



General Facilities Charges





GFC Review Committee

- **GFCs are charges that new development pays to connect to our Water and Wastewater Systems; promote “growth-pays-for-growth” policies**
- **GFCs implemented over 20 years ago in Spokane; hadn’t been updated**
- **This year, City Council approved an interim GFC through March 2024.**
 - » Full updated rates slated to begin after that.
 - » Completing additional outreach and education so people can provide feedback and propose changes
 - GFC Review Committee
 - Plan Commission
 - Other groups



GFC Recommendation

The GOAL:

- **A Citywide update to the GFCs** that represents current costs and anticipated projects over time and helps to keep monthly rates more affordable for everyone.
- Uses a **reasonable and rational approach** to assign costs.
- **Ties GFCs to an inflationary index** to avoid having the fees quickly get behind and avoid having to make such major changes in the future.
- **Supports certain types of development** with a dedicated funding source for GFCs.
- **Implements new costs over time** to allow our community time to adjust.
- Bases fees on meter sizes that **support City goals around water conservation.**



Discussion Items

- **Understanding the Calculation**

- Interest. Use of original project costs. Determining new capacity. 1" v.s. $\frac{3}{4}$ "

- **Water GFC – Two zones or one?**

- Can change to a single citywide water GFC rate.
- Also can explore refining boundaries of the proposed zones.

- **Growth v. Rates**

- GFCs pay for increased capacity.
- Monthly bills pay for operations plus capital projects to replace/maintain existing infrastructure.
- Can/should monthly bills cover a portion of growth needs?

- **Supporting certain development**

- What do we want to incentivize? In what way?



Discussion Items.. continued

- **Methodology**

- » Meter Capacity Equivalents v. Equivalent Residential Units.

- **Phase-in Approaches**

- » Take a fresh look at phase-in approaches

- **Growth Projections – SRTC model**

- » Can explore how growth expectations create need for investment.

- **Capital Planning – What's included?**

- » Review of Water System Plan projects & Wastewater (Comp Plan update) projects



General GFC Methodology

$$\text{GFC} = \frac{\text{Allowable Cost}}{\text{System Capacity}}$$

Key steps:

- **Define the “cost of the system”**
 - » Existing assets (plus interest)
 - » Adopted Comprehensive Plan
- **Define System Capacity**
 - » Establish “unit of capacity”
 - » Determine number of units that can be served

Should only include costs funded by the utility



Water General Facilities Charge



Water GFC Cost Basis– Expanded Discussion

Description	Lower Zone / City Wide	Distribution & Fire	Upper Zone	Total System
Facilities in Service (Original Cost)	\$ 31,188,422	\$ 304,085,206	\$ 30,154,527	\$ 365,428,155
plus: Interest on Plant	13,137,855	136,636,891	13,492,617	163,267,362
less: Contributed Capital		(53,327,647)		(53,327,647)
Total Existing Cost Basis	\$ 44,326,277	\$ 387,394,450	\$ 43,647,144	\$ 475,367,871

Description	Lower Zone / City Wide	Distribution & Fire	Upper Zone	Total System
Total Capital Projects	\$ 95,468,293	\$ 306,810,029	\$ 204,469,650	\$ 606,747,972
less: Non-Expansion-Related Costs	(44,478,750)	(131,723,500)	(65,836,743)	(242,038,993)
less: Developer Contributions/Grants	-	(23,980,000)	(12,375,000)	(36,355,000)
Total Future Cost Basis	\$ 50,989,543	\$ 151,106,529	\$ 126,257,907	\$ 328,353,979



Water Capacity – Expanded Discussion

Description	Lower Zone / City Wide	Distribution & Fire	Upper Zone
Total System Capacity (MCEs - 3/4" Base)	259,011	259,011	63,291
less: contractual capacity	(12,498)	(12,498)	(4,684)
Remaining Capacity Available	246,513	246,513	58,606
Existing Customer Base	(135,300)	-	(40,146)
System Capacity Available for Growth	111,213	246,513	18,461
<i>% Capacity Remaining</i>	<i>45.1%</i>	<i>100.0%</i>	<i>31.5%</i>

- System capacity in MCEs is determined by planning estimates of 287.50 MGD for total system production capacity and 106.30 MGD for the upper zone production capacity.
- Systems are designed for max day usage – using existing customer flows and existing MCEs we convert MGD capacity into an estimate of MCE capacity based on existing max flows per MCE.
- Distribution & fire components will use the average cost calculation to recognize the difficulty in isolating existing and future capacity within the interconnected system also providing fire protection requirements.



