

Monroe's Water Needs

8 September 2021



Monroe is worth saving...

Community Investment

The residents of Monroe are heavily invested in seeing Monroe flourish. They've invested hundreds of volunteer hours into downtown revitalization, parks and trails, and a brand new library facility.

Public Education

If the City of Monroe is not able to resolve its water and wastewater issues, the public school system will close, displacing nearly 400+ rural students.

Economic Impact

Monroe is home to a number of businesses that impact the larger economic system of Oregon (including farms, wineries, lumber), many small businesses, and public schools that require water and waste water treatment access to survive.



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01



**WATER
INFRASTRUCTURE**



Key Water Infrastructure



1. The Long Tom River supplies the city's water.

- It has the volume needed for current and projected needs.
- It is reliable, but vulnerable to climate change.
- It has high organic content, which reacts with chlorine disinfectants used in the treatment process and produces unwanted, EPA regulated byproducts. OHA is requiring the City of Monroe to find a solution at the City's expense.

Key Water Infrastructure



2. The current water treatment plant is operating outside its designed capacity.

- The system was designed so that two identical membrane treatment units would operate on alternating days. Currently must run both cells 8+ hours a day to meet capacity, and someone must be onsite for most of that time.
- The system will need to be upgraded or replaced to meet future needs.

Key Water Infrastructure



3. The current water treatment plant is expensive to operate.

- It is dependent on high tech components, many of which are obsolete or very expensive to replace.
- Computer system programming and repair is limited due to age. The programming language is no longer used, and many who know it have retired.
- The system requires a higher grade water operator than most water systems, which has presented additional burdens to staffing and training.

Estimated Costs for Water Infrastructure

\$1.2M for pre-treatment facility

\$1M to bring system to standard and upgrade computer components

Total: \$2.2M



02



**WASTEWATER
INFRASTRUCTURE**



Key Wastewater Infrastructure



1. Parts of the system date back to 1916.

- Some of our current components have outlived their designed lifespan and need to be replaced.
- Many of the pipes are concrete. They have been leaking for years, allowing unwanted water into the system.

Key Wastewater Infrastructure



2. The current system depends on unaerated lagoons.

- These should be changed to aerated (requires changing the permit).
- Two of the three ponds will need to be dredged and lined.

Key Wastewater Infrastructure



3. The lift station requires upgrades.

- The current pipe is 6 inches, which is too small for our needs. The pumps also need to be replaced.
- The collection system is undersized.



Estimated Costs for Wastewater Infrastructure

\$.75M to replace concrete pipes and 100+ year old components

\$1M to aerate lagoons

\$1.25M to upgrade lift station

Total: \$3M

03

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REGULATORY BURDENS



Regulations in progress that will impact small systems



1. Total Maximum Daily Load (TMDL)

- Identifies the total pollutant loading that a waterbody can receive.
- Monroe stormwater currently enters the river without treatment.

2. Revised Lead and Copper Ruling

- Much more stringent than current rule.
- Requires City to test schools and other public facilities.
- Increased testing frequency.

3. National Pollutant Discharge Elimination System (NPDES)

- The current NPDES permit for waste discharge is under review.
- Anticipated requirements will be more stringent than currently allowed.

Total Estimated Costs

Water Treatment: \$2.2M

Wastewater Treatment: \$3M

Total: \$5.2M



04



QUESTIONS &
ANSWERS





CONTACTS

DAN SHEETS	STEVE MARTINENKO	KELIE McWILLIAMS
<p data-bbox="160 511 575 590">dan.sheets@ci.monroe.or.us 541-953-5979</p>	<p data-bbox="710 511 1222 590">steve.martinenko@ci.monroe.or.us 541-829-2466</p>	<p data-bbox="1304 511 1823 590">kelie@ruralengagementproject.com 503-862-3518</p>
<p data-bbox="297 727 436 836">MONROE MAYOR</p>	<p data-bbox="794 727 1136 836">MONROE CITY ADMINISTRATOR</p>	<p data-bbox="1327 727 1800 836">RURAL ENGAGEMENT PROJECT EXECUTIVE DIRECTOR</p>

