

BOISE WARM SPRINGS WATER DISTRICT

Annual Meeting November 13, 2024



Agenda

- Introductions
- Home System Maintenance
- Pump Data
- Budget
- Mainline Replacement Project Update

Open discussion about the BWSWD operations. We welcome your input.

Meet the BWSWD Team!

PUMPHOUSE STAFF

District Manager - Del Etchison

Pump Technician - Scott Lewis

Administrative Assistant - Shelley Franklin

BOARD MEMBERS

Scott Peterson, Chairman

Steve Hatfield - Board Member

Bill Hirai - Board Member

Pete Miranda - Board Member

Steve Sawyer - Board Member

SUPPORTING STAFF

Treasurer - Joe McCullum

Attorney - Lyndon Nguyen

Special Advisor - Bruce Smith

BWSWD Plaques & Merch

- Plaques are available for purchase.
- Contact pumphouse for price and leadtime.
- Choice of machined metal available.
- Size is roughly 6" x 6"



Home Geothermal System Maintenance

- Time of the year again to INSPECT YOUR SYSTEM!
 - Heat exchangers, radiators, valves, controllers, filters, etc.
 - Heat exchangers (forced air systems) do have a service life - change them out before they fail.
 - Any signs of corrosion? Seek advice from Del!
- COLD HOUSE?
 - Your geowater FLOW could be restricted!
 - Have your pipes/orifice inspected for blockage. Water reacts with system metals to build corrosive deposits around valves, orifices, etc.
 - AIR BUBBLES in radiators can also impede flow of hot water. Bleed your system!

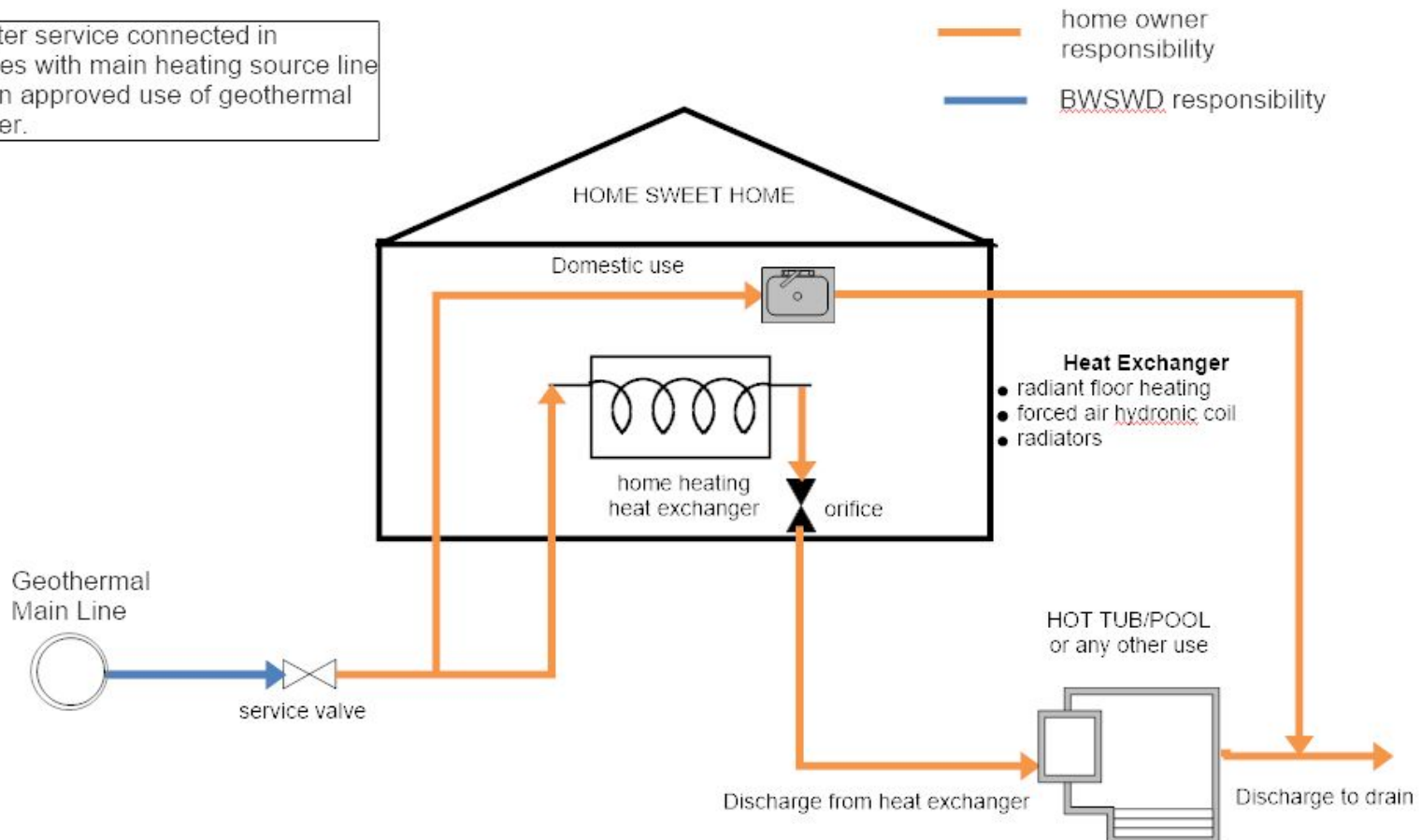
ANY FLOW RESTRICTION IN YOUR SYSTEM CAN IMPEDE THE EFFICIENCY OF YOUR HEAT EXCHANGER!



