

GALVA, KANSAS

Water Supply System Improvements



Outline

- Existing System
- Water System Issues
 - Supply
 - Storage
- Solutions
- Project Costs/Funding
- Water Rate Summary
- Timeline



Existing Water System

- Public Water System
KDHE KS2011312
- 4 Water Supply Wells
directly connected to the
distribution system
- 1 – 50,000 - gallon water
storage tower
- ~420 water service
connections

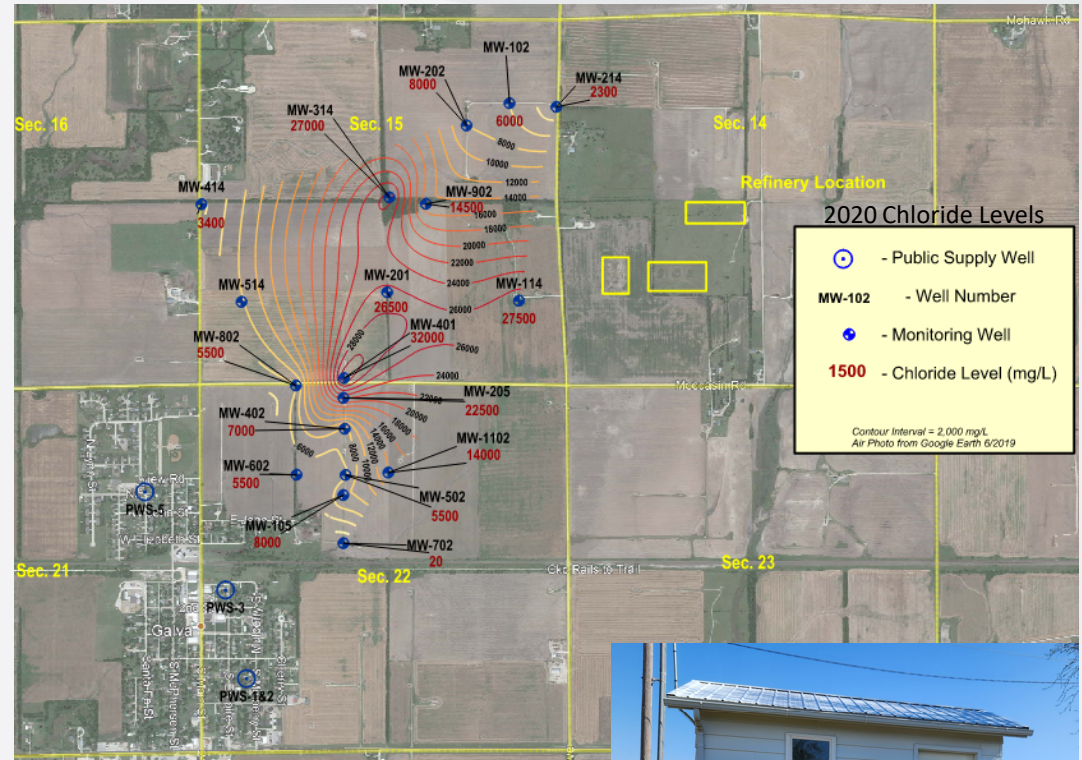


Water System Issues

- Supply

- Wells

- Contamination site located in Sections 15 and 22 of Township 19 South, Range 2 West (Warren Petroleum Plant Site)
 - Contaminants - arsenic, cadmium, selenium, barium, chloride, naphthalene, benzene, and petroleum hydrocarbons
 - Well #3 has been impacted and discontinued from use.
 - Limited production with reduced quantity of wells – meeting daily usage problematic
 - Well #1 – 35 gpm
 - Well #2 – 65 gpm
 - Well #3 – 100 gpm
 - Well #5 – 115 gpm



- City has made improvements since 2020 to all three wells in service to maximize pump rates.



Water System Issues

- Supply

- Summary of Municipal Water Use Reports (2008 - 2023)

- Water Sold to Customers

Average Usage	34,659,831	Gallons / Year
	94,958	Gallons / Day
	115	Gallons/ Per / Capita / Day

Peak Usage	40,290,000	Gallons / Year
	110,384	Gallons / Day
	134	Gallons/ Per / Capita / Day

- 3 operable wells need to run 18-24 hours per day on peak summer months to meet system demand.
 - 1 Inoperable well (Well 3), stopped using in 2019 due to contamination, produced 10-12 million gallons a year.

Water System Issues

- Storage

- Volume

- Existing Water Tower is 50,000 gallons
 - Average daily water use is approx. 100,000 gallons
 - United States Department of Agriculture (USDA) recommends minimum of 2 days storage (200,000 gallons)
 - Multiple tower operational cycles per day during peak summer usage



Solutions

- Water Supply Contamination/Limited Production
- Future Contamination Considerations
- Storage Improvements



Solutions

- Alternatives

- New Public Water Supply Wells
- Water Treatment Solutions
- Purchase of Water (All or Some)

Blending Approach for Additional Storage



Project Costs

- Estimated Project Costs

- Phase 1 Supply/Storage Improvements
 - Supply Piping to Blend City Wells \$600K – 750K
 - Blending/Storage Tank \$600K – 800K
 - Booster Pump/Chlorination Facility \$900K – \$1 Million
 - Phase 2 – Connection to another Water Supply System (Purchase)
\$2 – \$3 Million
-
- Total Project \$4.1 – \$5.5 Million

Funding



- Funding Sources

- Kansas Department of Health and Environment (KDHE)
 - Small Town Grant Drinking Water (STGDW)
 - State Revolving Loan Fund - Loan and/or Principal Forgiveness (Grant)
 - Bureau of Remediation - State Water Plan Fund (SWPF)
- Kansas Water Office – HB 2303
- United States Department of Agriculture – Rural Development (USDA-RD)
 - Loan and Grant
- Community Development Block Grant (CDBG)
- Bonds

*Funding Secured to Date:
STGDW = \$2,016,230.00
SWPF = \$1,500,000.00
Total = \$3,516,230.00

Water Rate Summary

- Potential Future User Rates

- Dependent upon amount of water purchased from other sources and amount of grant funding secured for construction costs.

- Water Rate Summary (costs per month - inside City Limits):

Current Water Rate (March 2025) :

Base Rate (2,000 Gallons): \$15.00

Cost for 5,000 Gallons: \$12.00

Total Cost per Month \$27.00

Debt Service Water Rate Increase (Current Funding Matrix):

Construction Loan (Est.) \$16.00 to \$22.00 (Phase 2)

Future Water Rate Increase (Purchase 25% of Water from another water system):

Cost for 5,000 Gallons: \$8.00 to 18.50

Hypothetical Water Rate Example (Base Rate Adjustment):

Base Rate – 2,000 Gallons: \$33.00 or \$53.50

Cost for 5,000 Gallons: \$12.00 or \$12.00

Total Cost per Month \$47.00 \$65.50

Timeline

- 2 Phases of Improvements
 - Phase 1
 - Preliminary Work: Now – Sept. 2025
 - Construction: Oct. 2025 – July 2026
 - Phase 2
 - Preliminary Work: Now – Mar. 2026
 - Construction: Est. Apr. 2026 – Dec. 2026



Questions / Discussion