Water GFC Calculation – Expanded Discussion

Description	Lower Zone / City Wide	Distribution & Fire	Upper Zone	Total System
Total Existing Cost Basis	\$ 44,326,277	\$ 387,394,450	\$ 43,647,144	\$ 475,367,871
Share of existing assets available for growth	45.1%	100.0%	31.5%	
Existing Cost Basis - residual capacity	\$ 19,997,560	\$ 387,394,450	\$ 13,748,501	\$ 421,140,512
Future Cost Basis	\$ 50,989,543	\$ 151,106,529	\$ 126,257,907	\$ 328,353,979
Total Cost Basis for Growth	\$ 70,987,104	\$ 538,500,979	\$ 140,006,408	\$ 749,494,491
Capacity Available for Growth (MCEs)	111,213	246,513	18,461	
Total GFC per MCE	\$ 638	\$ 2,184	\$ 7,584	

- Total GFC for Lower Zone is the summation of the Lower Zone component and the distribution & fire component
- Total GFC for Upper Zone includes all components - upper zone needs core infrastructure in lower zone to deliver water
- Lower Zone = \$2,823 for ¾” meter
- Upper Zone = \$10,407 for ¾” meter



Water GFCs - Removing Interest

Meter Size	Adopted Low Zone March 2024	Low Zone –No Interest	Adopted Upper Zone March 2024	Upper Zone – No Interest
¾ inch	\$2,823	\$2,281	\$10,407	\$9,635
1 inch	\$4,705	\$3,802	\$17,345	\$16,059
1.5 inch	\$9,409	\$7,604	\$34,690	\$32,117
2 inches	\$15,055	\$12,167	\$55,503	\$51,387
3 inches	\$32,932	\$26,615	\$121,413	\$112,410
4 inches	\$56,455	\$45,625	\$208,137	\$192,703
6 inches	\$127,025	\$102,657	\$468,309	\$433,582
8 inches	To be calc.	To be calc.	To be calc.	To be calc.
10 inches	To be calc.	To be calc.	To be calc.	To be calc.



Sewer General Facilities Charge



Sewer – Existing & Future Cost Basis

Existing Cost Basis	Treatment	Collection	Total
Facilities in Service	\$520.0 M	\$259.8 M	\$779.8 M
plus: interest on net assets	151.8 M	69.3 M	221.1 M
less: contributions in aid of construction	-	(27.2 M)	(27.2) M
less: net debt principal outstanding	(120.5 M)	(39.5 M)	(160.0) M
Total Existing Cost Basis	\$551.3 M	\$262.3 M	\$813.7 M

Future Cost Basis	Treatment	Collection	Total
Total Project Costs	\$41.2 M	\$64.0 M	\$105.2 M
less: Non-expansion related project costs	(40.6 M)	(42.9 M)	(83.5) M
less: developer contributions/grants	-	(2.9 M)	(2.9) M
Total Future Cost Basis	\$0.6 M	\$18.1 M	\$18.8 M



Sewer Capacity – Expanded Discussion

Capacity Analysis		Treatment
Next Level of Treatment - Permitted Capacity		50.0 MGD
less: Spokane County Reserved Capacity		(10.0 MGD)
less: Existing max month flow (less Spokane)		(33.0 MGD)
Available Treatment Capacity		7.0 MGD

% available 18%

Capacity Analysis		Collection
Interceptor Pipe Capacity		83.2 MGD
less: Spokane County Reserved Capacity		(6.4 MGD)
less: Existing peak hour flow (less Spokane)		(61.3 MGD)
Available Collection Capacity		15.5 MGD

% available 20%

System Capacity (MCEs)	Treatment	Collection
Total Capacity	120,096	123,998
less: Existing Connections	(98,989)	(98,989)
Available System Capacity (MCEs)	21,107	25,008

% of total 18% 20%

- **MCE number differs from water because there are more water connections than sewer on the system**
- **Treatment and collection numbers are separate to represent the differing capacities within the functions**



Sewer – Calculated GFC

Cost Components	Treatment	Collection	Total
<i>Total Existing Cost Basis</i>	\$551.3 M	\$262.3 M	\$813.7 M
<i>Capacity of Existing Assets Available</i>	18%	20%	18%
Residual Existing Cost Basis	\$96.9 M	\$52.9 M	\$149.8 M
Expansion Related Future Cost Basis	0.6 M	18.1 M	18.8 M
Total Cost Basis Allocable to Growth	\$97.5 M	\$71.0 M	\$168.6 M
Future Capacity Available for Growth (MCEs)	21,107	25,008	
Total Sewer GFC per MCE	\$4,620	\$2,841	\$7,461

Calculated System Wide GFC for Sewer = \$7,461 per MCE



Wastewater GFCs – Removing Interest

Meter Size	Adopted for March 2024 and beyond	March 2024 Sewer Charge – No Interest
¾ inch	\$7,461	\$5,639
1 inch	\$12,435	\$9,398
1.5 inch	\$24,870	\$18,787
2 inches	\$39,792	\$30,075
3 inches	\$87,046	\$65,789
4 inches	\$149,221	\$112,781
6 inches	\$335,747	\$253,758
8 inches	To be calc.	To be calc.
10 inches	To be calc.	To be calc.