Approved Geothermal Water Use

Boise Warm Springs Water District
(Approved piping network for home heating & domestic use)

Water service connected in series with main heating source line is an approved use of geothermal water.

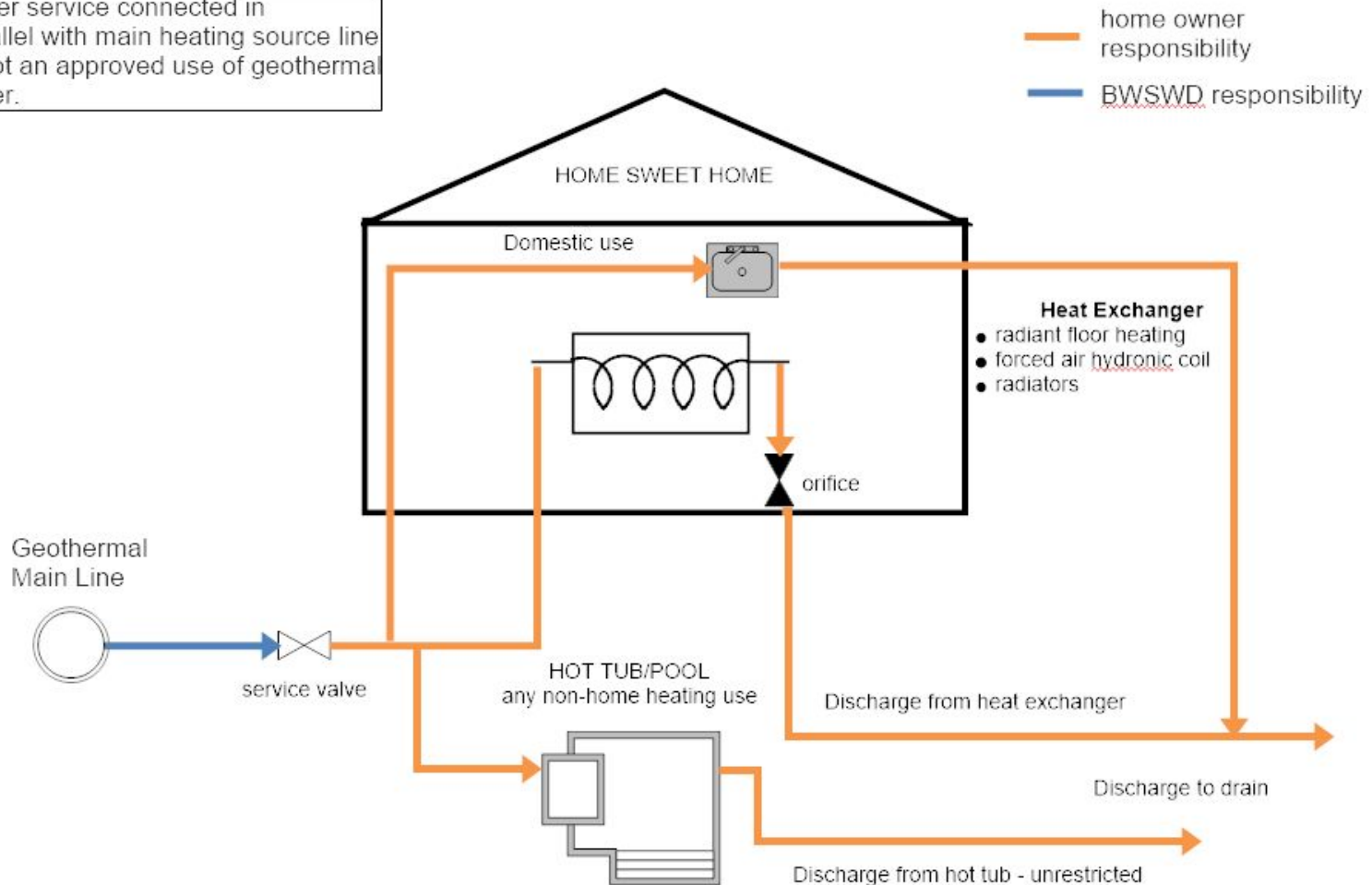


