Current Rate Structure

Total Water Development Fees on a Single-Family Home

Year	Trunk Charge	Capacity Charge	Total Water Development Fees	Annual Increase/ (Decrease)	Percent Increase
2020	$ 4,451	$ 6,039	$ 10,490		
2021	$ 4,662	$ 5,375	$ 10,037	$ (453)	-4.3%
2022	$ 4,884	$ 5,428	$ 10,312	$ 275	2.7%

Total Water Development Fees on a 100 Unit Apartment

1 Multifamily Unit = 1 SAC Unit

Year	Trunk Charge	Capacity Charge	Total Water Development Fees per SAC Unit	Total Fee for Project	Annual Increase/ (Decrease)	Percent Increase
2020	$ 4,451	$ 6,039	$ 10,490	$ 1,049,000		
2021	$ 4,662	$ 5,375	$ 10,037	$ 1,003,713	$ (45,287)	-4.3%
2022	$ 4,884	$ 5,428	$ 10,312	$ 1,031,234	$ 27,521	2.7%

Water Capacity Charges

Option #2: Modify Rate Structure

1 Multi-family Unit = 0.8 SAC Units

Rationale: Small survey of Shakopee properties indicates apartments use less water than single family homes

Outcome: Reduces Charges 5.5% in 2021

$332 reduction per SAC Unit

Increase rates 1% annually thereafter

Option #2: Apartment Unit = 0.8 SAC Units

Total Water Development Fees on a Single-Family Home

Year	Trunk Charge	Capacity Charge	Total Water Development Fees	Annual Increase/ (Decrease)	Percent Increase
2020	$ 4,451	$ 6,039	$ 10,490		
2021	$ 4,662	$ 5,707	$ 10,369	$ (121)	-1.2%
2022	$ 4,884	$ 5,764	$ 10,648	$ 279	2.7%

Total Water Development Fees on a 100 Unit Apartment

1 Multifamily Unit = .8 SAC Unit

Year	Trunk Charge	Capacity Charge	Total Water Development Fees per SAC Unit	Total Fee for Project	Annual Increase/ (Decrease)	Percent Increase
2020	$ 4,451	$ 6,039	$ 10,490	$ 1,049,000		
2021	$ 4,662	$ 5,707	$ 10,369	$ 829,542	$ (219,458)	-20.9%
2022	$ 4,884	$ 5,764	$ 10,648	$ 851,825	$ 22,283	2.7%

Policy Question

If SPU reduces charges and/or changes the rate structure, developers who recently paid fees will ask for reimbursement.

Significant recent development activity means reimbursements will result in smaller fee decreases. Quantifying amount will require more analysis.

Will the SPU provide reimbursements on fees paid in 2019 or 2020?

Conclusions and Recommendations

SPU has prudently managed its resources and set adequate fees

Higher density development allows a one-time reduction in water capacity charge for 2021 and modest increases thereafter

Opportunity to restructure fees for multifamily residential

Update study every 3-5 years

SPU
Shakopee Public Utilities

PO Box 470 • 255 Sarazin Street
Shakopee, Minnesota 55379
Main 952.445-1988 • Fax 952.445-7767
www.shakopeeutilities.com

TO: Shakopee Public Utilities Commissioners

FROM: Larry Koshire, Interim Utilities Manager

DATE: October 1, 2020

SUBJECT: Shared Services Between SPU and the City of Shakopee

I have been made aware of a number of communications and meetings regarding the potential of shared services since last July, between the City of Shakopee and SPU. To date these efforts have not moved forward, and no proposed organizational charts have been produced. Meanwhile, SPU is considerably short-staffed while working on the 2021 budget, salary studies, and normal day to day accounting and financial projects.

As this analysis will continue to take time, and the referendum is a month away, it appears appropriate to engage outside assistance for the finance work facing SPU staff. SPU has reached out for outside consulting assistance to fill this role, and have received a positive response. Taking this action will allow discussions to continue, and not commit SPU to a permanent position. It will also allow, at some point, the ability to engage a third party to assist in studying the organizational structure of the City and SPU in developing a direction on the shared services question.

Thank you.