Methodology Comparison

	Idaho Connection Charges
	Gross Present-Day Replacement Value of System
<i>Less:</i>	Bond Principal Outstanding
<i>Less:</i>	Unfunded Accumulated Original Cost Depreciation
=	Net System Replacement Value for the Current Year
÷	Number of Users Current System Can Support (MCEs/ERUs)
=	Total Connection Charge per MCE/ERU

- **Calculation requirements differ by state**
- **Depreciation is a component of Idaho charges – but not seen in Washington**

1" Base vs. 3/4" Base

- Prior practice is to use a 1" base – treats all meters from 1" and below as the same flow rate
- Moving towards a 3/4" base reduces charges for the lower meter sizes and would align the 3/4" meter with their lower flow rate

Proposal # 1 – No 3/4" vs. 1" Differentiation

Meter Size	Lower Zone	Upper Zone
3/4 inch	\$3,711	\$13,683
1 inch	\$3,711	\$13,683
1.5 inches	\$7,423	\$27,367
2 inches	\$11,877	\$43,787
3 inches	\$25,980	\$95,783
4 inches	\$44,538	\$164,200

Proposal # 2 – With 3/4" vs. 1" Differentiation

Lower Zone	Upper Zone
\$2,823	\$10,407
\$4,705	\$17,345
\$9,409	\$34,690
\$15,055	\$55,503
\$32,932	\$121,413
\$56,455	\$208,137

1" Base vs. 3/4" Base

- Similar to water, prior practice was to use a 1" base – treats all meters from 1" and below as the same flow rate
- Moving towards a 3/4" base reduces charges for the lower meter sizes, but would align the 3/4" meter with their lower flow rate

Proposal # 1
No 3/4" vs. 1" Differentiation

 Proposal # 2
With 3/4" vs. 1" Differentiation

Meter Size	1" Base	3/4" Base
3/4 inch	\$8,509	\$7,461
1 inch	\$8,509	\$12,435
1.5 inches	\$17,017	\$24,870
2 inches	\$27,228	\$39,792
3 inches	\$59,560	\$87,046
4 inches	\$102,103	\$149,221



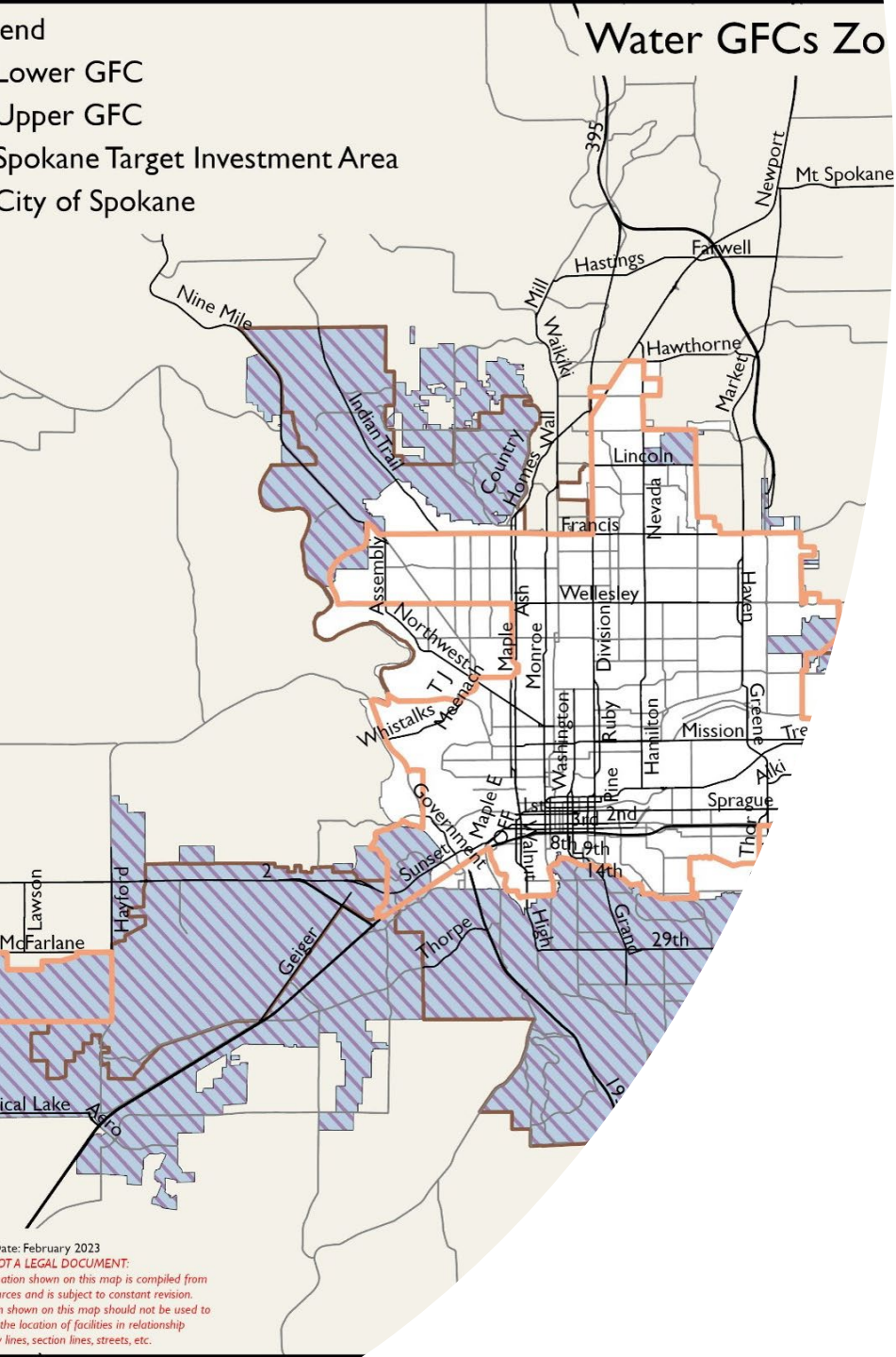
Meter Equivalencies

Meter Size	Maximum-Rated Safe Operating Flow (gpm)*	Meter Equivalency Ratio 3/4" Base	Meter Equivalency Ratio 1" Base
3/4"	30	1.00	1.00
1"	50	1.67	1.00
1.5"	100	3.33	2.00
2"	160	5.33	3.20
3"	350	11.67	7.00
4"	600	20.00	12.00
6"	1,350	45.00	27.00
8"	1,600	53.33	32.00
10"	4,200	140.00	84.00