Unapproved Geothermal Water Use

Boise Warm Springs Water District

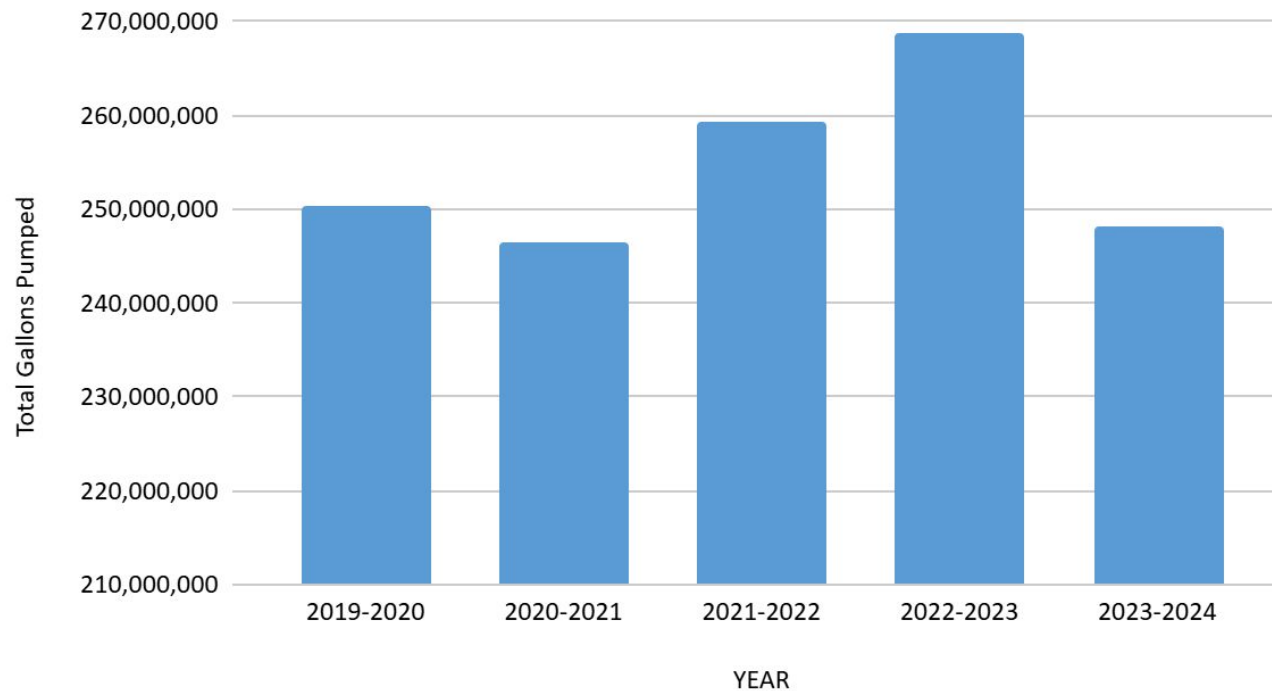
(Unapproved piping network for home heating & other geothermal hot water use)

Water service connected in parallel with main heating source line is not an approved use of geothermal water.