SPU
Shakopee Public Utilities

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Main 952.445-1988 • Fax 952.445-7767
www.shakopeeutilities.com

October 1, 2020

TO: Larry Koshire, Interim Utilities Manager

FROM: Kelley Willemssen, Interim Finance Director

SUBJECT: 2021 Wage and Compensation Planning Assumptions

Overview:

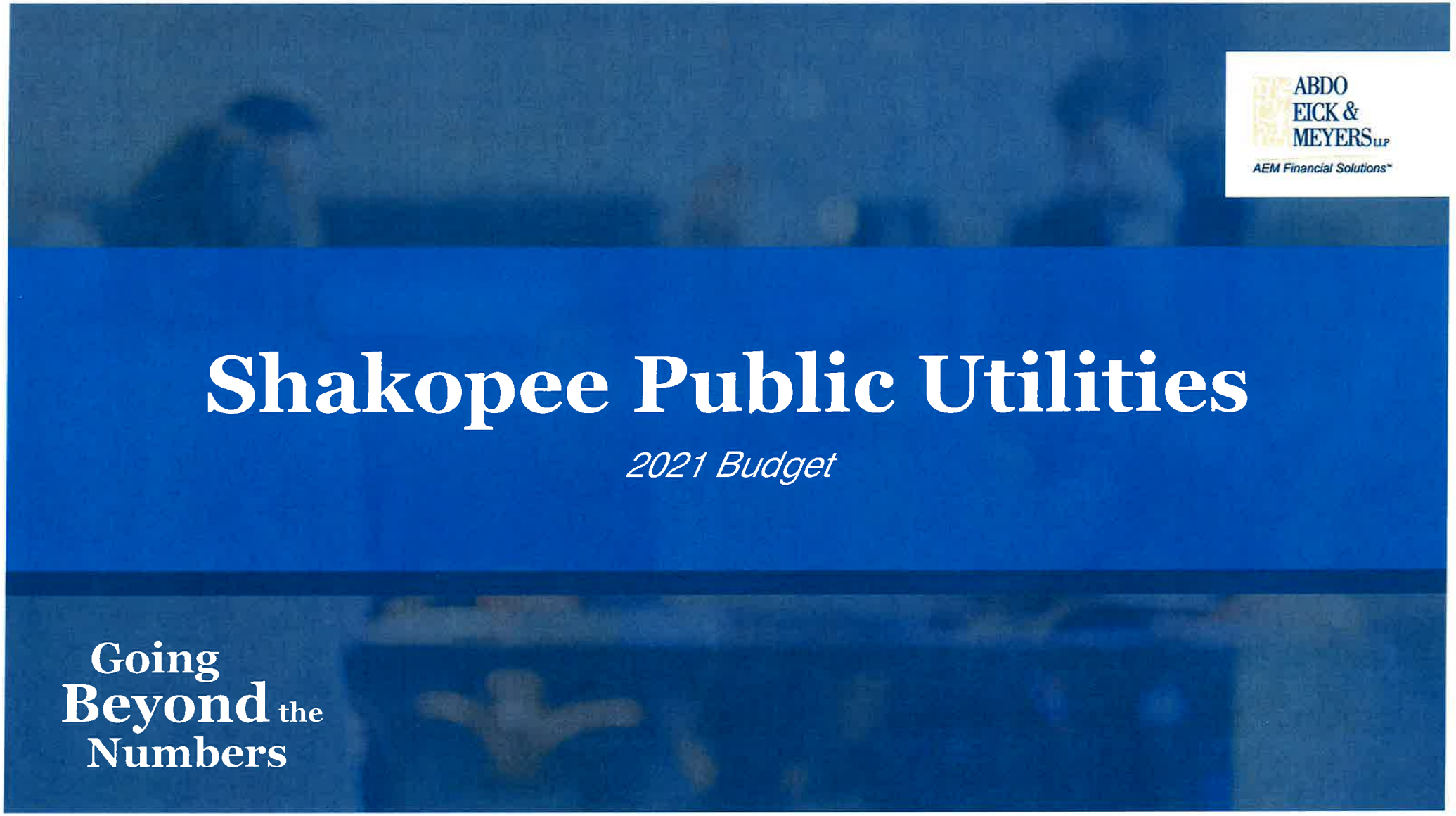
ABDO Eick & Meyers, LLP (AEM) budget development services began work building the 2021 Budget for SPU in August. The work for the 2021 budget began around wage and compensation planning assumptions.

Sub-Committee members appointed to the 2021 Wage and Compensation planning included Commissioner Mocol, Commissioner Fox and City of Shakopee's Human Resource Director, Alissa Frey. Staff members included Interim Utilities Manager, Joe Adams and Interim Finance and Administration Director, Kelley Willemssen.

The Sub-Committee met on September 21st. The meeting was led by Jean McGann, President of AEM Financial Solutions, LLC. The discussion included the budget process and timeline, cost of living adjustments(COLA), health insurance projections and the need to consider future sub-committee meetings to review impacts to the preliminary wage and benefit budget from the results of the compensation analysis currently underway. A consensus by the Compensation Sub-Committee was reached that a 2.5% COLA increase be projected. As well as a change be made to the current employer coverage percentage. 2020 Health/Dental coverage included 100% employee premium; 71.2% of spouse/dependent premium.

The attached presentation is a review of the 2021 wage and compensation planning meeting and will be led by Jean McGann from AEM.