3/4" and 1" treated as the same flow rate

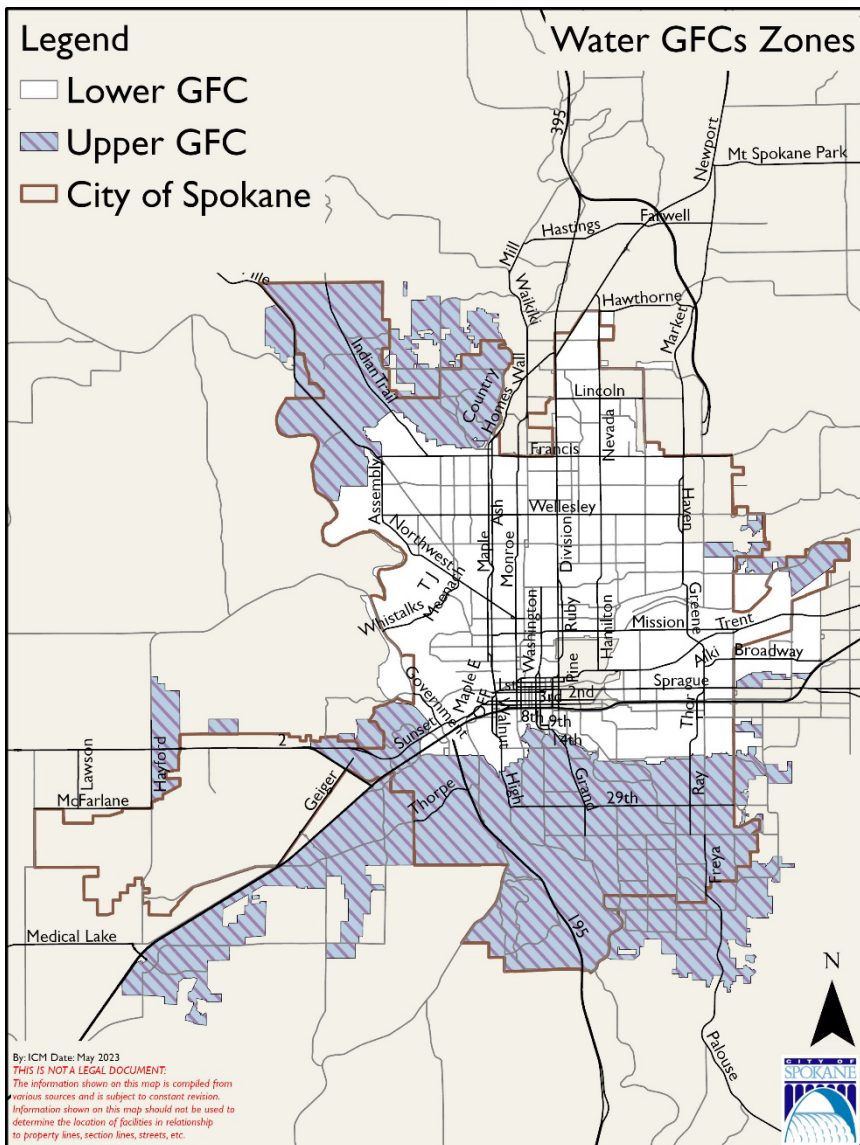
1 1/2" and above compared to flow rates of a 1" meter

*per AWWA M22 Table 6-1



Water GFC - Upper and Lower Zone Designations

Date: February 2023
NOT A LEGAL DOCUMENT:
Information shown on this map is compiled from
sources and is subject to constant revision.
Information shown on this map should not be used to
determine the location of facilities in relationship
to utility lines, section lines, streets, etc.