Historical Pump Data

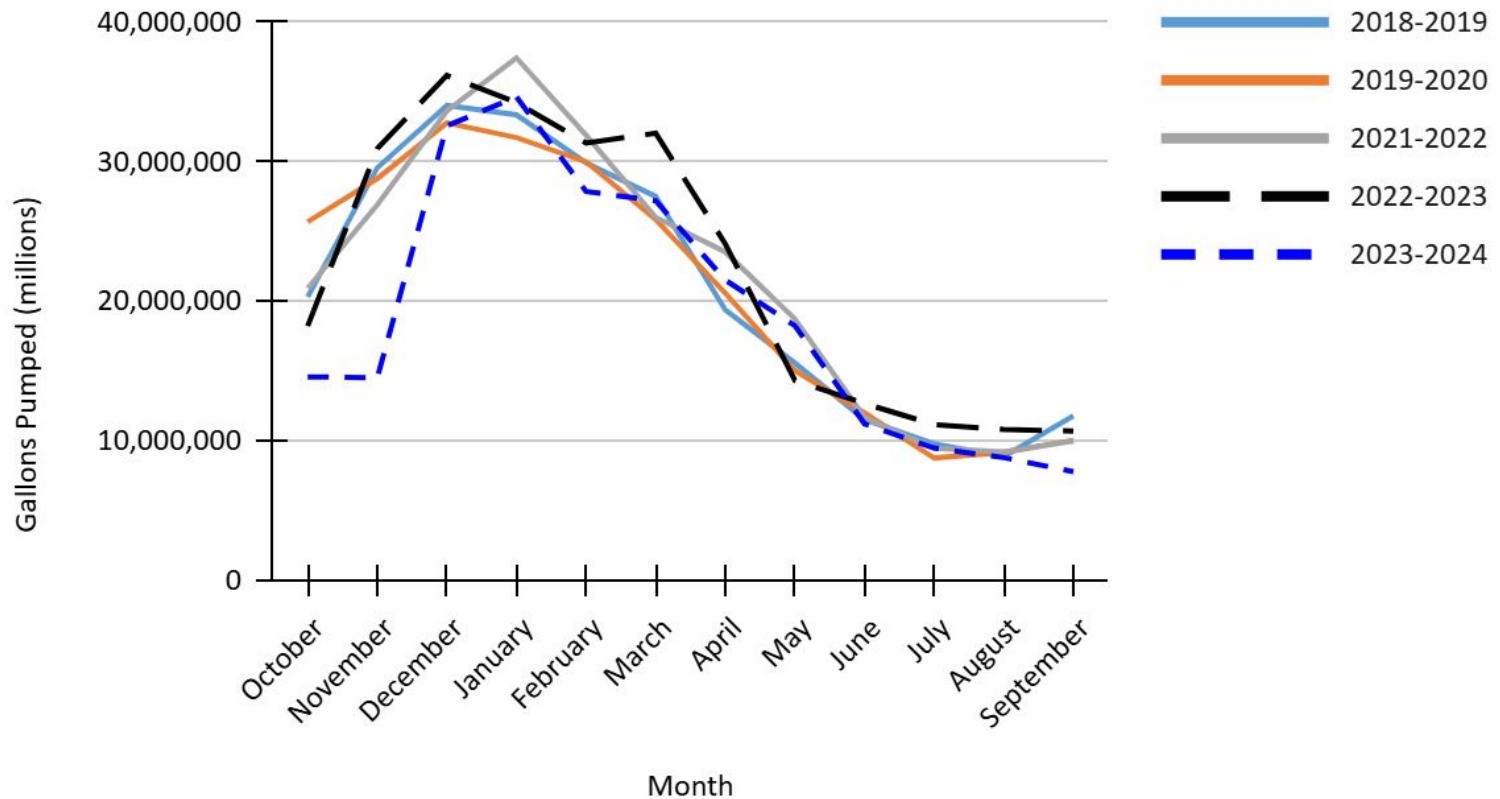
Total Gallons Pumped - 5 Yr Trend



~25M gallons from
Boise intertie
during MRP.