Action Required
Approve 2021 Wage and Compensation Planning Assumptions until the compensation analysis is completed, which is scheduled for 11/14/2021.



ABDO
EICK &
MEYERS LLP
AEM Financial Solutions™

Shakopee Public Utilities

2021 Budget

Going
Beyond the
Numbers

Meet the Presenters

Jean McGann
President – AEM Financial Solutions, LLC
Partner – Abdo, Eick & Meyers, LLP

Pa Thao
Senior Associate – Government Operations

Agenda

- Budget Process and Timeline
- Review Wage Trend Data
- What We Know
- Prior Year Comparison

Budget Process and Timeline

Budget Timeline

Task	Dates
AEMFS to create budget worksheets for departments	August 27, 2020
Budget worksheets to Department Directors	August 28, 2020
AEMFS to provide 2021 labor information	August 28, 2020
PUC to meet with Commission regarding 2021 labor	September 8, 2020
PUC to provide Revenue Assumption Data to AEMFS	September 16, 2020
AEMFS to develop cash flow for PUC	September 16, 2020
AEMFS to meet with Sub-Committee	September 21, 2020
AEMFS finalize budget changes from department discussions	September 25, 2020
10/5 meeting info due to SPUC from AEMFS	September 29, 2020
SPUC review of 10/5 meeting due to AEMFS	September 30, 2020
Commission Decision on General Wage Increases	October 5, 2020
Ehler's Rate Analysis Present to SPUC	October 5, 2020
Draft budget to SPUC	October 9, 2020
SPUC Final budget, CIP changes to AEMFS	October 16, 2020
Commission Review of Draft CIP, Cash Flow and Budget	November 2, 2020
Final Budget Approved by Commission	December 7, 2020
AEMFS to create budget books	December 11, 2020
Commission Adoption of Various Fee/Rate Resolutions	December 21, 2020

Wage Trend Data

Preliminary 2021 Budget COLA Examples

- ✓ Alexandria Public Utilities – 2.5-3%
- ✓ Anoka Utilities – 3%
- ✓ Austin Public Utilities – 2.75%
- ✓ Chaska Public Utilities, Non-Union – 1.50%
- ✓ Detroit Lakes – 3%
- ✓ Elk River Utilities – 3%
- ✓ Hutchinson Public Utilities – 3%
- ✓ Marshall Utilities – 3.1%
- ✓ Mora Utilities – 3%
- ✓ Moorhead Public Service – 3%
- ✓ Rochester Public Utilities – 2.5%
- ✓ Watertown, S. Dakota Utilities – 3%
- ✓ Westbrook Public Utilities – 3.0%
- ✓ Steele Waseca Cooperative Electric – 3%

Note: Some responses are projected numbers and have not been officially approved.

Preliminary 2021 Budget COLA Examples

- ✓ Crystal – 2%
- ✓ Dayton – 2.5%
- ✓ Dundas – 3.0%
- ✓ Hastings – 2.0%
- ✓ New Brighton – 2.0%
- ✓ New Hope – 3.0%
- ✓ Oak Grove – 2.5%
- ✓ Owatonna – Jan 2% - mid year 1%
- ✓ Savage – 2.0%
- ✓ Shakopee – 0.0%
- ✓ Roseville – 3.0%

Note: Some responses are projected numbers and have not been officially approved.

What we know

What we know

- ✓ Health insurance rate increase 4%
- ✓ LTD renewal increase 5%
- ✓ COLA increase 2.5%
- ✓ Step increase varies by department and employee
- ✓ Compensation study underway

Assumptions

- ✓ * COLA (cost of living increase) projected at 2.5% in effect Jan. 1
- ✓ Step increases in effect Jan. 1 (separate from COLA)
- ✓ Health insurance rates projected at 4% increase
- ✓ Health/Dental ER 100% Single, 75% all others
- ✓ LTD is 100% SPU contribution
- ✓ HSA annual contribution by SPU: Single $1,050 / Family $2,100

Prior Year Comparison

Prior Year Comparison

- ✓ 2020 Wages $5,607,178
- ✓ 2021 Estimated Wages $5,960,123

Increase of $352,945 or 6.29%

* *Benefit rates are not yet final. Additional information/prior year comparison will be provided once rates are finalized*


Questions?
Going
Beyond the
Numbers

ABDO EICK & MEYERS LLP

AEM Workforce Solutions™

September 25, 2020

Shakopee Public Utilities Commission
255 Sarazin Street
Shakopee, MN 55379

RE: ANALYSIS OF STATUTORY COMPLIANCE RELATED TO COMPENSATION AND SEVERANCE PAYMENTS

Executive Summary

Our firm was contracted by the Shakopee Public Utilities Commission to analyze compliance with Minnesota Statute related to public employee executive compensation limitations, specifically related to the Utilities Manager position for calendar years 2017 through 2020. As part of this analysis, we reviewed historical payroll information, relevant statutory regulations and agency guidance, and calculated compensation amounts exceeding the applicable statutory limitations. We have also evaluated the terms of the executed Repayment, Release, and Separation Agreement dated September 9, 2020, (the "Agreement") presented to and signed by the former Utilities Manager, and have evaluated if/how the payment terms within the agreement are impacted by statutory compensation limits.