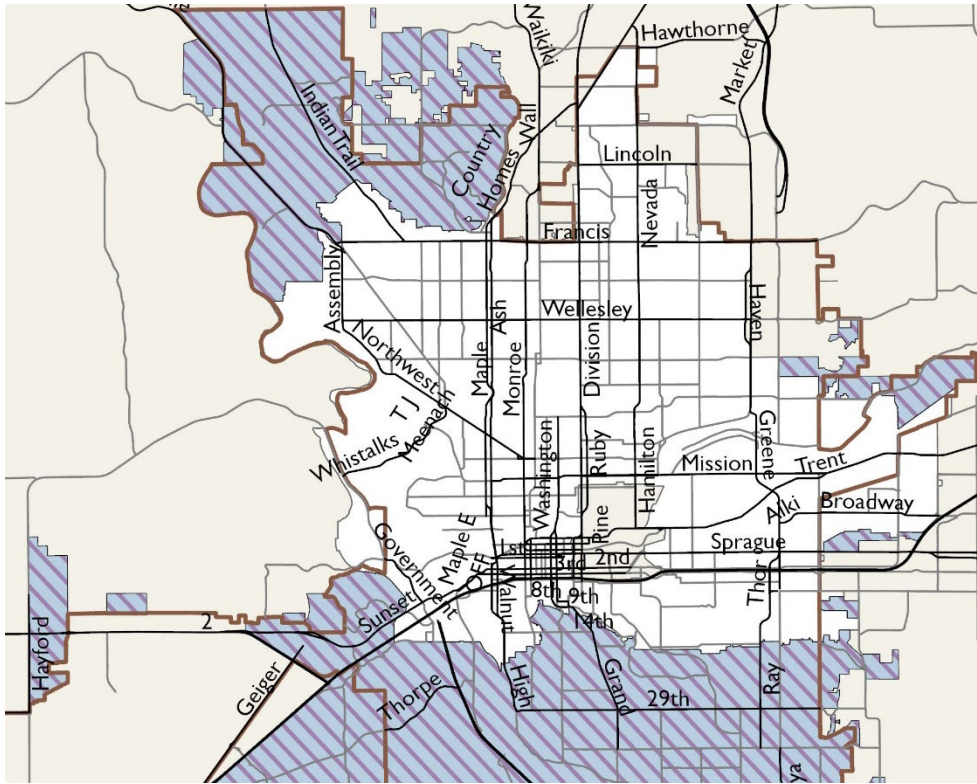


GFC Zones for Water

Two zones were selected based on system operations and engineering:

- Lower-the basis of supply for the entire system
- Upper-areas that need boosting





Lower Zone for Water

- Pressure Zones that are supplied directly from Wells without the need of additional boosters.
- Provides the base storage and supplies water to all other pressure zones through booster pump stations.
- Includes transmission mains from the wells.