Historical Pump Data

5-Year Trend Pump Data by Month



BWSWD Budget

2024 Revenue & Expenditures

➤ REVENUE

- Actual: \$472,436.08
- Budget: \$532,575.72
- Difference: \$60,139.64 (mostly due to Ag Lab metered income shortfall)

➤ EXPENSES

- Actual: \$322,987.55
- Budget: \$374,240.64
- Difference: \$51,253.09

2025 Budget - 3% Increase

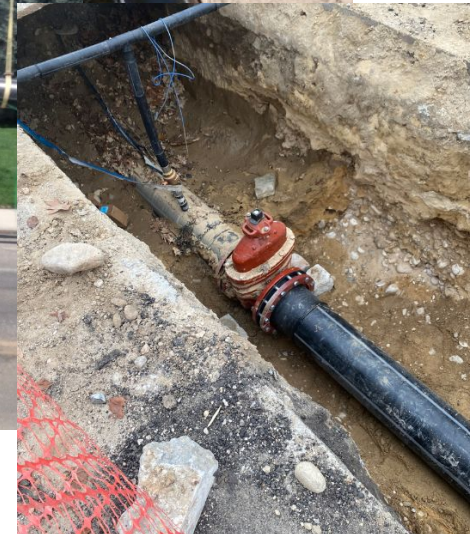
- Projected Revenue (w/ rate increase)
 - Budget \$547,566.27
- Projected Expenditures (includes MRP loan payment)
 - Budget \$546,162.00

<i>Orifice Size</i>	<i>Old Rate</i>	<i>New Rate</i>
4/32 (1/8)	\$800.50	\$824.52
5/32	\$1,275.35	\$1,313.61
6/32 (3/16)	\$1,827.00	\$1,881.81
7/32	\$2,482.75	\$2,557.23
8/32 (1/4)	\$3,232.25	\$3,329.22
9/32	\$4,100.00	\$4,223.00
Domestic	\$500	\$525.30
Metered	\$3.75	\$3.87

Mainline Replacement Project UPDATE

Project Completed!

- ~6400 total feet of mainline replaced - including 1520ft of extension!
- (10) 12-in valves replaced/installed!
- (8) 6-inch valves replaced/installed!