Our analysis found that the Shakopee Public Utilities Commission Utilities Manager has, from calendar year 2017 through 2020, been issued compensation exceeding statutory limits of $ 39,238.03, in total.

A summary of our analysis as well as related recommendations for correction follow.

Analysis Findings

Annual Compensation Limitations

Minnesota State Statute 43A.17 limits the salary and the value of other forms of compensation of a person employed by a political subdivision of this state, excluding school districts. This compensation limit was originally established in 2005 as a percent of the governor's salary with annual increases to this limit based on CPI-U increase over the prior year. ***Table 1*** reflects statutory limits, established by the Minnesota Office of Management and Budget, for the 2017 through 2020 calendar years.

Table 1

Calendar Year	Compensation Limit
2017	$ 167,978.00
2018	$ 171,338.00
2019	$ 175,621.00
2020	$ 178,782.00

Per Minnesota Statute, "salary" is defined as, "*monthly, or annual rate of pay including any lump-sum payments and cost-of-living adjustment increases but excluding payments due to overtime worked, shift or equipment differentials, work out of class as required by collective bargaining agreements or plans established under section 43A.18, and back pay on reallocation or other payments related to the hours or conditions under which work is performed rather than to the salary range or rate to which a class is assigned.*" Excluded from salary, however, are the following types of payments to employees:

1. *employee benefits that are also provided for the majority of all other full-time employees of the political subdivision, vacation and sick leave allowances, health and dental insurance, disability insurance, term life insurance, and pension benefits or like benefits the cost of which is borne by the employee or which is not subject to tax as income under the Internal Revenue Code of 1986;*
2. *dues paid to organizations that are of a civic, professional, educational, or governmental nature; and*
3. *reimbursement for actual expenses incurred by the employee which the governing body determines to be directly related to the performance of job responsibilities, including any relocation expenses paid during the initial year of employment.*

It is important to note that, per position letter issued to the Shakopee Public Utilities Commission by the Minnesota State Auditor on May 1, 2020 (***Appendix A***), "vacation and sick leave allowances" in item (1) above refers to the value of the paid vacation or sick leave benefit available to the employee, not the gross amount of the vacation or sick leave used and paid out to the employee during the calendar year. For the purposes of this analysis, we relied on this position letter and it's interpretation that neither the value of the ***unpaid or paid*** vacation or sick leave is allowed to be deducted from annual compensation when calculating compliance with statutory limitations.

Table 2 reflects the calculation of total annual and related excess compensation for the Utilities Manager position for the 2017 through 2020 calendar years.

Table 2

Position	Gross Compensation	Value of Used Vacation/Sick	Statutorily Limited Compensation	Exceed Limits (Yes/No)	Value of Excess Compensation
Utilities Manager					
2017	$ 173,653.91	$ 23,913.04	$ 173,653.91	Yes	$ 5,675.91
2018	$ 183,134.63	$ 22,261.24	$ 183,134.63	Yes	$ 11,796.63
2019	$ 197,386.49	$ 30,872.76	$ 197,386.49	Yes	$ 21,765.49
2020 YTD 9/25/20	$ 152,705.19	$ 13,716.34	$ 152,705.19	No	
			Excess Compensation		**$ 39,238.03**

Severance and Accrued Vacation/Sick Payout Limitations

Per Minnesota Attorney General opinion guidance (A.G. Op. 161b-12) and (A.G. Op. 469b) , unused vacation time may be paid to an employee upon termination, voluntary or involuntary, and is not required to be included in wages for purposes of the statutory limitations.

Statutory language and agency guidance, however, is fairly silent and/or ambiguous related to the inclusion of payout of unused Sick leave, upon termination or resignation, in statutorily limited compensation. In addition, the Shakopee Public Utilities Commission Employee Handbook, dated June 18, 2012, states that, "Unused sick leave is not paid at termination." Based on these facts and the absence of otherwise contradictory agency guidance, it is our interpretation that because Sick leave payout is not a benefit offered to other employees in similar situations, it should be considered a "lump sum payment" for purposes of the statute, thereby subject to the annual compensation limits.

Based on these findings and interpretations, we are able to make the following conclusions related to the payout of unused Vacation and Sick time, per the executed Agreement:

- Accrued but unused Vacation leave balance of $16,760.81 may be paid out in full to the former Utilities Manager without being included in annual compensation limitation calculations; and
- Accrued by unused Sick leave should be considered a lump sum payment subject to the 2020 annual compensation limitations.

