



City of East Helena Water System Master Plan

Overview and Discussion on Preliminary Findings

Public Meeting – February 27, 2018

Robert Peccia and Associates

In General the Master Plan includes:

- **Review the existing water system and its operating parameters.**
- **Identify areas where system improvements should be made. Develop alternatives to provide the community with reliable water service and improve operations through the planning period.**
- **Complete a list of recommended improvements for the water system and a funding strategy for implementation.**

East Helena Water System Components

- **Wylie Drive Wells and Transmission Main**
 - **Wylie Well #1, 600 gpm (1965)**
 - **Wylie Well #2, 600 gpm (1965)**
 - **Wylie Well #3, 450 gpm (1987) – Chlorination Point for Wylie Wells**

- **Highway 282, 1-Million Gallon Reservoir**

- **McClellan Radial Wells**
 - **Radial Well #1, 500 gpm (1987)**
 - **Radial Well #2, 500 gpm (1987)**



East Helena Water System Components (Cont'd)

➤ **McClellan Tanks**

- **Reservoir #1, 250,000 Gallons (1928)**
- **Reservoir #2, 300,000 Gallons (1948)**

➤ **Wylie and McClellan Transmission Mains**

➤ **Distribution System**

➤ **Telemetry & Control System**



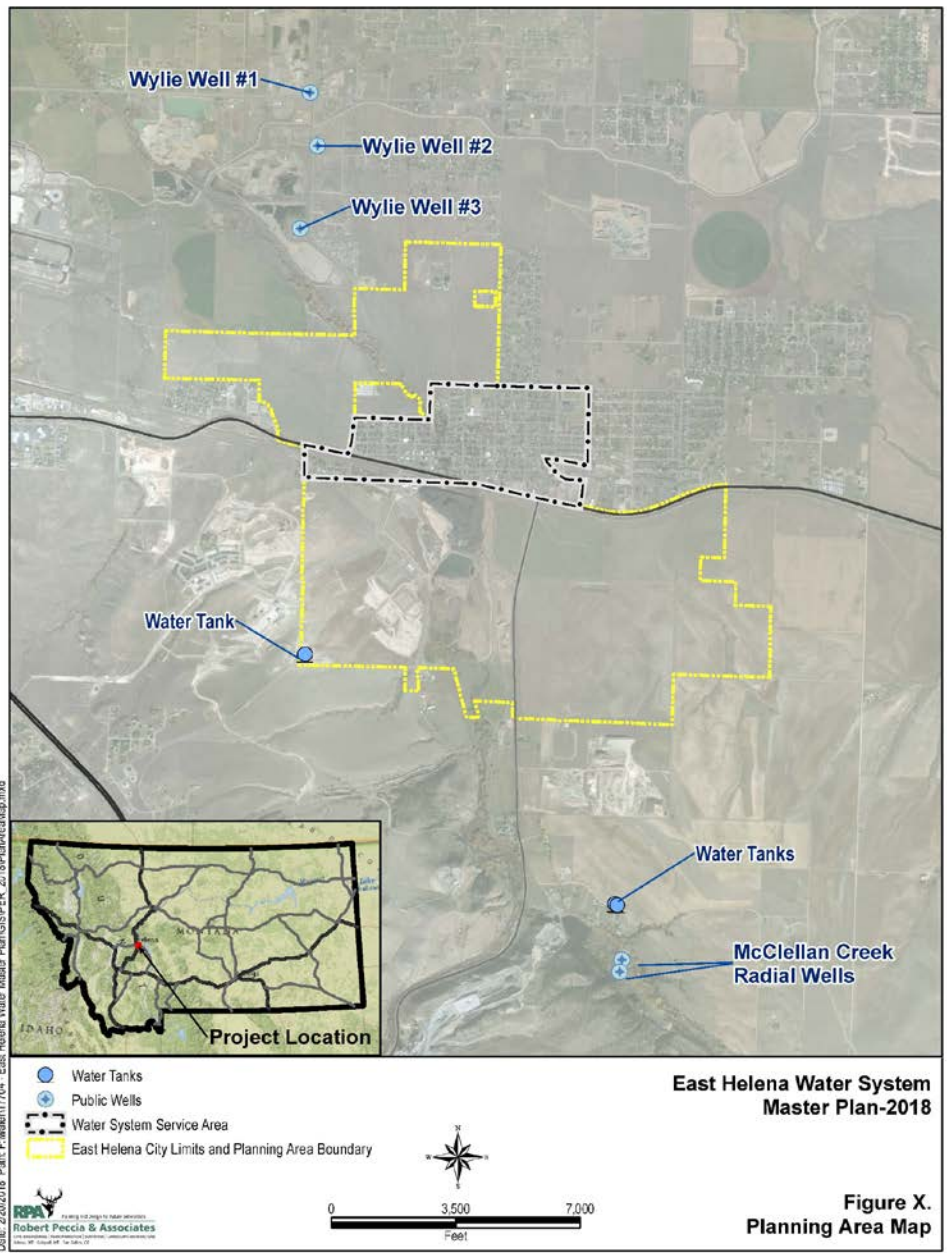


Figure X.
Planning Area Map

CURRENT and FUTURE OPERATING CRITERIA

CRITERIA	VALUE
Existing Population (2017)	2,194
Annual Growth Rate	1.45%
Future Population (2037)	2,926
Current Average Daily Demand	423,835 gpd (294 gpm)
Average Day Demand per Capita	193 gal
Current Max Daily Demand	1,059,588 (736 gpm)
Future Average Daily Demand	564,718 gpd
Future Max Daily Flow	1,411,795 gpm