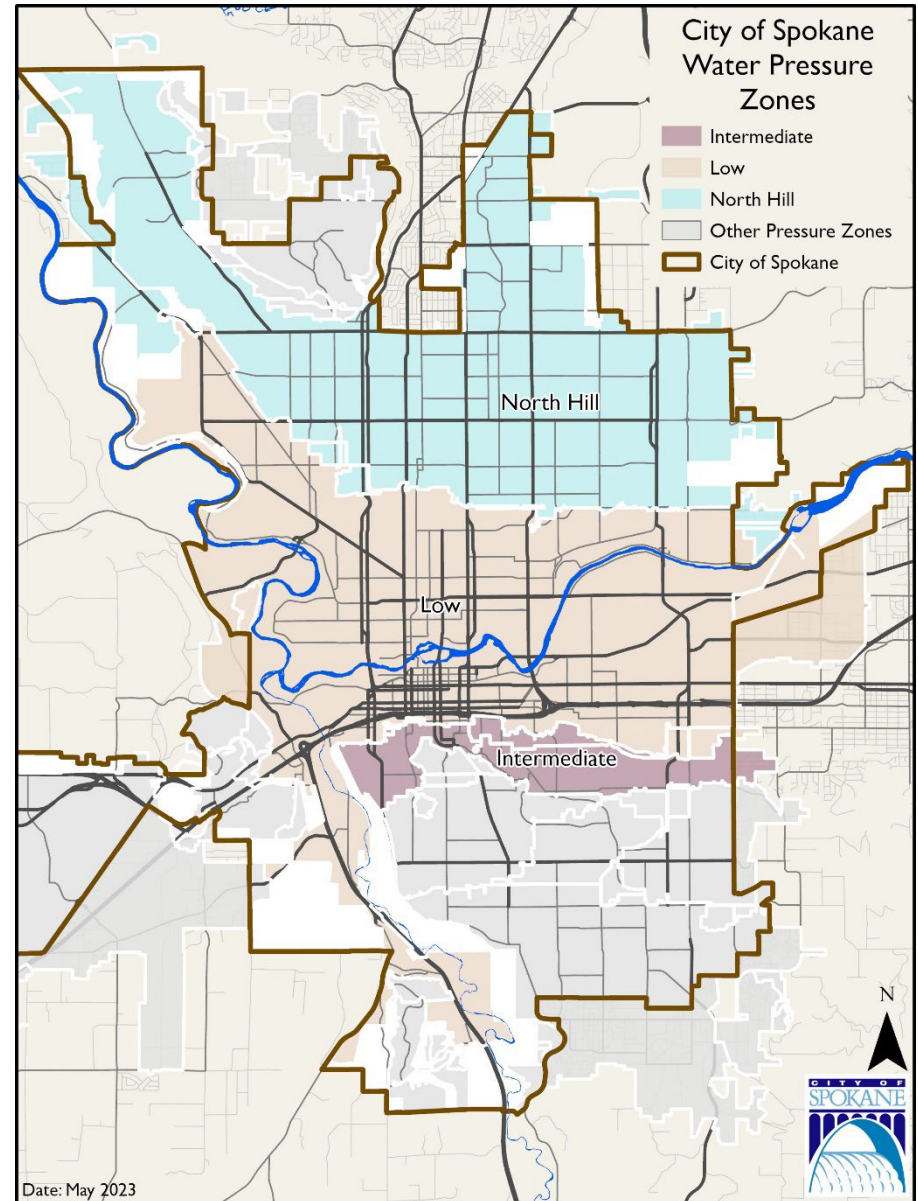


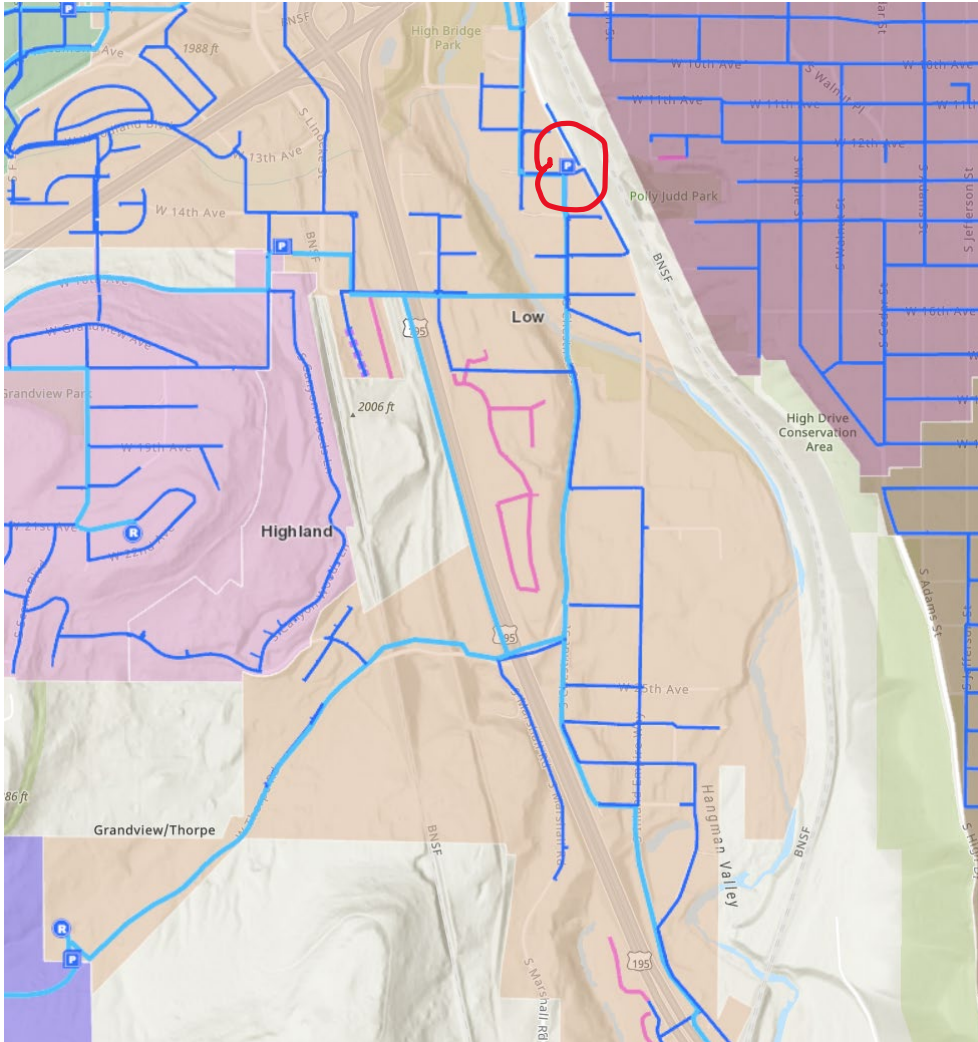


Pressure Zones with Wells

- Low
- Intermediate
- South Hill

Pressure zone boundaries
follow elevations