Table 3 provides the accrued and unused Vacation and Sick Leave balances for the former Utilities Manager and calculates the allowed gross Sick leave payout amount, per the statute. Please note that the effective hourly rate used to calculate the gross value of the Vacation and Sick leave balances is based on the 2020 annual compensation limit of $178,782, not the prior Utilities Manager annual salary of $200,000.

Table 3

Accrued Benefits:	Balance (hours)	Effective Hourly Rate	Gross Value
Vacation - eligible for 100% payout	195.00	$ 85.95	$ 16,760.81
Sick - limited by statute	571.50	$ 85.95	$ 49,122.07
	766.50		
09/25/20 YTD Compensation			$ 152,705.19
Allowable Sick Leave Payout			26,076.81
Total 2020 Compensation - Utilities Manager			$ 178,782.00

Recommendations

Excess salary, totaling $39,238.03, from years 2017 through 2020, should be repaid under an arrangement with the prior Utilities Manager. To avoid complex employment tax consequences and amendments, AEM Workforce Solutions recommends that the Shakopee Public Utilities Commission renegotiate a reduction in the employee's final Vacation and Sick Leave payout, totaling $42,837.62, resulting in a net payout amount of $3,599.59.

If a renegotiation of the repayment agreement is not possible, due to the full execution of the Agreement on September 9, 2020, the Commission should follow the three (3) month repayment schedule outlined therein to recover the full amount of the excess wages prior to December 31, 2020. It is also important to note that, if the three (3) month repayment plan is used, the Shakopee Public Utilities Commission must ensure that all employee repayments, per the schedule, are appropriately reported for payroll and income tax purposes. These repayments will necessitate refunds of applicable employee tax withholdings and potentially require amendments of previously filed payroll tax returns. We also recommend that the Commission contact Minnesota PERA to report and coordinate correction of prior PERA reporting and contributions for the 2017 through 2020 calendar years.

AEM Workforce Solutions thanks the Shakopee Public Utilities Commission for the opportunity to present this analysis and welcomes any additional questions and discussion.

Shakopee Public Utilities

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October 1, 2020

TO: Larry Koshire, Interim Utilities Manager

FROM: Kelley Willemssen, Interim Finance Director

SUBJECT: J. Crooks PERA Update

PERA was notified that adjustments to contributions made to J. Crooks account need to be reviewed because it was determined that his compensation exceeded the salary cap for municipal employees. A written description of the situation and an explanation of how SPU plans to correct J. Crooks salary was provided to PERA for a DIE (deduction in error) review.

PERA advised that a DIE correction is governed by Minnesota Statutes and once all stipulations are met through the terms of the separation agreement SPU can request from PERA a refund of contributions of excess compensation contribution amounts.

PERA will then provide a timeline of the DIE review, as well as what steps would be taken should the DIE review determine any adjustment can be made.

Action Required

No action is required at this time.

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TO: Shakopee Public Utilities Commissioners

FROM: Larry Koshire, Interim Utilities Manager

DATE: October 5, 2020

SUBJECT: Ballot Question Regarding the future of the Shakopee Public Utilities Commission

Information regarding the November 3rd ballot question on the future of the SPUC was recently observed on the City web site. Also on the web site was information on the ballot question in a "Frequently Asked Questions" article.

Shakopee Public Utilities (SPU) had long supported the growth and success of the City of Shakopee. The SPU operation is reviewed and regulated by multiple agencies, including having an independent audit. This oversight has shown a positive analysis of the SPU operation. Information on its rates, reliability, and water quality have been provided in previous newsletters and to the commission as public information.

This subject is brought to the commission for review and discussion. In addition, the SPU staff has provided information clarifying points raised in the Frequently Asked Questions article. Also at this meeting SEH has presented their recently completed study on the SPU water system.

Thank you.

SPU Staff Responses to City Website Posting

Frequently Asked Questions

About the Ballot Question

What are the City Council's main concerns with Shakopee Public Utilities Commission?

In its Aug. 18 vote to add a ballot question abolishing SPUC, the City Council identified several main concerns with SPUC:

- a lack of communication and cooperation from SPUC. This problem dates back to at least the 1990s, through multiple city administrators, councils, public works directors and planning directors.

  SPU's primary goal is to be fully transparent in everything it does to its ratepayers. There are several ways we do this. The Council Liaison to SPUC has the official role to communicate Commission actions to the Council and the same in reverse for Council actions that affect the Commission. Additionally, all Commission meeting minutes and adopted Resolutions are posted in the adopted official publication the SVN and on SPU's website. The record shows many successful collaborations between the Commission and the City. Most disagreements have/had to do with City requests for more financial support from the Commission and demands to change the Commission's policies to benefit developers vs customers.