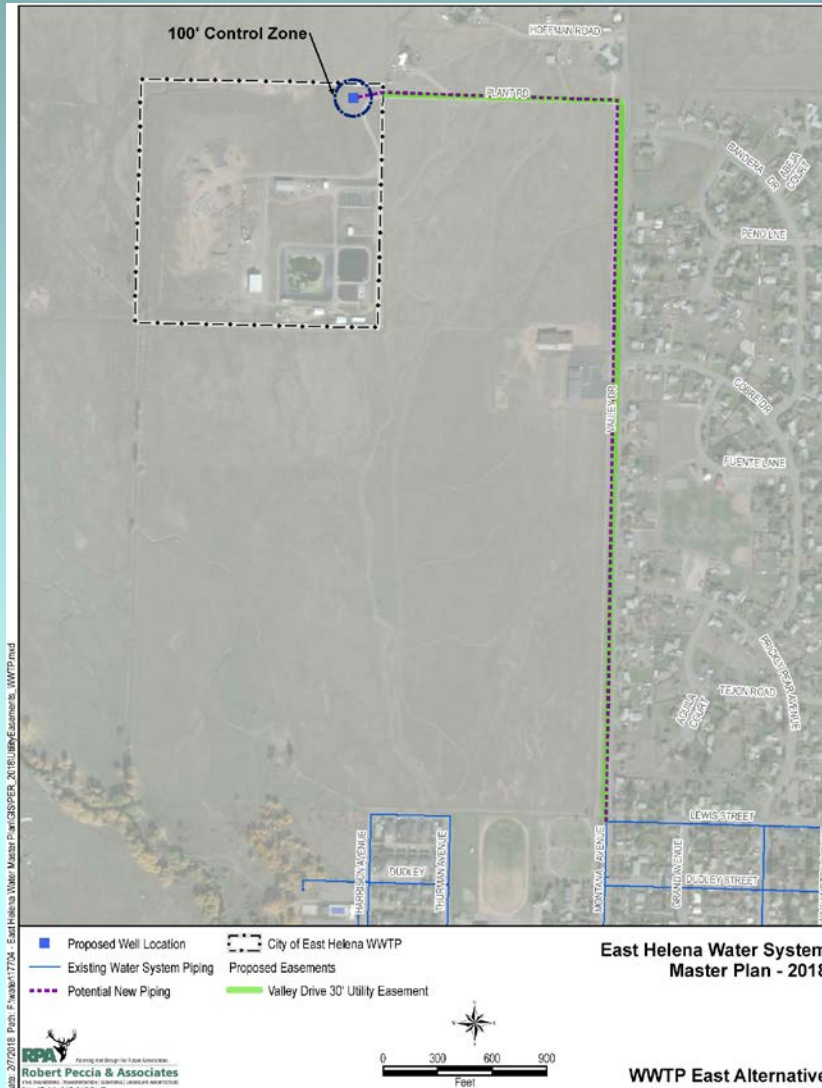
Concerns – East Helena Water System

- **Wylie Well #3 – Proximity to Selenium Plume and Gravel Pit.**
- **McClellan Tank – Leakage, Inoperable Valves, Aging Concrete.**
- **Critical Water Main Creek Crossing Lost at Main Street.**
- **Accessibility to Maintain and Service Radial Wells.**
- **Available Fire Flow near American Chemet.**
- **Dead End Main at West Groschell and 1st Street.**
- **Aging Telemetry Controls.**