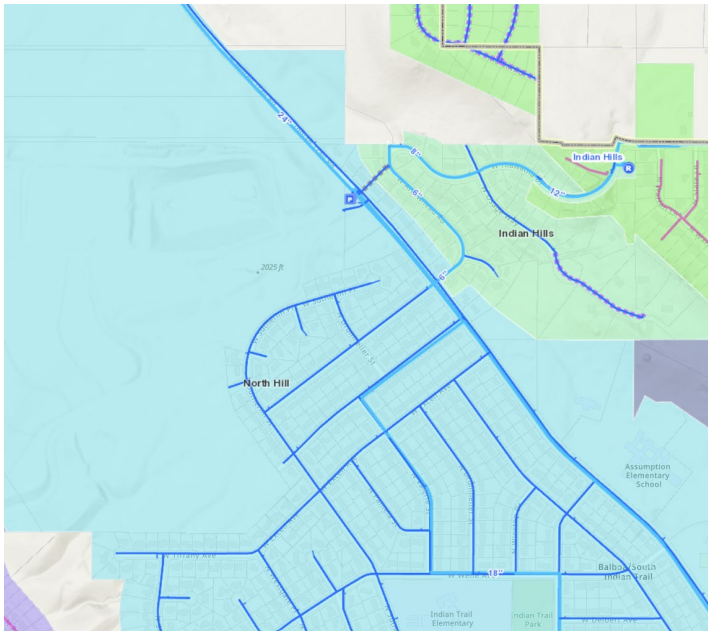


Lower Zone EXCEPTION Southwest

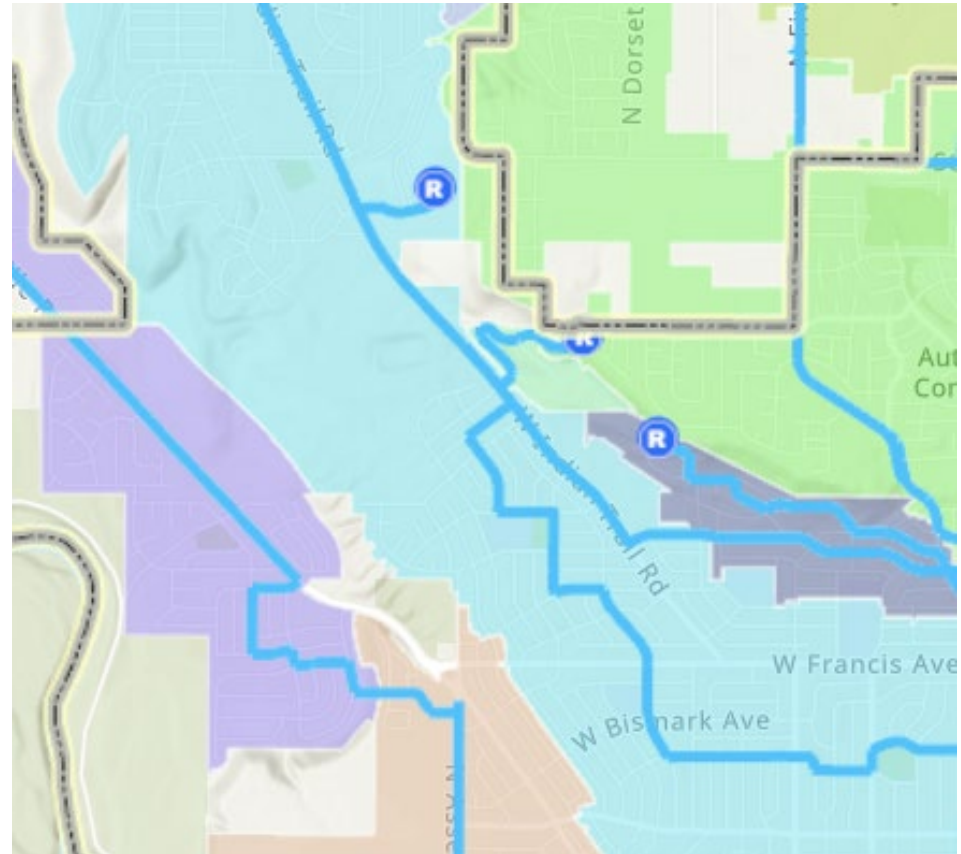
Low Pressure Zone served from Latah In-line Booster approximately south of 13th Avenue