- a lack of SPUC transparency that has led to financial concerns and state law violations.

  SPU is in a strong financial position. SPU is debt free. In 2010, we owed nearly $21.5 million dollars. Since paying off our debt in 2018 (12 years early), we have saved carrying costs (interest charges) of nearly $4 million. All meeting packets are posted on the SPU website.

- water quality and safety. The city is not content with water that simply meets the minimum standards; Shakopee deserves a long-term, proactive, coordinated plan to ensure safe drinking water for years to come.

As noted below, there are no safety concerns with the water. The City is proposing several aesthetic benefits; citizens deserve to have a say in how much those aesthetic benefits should cost. The City's proposal to build a centralized treatment plant has not had the benefit of all of the data and public input.

Shakopee Public Utilities is a public, municipal utility, owned by the residents of Shakopee. It is accountable to all of Shakopee – the residents, ratepayers and businesses. However, the current governance structure does not give Shakopee voters direct control over those managing the utility in the same way they vote for City Council, which manages core services in public safety, streets, sewer and storm drainage.

SPU is directly responsible to the community – Commission members are residents of the community and are appointed by the Shakopee City Council, meetings are open to the public, and the public's input is always welcome. The ballot referendum itself (to abolish or keep the Commission) provides the Voters' direct control.

If a majority of voters answer yes to the ballot question, Shakopee residents can be assured of receiving affordable service, dependable service, safe and quality water and excellent stewardship.

SPU's water and electric rates are lower than average. Residential annual electric costs are 10% below Xcel Energy's and 5% below MVEC's.

SPU has continuously been a Reliable Public Power Provider (RP3) program designee since 2013. **APPA's RP3 program is based on industry-recognized leading practices in four important disciplines:**

- **Reliability**
- **Safety**
- **Workforce Development**
- **System Improvement**

An RP3 designation is a sign of a utility's dedication to operating an efficient, safe, and reliable distribution system. Being recognized by the RP3 program demonstrates to community leaders, governing board members, suppliers, and service providers a utility's commitment to its employees, customers, and community. Currently 274 of the nation's more than 2,000 public power utilities hold an RP3 designation.

SPU achieved a perfect score of 100 for each of the last two 3-year period submittals, earning an RP3 Diamond Designation since 2015.

SPU earned a Governor's award for Source Water Protection in 2013.

SPU won Best Tasting Water in the state from the Rural Water Association in 2014.

SPU routinely receives Fluoridation Quality Awards from the state and received a Certification of of Appreciation 50-year Award from the American Dental Association for the period 1966-2016.

Affordable Service

How will abolishing SPUC affect my rates and service?

The city does not plan on changing water or electric rates. If the ballot question is approved, the city will complete a full rate study to determine the competitiveness of current rates and needs of the utilities.

As noted above, SPU's rates are lower than average now. The City's proposed water softening plant may cost upwards of $50 million, without considering on-going operating costs. Rates will have to reflect not only the costs of construction, but also the added cost of operating and maintaining a treatment plant.

The city's goal is to provide as affordable rates as possible while meeting our future infrastructure needs and ensuring residential, commercial and the development users are paying the appropriate portion of the cost of the system.

The Commission has a 70-year track record of providing reliable service, safe water, and affordable rates.

What is the advantage of consolidating the organizations?

By merging organizations, residents are consolidating two separate government entities into one more efficient organization.

There is no data to support a claim of more efficiency.

Dependable Service

Who will manage the day-to-day water and electric operations?

Public utilities staff will continue to provide water and electric services. The Public Works Director would oversee the city's water services, as is customary in most metro communities. The city's Public Works Director and Finance Director are experienced with managing municipal water utilities. Integrating the water utility into a consolidated operation will decrease costs, eliminate duplication and coordinate and streamline processes.

There is no data to support the claims of decreasing costs.

The city would likely contract an electrical manager through Minnesota Municipal Utilities Association or another utility provider to manage the electric services. The city issued a request for qualifications to seek an experienced electrical manager to provide day-to-day oversight, evaluate the current system, offer engineering expertise on projects and deliver emergency response in case of a catastrophe. After two years, the city would evaluate the operations. Among the duties of the contracted manager would be evaluating existing infrastructure and helping the city to determine the best way to deliver dependable, affordable electric service to the residents/ratepayers/businesses in the long term.

All of the listed tasks are being performed now by experienced and qualified SPU personnel as efficiently as possible.

Water Quality & Safety

What are the concerns regarding Shakopee's water?

Drinking water is arguably the most important consumer item that can affect our health, both acutely and chronically. Examples such as Flint, Mich., Milwaukee, Wis., or even the eastern area of the Twin Cities metro highlight how important safe drinking water is.