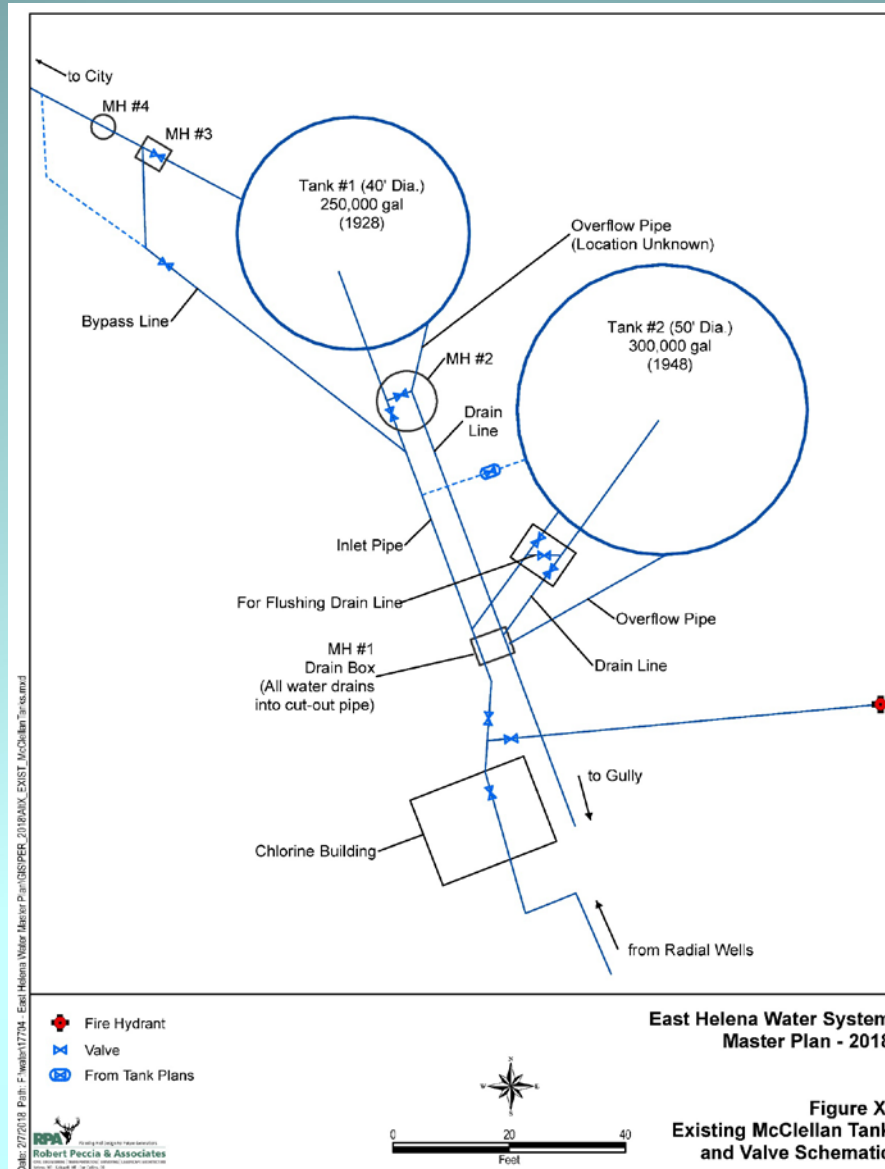
Alternatives : Wylie Well #3 Proximity to Selenium Plume

- **Replace Wylie Well #3 and Pump West Re-Using Existing Chlorination Point.**
- **Replace Wylie Well #3 and Pump East. Chlorination Point at New Well.**

Alternatives : Wylie Well #3 Proximity to Selenium Plume



Alternatives : McClellan Tanks and Piping



Alternatives : McClellan Tanks and Piping

- **Construct New 750,000-Gallon or 1-Million Gallon Tank and Replace Piping with Optimized Design.**

Summary of All Recommended Improvements

- **Replace Wylie Well #3 at WWTP Property and Install New Chlorination System.**
- **Construct New McClellan Tank and Piping.**
- **Re-establish Water Main Crossing at Main Street.**
- **City to Work on Access Agreement and Add Walking Bridge at Radial Wells.**
- **Water Main Loop and Replacement from 1st Street below Highway 12 to Manlove near American Chemet.**
- **Water Main Loop on 1st Street from West Groschell to Gail to alleviate dead end.**
- **Replace Telemetry.**

TOTAL PROJECT COST – ALL RECOMMENDED ALTERNATIVES

- Preliminary Estimate is \$4.4 Million.

Grant and Loan Funding Opportunities

- TSEP Grants of \$500,000 to \$750,000 (biannual) – 7 Criteria
 - **Must Exceed TSEP “Target Rate” (2.3% of MHI = \$88.60 /mo for Water+Sewer)**
Current Residential Avg. Rate = \$100.25 (113% of Target Rate)
 - **Maximum of \$500,000 (unless \geq 125% of Target Rate)**
 - **“Dollar-for-Dollar” Match required – can include other grants**
- RRGL Grants to \$125,000 (biannual) – “conservation of water resources”
 - **Maximum of \$125,000**
 - **No Match required**
- CDBG Grants to \$450,000 (annual)
 - **Requires > 51% LMI Benefit (Income Survey or “Targeting”)**

Grant and Loan Funding Opportunities

- USDA Rural Development Grant/Loan Packages
 - **Grant Share is Variable**
- MDEQ State Revolving Fund (SRF) Loans
 - **(2) SRF Programs – Water Pollution Control and Drinking Water**
 - **2.50% Interest, 20 or 30 year Loans**
- Most Grants Require “Financial Need”.... also Health/Safety Issues
- Grant Applications are Ranked COMPETITIVELY, and Not All Funded

Next Steps and Project Schedule

- Project Newsletter Forthcoming.
- Project Web Site (Current) – Link From City's Web Page.
- Develop a Detailed Funding Strategy for Implementation.
- Second Public Meeting (on PER, Grant Applications, and EA).
- Grant Applications Due May and June.