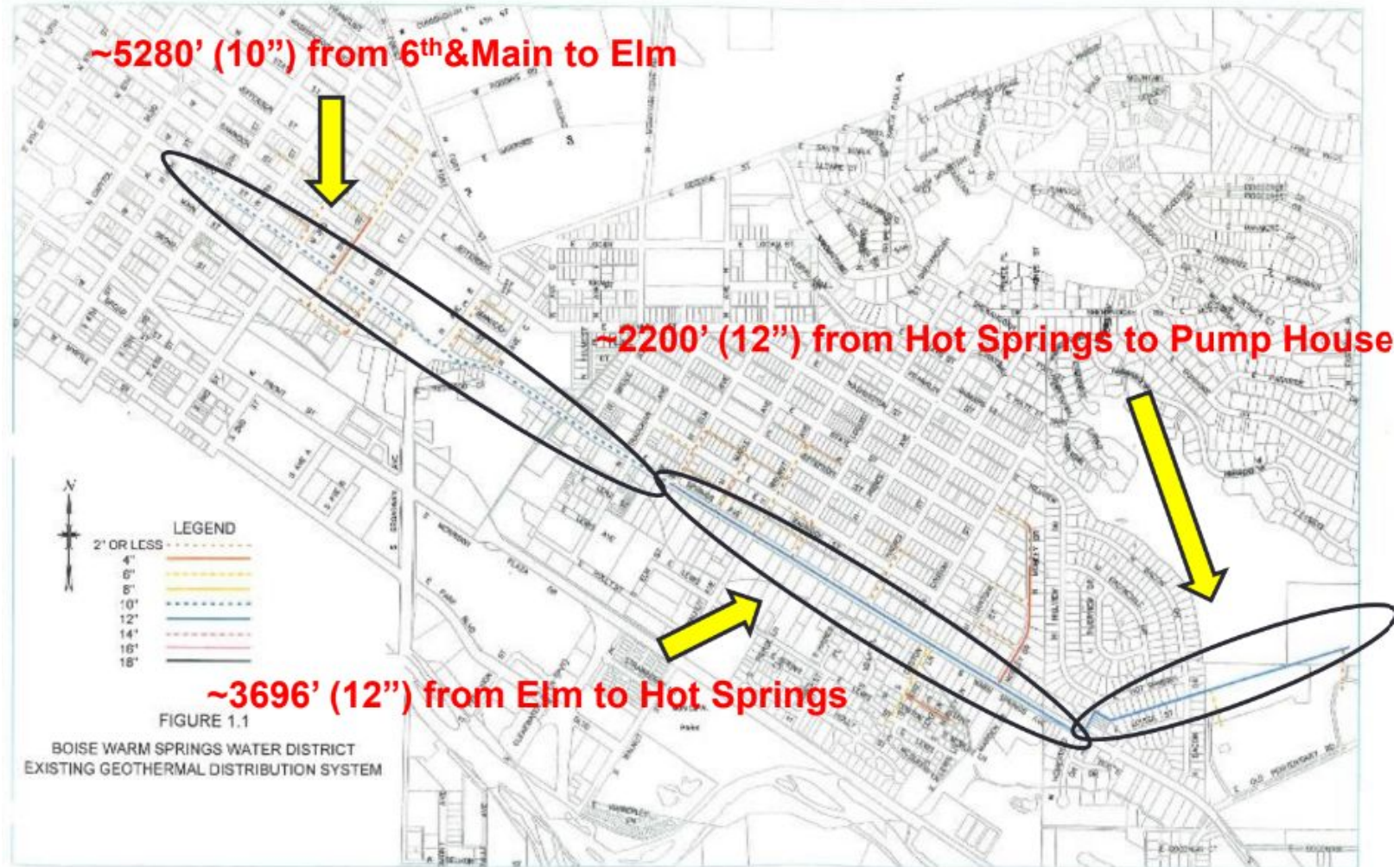


Project Completed!

- (91) Service lines replaced!
- (91) Water meters installed (for water usage tracking)!
- 2948 feet of service piping installed!
- Relocated PRV valve which allowed approx. 10 homes to have private PRVs removed, thus making the system operate more efficiently with lower maintenance concerns.



Mainline Replacement Project



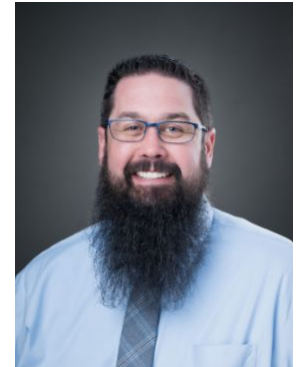
MRP Wrap up!

- Total cost: ~ \$3.25M
- ~16 weeks of construction in 2023
- ~7 weeks of construction in 2024
- ~18M gallons of Boise City geowater used
- System performance drastically improved
 - higher system pressure observed
 - decrease in gallons pumped (~22M gallons saved from 2023)
 - elimination of leaks along Warm Springs Ave.
- System service life extended well beyond another 50 years.

Acknowledgements

SPECIAL THANKS to:

- Great West Engineering - **Andrew Kimmel**
- Knife River
- City of Boise Geothermal - Jon Gunnerson
- Del
- Scott
- BWSWD Board of Directors



**THANKS TO THE PATRONS FOR YOUR
PATIENCE AND UNDERSTANDING GIVEN THE
MAGNITUDE OF THIS PROJECT!**



The End

Q & A