The situation in Shakopee is nothing like that in Flint, Michigan, Milwaukee, Wisconsin, or the Twin Cities' eastern metro. In fact, the Minnesota Department of Health described the Shakopee water as high quality.

SPUC is aware that water treatment might be necessary in Shakopee in the future and has been collecting funds toward a treatment plant. However, the water infrastructure is not set up to accommodate water treatment for the entirety of the community. Generally, SPUC's plan is to implement a water treatment plant if needed as a reactionary plan only. If a water treatment plant becomes necessary due to an emergency, it will take years to plan and build.

Shakopee is one of the only – and the largest – metro communities without a water filter plant. While Shakopee's drinking water is considered safe and has not historically exceeded the maximum contaminant levels (MCL) established by the Environmental Protection Agency, that does not mean Shakopee's ground water is high quality. There are issues that need concerning attention.

See recent article in SVN re Shakopee water:

https://www.swnewsmedia.com/shakopee_valley_news/news/city-of-shakopee-questions-water-quality-spuc-officials-say-city-is-just-wrong/article_36441f46-7b48-5cd2-bea0-d8cdc654bac0.html

"When asked about this statement, Thornley said from the Department of Health's perspective, 'high quality, in terms of what we regulate, would mean meeting the standards.' Therefore, Shakopee's water is "high quality" from the MDH's perspective, Thornley said."

Reports from SPUC's own consultants, including the 2018 Comprehensive Water System Plan [PDF], clearly state that Shakopee needs to be more aware of water quality issues, including:

> "Some of the wells have a history of containing elevated concentrations of nitrate, radon, and radium 226/228. The increased concentrations are close to the NPDWR maximum contaminant levels and could have potential health risks associated with them" (page 36).
>
> "Contaminant levels… should be continued to be monitored closely as some wells have a history of elevated levels close to the MCL" (page 38).

The following historical and continuing notable issues exist:

Nitrates – Elevated levels of nitrate in drinking water can have adverse health effects. The Safe Drinking Water Act limit for nitrate in drinking water is 10 mg/L. The level of nitrate in Shakopee's drinking water is close to the upper limit. The Minnesota Department of Health provides an annual report on nitrates in community water systems. This report indicates that Shakopee's highest historic nitrate level in drinking water was 12 mg/L and the highest in 2018 was 7.3 mg/L. Shakopee is the largest community public water system in the state with this issue.

One sample result does not call for treatment. From the Minnesota Department of Health:

We average the results for four consecutive quarters to determine MCL compliance for chronic or non-acute contaminants, e.g. radium.

Since nitrate is defined as an acute contaminant, any time we have a sample above the MCL, a confirmation sample is collected as soon as possible, and averaged with the original result to determine compliance. Our SWP group has done some trend analysis based on historical results, and I know you have additional monitoring results, so that may be helpful in predicting to some degree.

If an entry point does fall out of compliance, systems with multiple wells would typically take the source out of service immediately to minimize exposure. If you want more information or trending information from SWP, just let us know.

- **Sodium** – Elevated levels of sodium in drinking water can have adverse health effects. According to Shakopee Public Utility's 2019 Consumer Confidence Report on drinking water, the EPA guidance level for sodium in drinking water is 20 mg/L. The range of detected test results is 13.20 to 65.60 mg/L.

https://www.epa.gov/sites/production/files/2014-09/documents/support_cc1_sodium_dwreport.pdf

The above link is from the Environmental Protection Agency with information about sodium in drinking water. Here is an excerpt: Conclusion and Recommendation This Advisory recommends reducing sodium concentrations in drinking water to between 30 and 60 mg/L based on esthetic effects (i.e., taste). A goal of 2.4 g/day dietary sodium has been proposed by several government and health agencies. Drinking water containing between 30 and 60 mg/L is unlikely to be perceived as salty by most individuals and would contribute only 2.5% to 5% of the dietary goal if tap water consumption is 2 L/day. At the present time the EPA guidance level for sodium in drinking water is 20 mg/L. This value was developed for those individuals restricted to a total sodium intake of 500 mg/day and should not be extrapolated to the entire population. This is from our Consumer Confidence Report.

- **Manganese** – Elevated levels of manganese in drinking water can have adverse health effects. The Minnesota Department of Health recently developed guidance values to keep household drinking water safe. The health base value for Manganese is limited to 100 parts per billion (ppb) for infants and 300 ppb for others. Levels above this can be harmful to your health. According to the Comprehensive Water System Plan Update 2019 Supplement, two SPUC wells have moderate Manganese levels (Well No. 15 is 72 ppb and Well No. 12 is 80 ppb, which is just below the state's guidance limit of 100 ppb for infants (page 13). SPUC recently drilled an expansion well that was abandoned when tested because Manganese levels were too elevated.