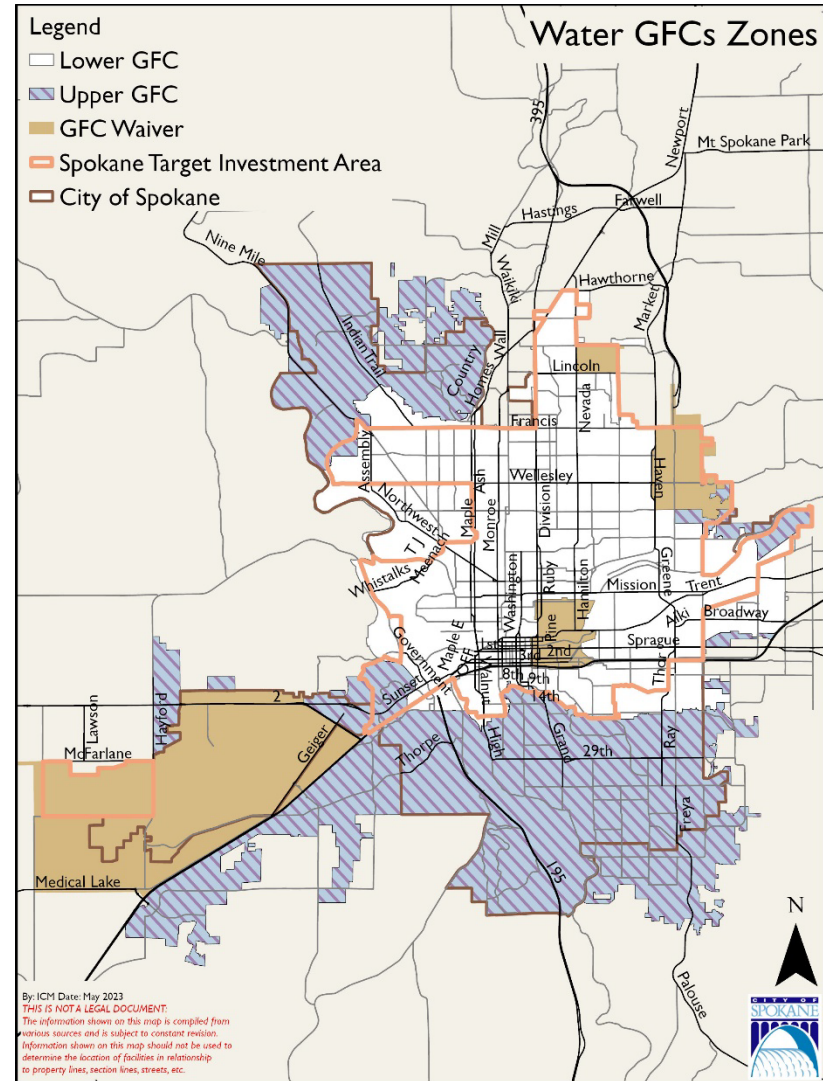
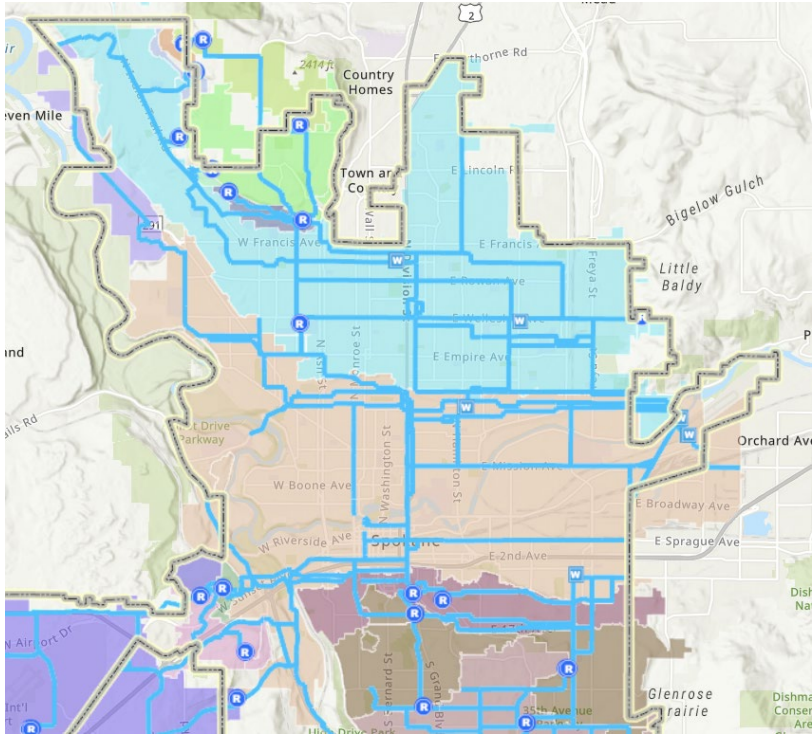


Lower Zone EXCEPTION Northwest



North Hill Pressure Zone
needs an Inline Booster on
Indian Trail north from
approximately Kathleen
Avenue.





- Lower Zone boundaries are based on pressure zone elevations with 2 exceptions
- Upper Zone includes all parts of the system that need boosted from wells



Boundaries Could Be Changed

- One Zone for the entire service area could be used.
- Other boundaries could be chosen by the City Leadership based on other criteria, but determining the facilities needed based on system operations and engineering principles will be difficult to calculate.
- Adding more connections to the Lower Zone will reduce its fee but will increase the fee to Upper Zone.





Water – City Wide Charge

Meter Size	Adopted Low Zone March 2024	Adopted Upper Zone March 2024	City-Wide Calculated Charge	City-Wide Calculated Charge – No Interest
¾ inch	\$2,823	\$10,407	\$4,881	\$4,285
1 inch	\$4,705	\$17,345	\$8,135	\$7,141
1.5 inch	\$9,409	\$34,690	\$16,269	\$14,282
2 inches	\$15,055	\$55,503	\$26,031	\$22,851
3 inches	\$32,932	\$121,413	\$56,943	\$49,987
4 inches	\$56,455	\$208,137	\$97,617	\$85,692
6 inches	\$127,025	\$468,309	\$219,638	\$192,808
8 inches	To be calc.	To be calc.	To be calc.	To be calc.
10 inches	To be calc.	To be calc.	To be calc.	To be calc.



Summary

- **Initial impression of calculations**
 - » Any suggested changes?
- **Initial impression of zone designations for water**
 - » Any suggested changes?
- **Other?**
- **Next meeting is June 8th at 3:00pm**



Questions/Discussion



Water – City Wide Charge – 1” Base

Meter Size	Adopted Low Zone March 2024	Adopted Upper Zone March 2024	City-Wide Calculated Charge (1”)	City-Wide Calculated Charge – No Interest (1”)
¾ inch	\$2,823	\$10,407	\$6,418	\$5,634
1 inch	\$4,705	\$17,345	\$6,418	\$5,634
1.5 inch	\$9,409	\$34,690	\$12,835	\$11,267
2 inches	\$15,055	\$55,503	\$20,536	\$18,027
3 inches	\$32,932	\$121,413	\$44,923	\$39,435
4 inches	\$56,455	\$208,137	\$77,010	\$67,603
6 inches	\$127,025	\$468,309	\$173,273	\$152,107
8 inches	To be calc.	To be calc.	To be calc.	To be calc.
10 inches	To be calc.	To be calc.	To be calc.	To be calc.