  The well that was drilled was for irrigation and was never abandoned. It will be used for irrigation at Windermere Booster Station as well as sampling.

Water Hardness – Aesthetic wise, Shakopee's water is like many other communities – it is moderately hard (Iron and Manganese). Most communities in the metro have filtration plants to address these aesthetic issues; Shakopee does not. The result can lead to issues of undesirable tastes and odors, discoloration and technical issues that result in damage to water equipment (water heater, coffee makers, etc.).

The water in the Midwest is very hard. Eden Prairie spends approximately $3.7 million dollars annually to operate and maintain

their facility. Eden Prairie's production has been averaging about 2.5 billion gallons/year.

It would cost SPU, if the treatment was similar to Eden Prairie, $2.5 million dollars per year to soften 1.7 billion gallons. That is to operate the plant, not to build it and the needed infrastructure.

- **Aquifer** – The primary aquifer in Shakopee (Prairie du Chien-Jordan sandstone aquifer) is relatively close to the surface and soft in structure. With bedrock being close to the surface in Shakopee, it is important to have a very proactive and "protective" Well-Head Protection Plan. SPUC has shown indifference to Shakopee wellhead protection, as evidenced by its encouragement to a business within SPUC's service area to drill a private well within the proximity to a high groundwater-vulnerability area with rapid infiltration to bedrock.

SPU did not encourage the drilling of a new private well. The developer refused to pay the water capacity charges for the process (non-potable) water used in their business and asked for any suggested alternatives. SPU staff noted there was an existing well on site that might suit their needs. That well and the well the developer chose to drill are not regulated in any way by SPU. The new well is OUTSIDE the Drinking Water Supply Management Area for the nearest SPU wells per SPU's state approved 2012 Wellhead Protection Plan.

- **Public Outreach and Involvement** – The city was excluded from any involvement in the initial update of SPUC's Water Comprehensive Plan to coordinate with the City of Shakopee's 2040 Comprehensive Plan. We are not aware of any community engagement efforts on the part of SPUC to share information or gain understanding of the community's goals related to safe drinking water.
  - Letter to SPUC Re: City of Shakopee Review Comments for SPUC Comprehensive Water System Plan - March 25, 2019 [PDF]

City staff is clearly (and consistently) confusing two separate documents. The first SPU document, the Water Supply Plan, is a required part of the City's 2040 Comprehensive plan and was completed on schedule based on the best information available from the City at the time. Our consultant contacted City staff and worked with the City's consultant to share information, which was mainly their population projections in developing the Water Supply Plan. The second document is SPU's own Comprehensive Water Plan which the Commission creates to guide it and its staff as development unfolds per the City's

approval process so the utility is prepared with the needed infrastructure to supply the necessary water capacity to support the community's needs. This document is not and never has been made a part of the City's Comprehensive Plan. City staff had never before expressed a desire to conduct a formal review of past Comprehensive Water Plans. All reports of this nature are first presented to the Commission itself before being made available to other parties including the City. City comments on the Comprehensive Water Plan are always welcome and taken into account as it is only a guiding document and ever evolving.

Excellent Stewardship

Doesn't the City Council appoint commissioners?

Yes, the City Council is responsible for appointing commissioners to SPUC. This structure, similar to the appointed Metropolitan Council, means SPUC does not have direct accountability to Shakopee voters. Ratepayers do not have direct control over who is managing the utilities or setting rates.

Without a Commission, the community loses a separate independent body to set specialized rates for water and electricity. For example, the Minnesota Supreme Court noted:

"The duties and powers of the commission emphasizes the legislative intent to create a body free from any coercion or control by the village council. . . . free from the baneful influences which so often result from the frequent changes of the political complexion of an elective village council." *State ex rel Chisholm v Borgeran*, 194 N.W. 624 (Minn. 1923)

In addition, the Minnesota State Auditor has defined water and electricity as essential services and when operated by a municipal utility usage rates should not be a significant source of revenue to the City's general fund. Otherwise captive customers would be paying more than necessary for an essential service.

What is an example of the city's financial concerns regarding SPUC?

One example is SPUC's investment performance over the years. Responsible fiscal management includes ensuring organizations are responsible fiscal stewards of public funds. Government entities are permitted to invest only in safe and highly liquid investments, as permitted by state statutes.

In a comparison of investment returns over the past 10 years, the City of Shakopee has significantly outperformed SPUC. Had the city managed SPUC's investments over the past decade, an additional $4 million of investment income would be available for operations

The Commission has a defined Investment Policy that staff must adhere to and preserving capital is of primary importance as the electric and water utilities are self-insured. Having liquid assets for quickly replacing facilities damaged by storms is essential to restoring service. Since paying off over $21,000,000 of debt in 2018 SPU has saved its customers nearly $4,000,000 of avoided interest payments.