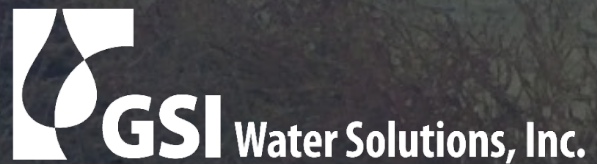


Steering Committee Meeting #6

Morrow and Umatilla County Drinking Water Investigation

May 29, 2025



Meeting Objectives

- Update Steering Committee on Roadmap Project
- Get input from Steering Committee on public water system connection concepts path forward

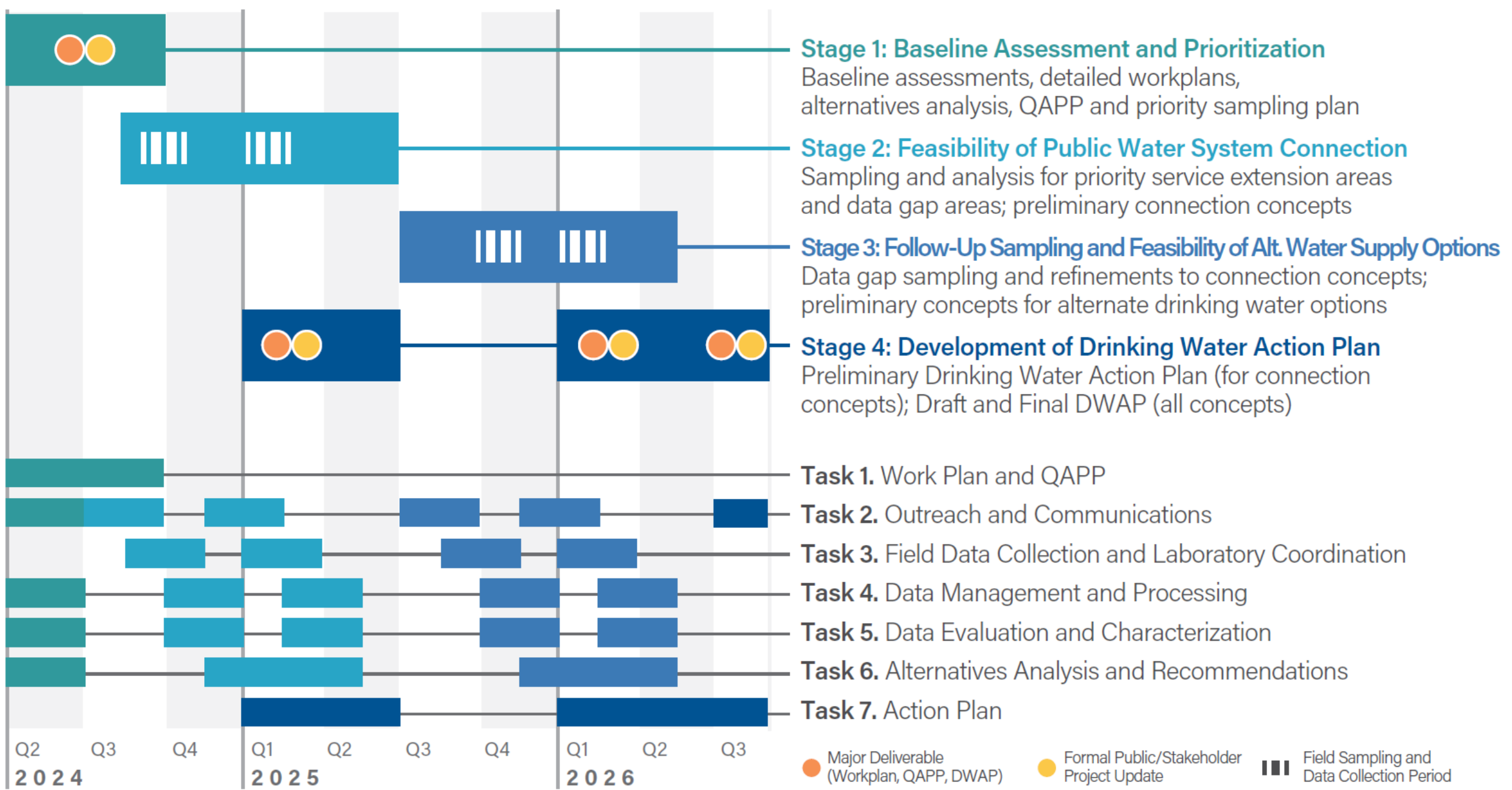
Meeting Topics

1. Update on Roadmap project
2. Update on public water system connection concepts
3. Feedback on issues with connection concepts
4. Next steps

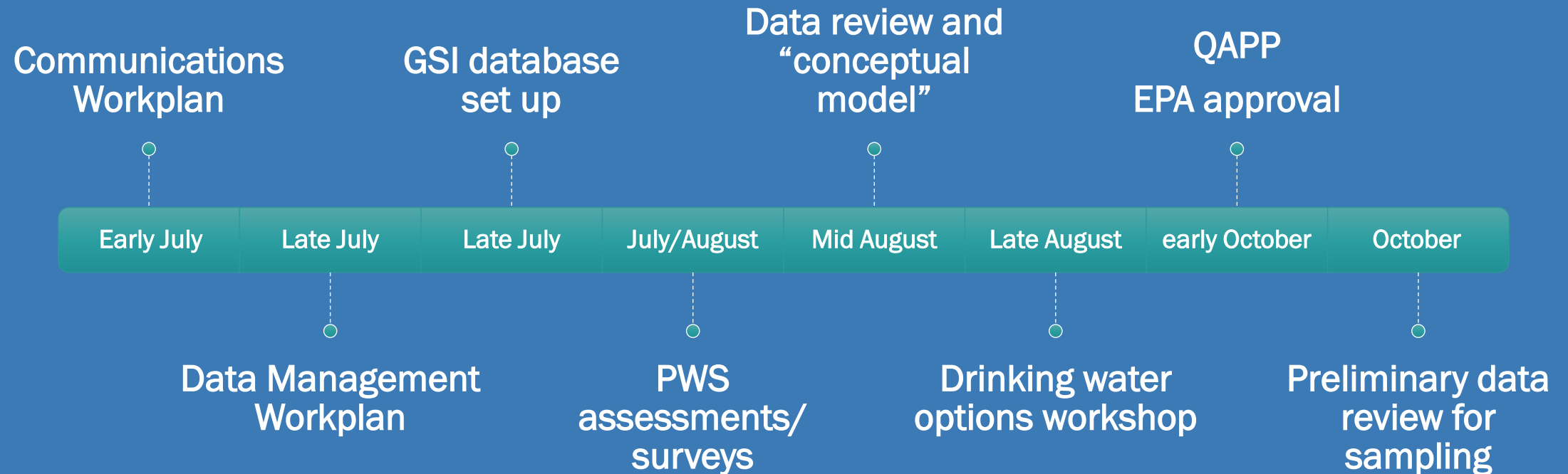
<https://www.co.morrow.or.us/planning/page/morrow-and-umatilla-county-drinking-water-roadmap>

A wide-angle photograph of a rural landscape at sunset. The sky is filled with orange and yellow clouds, with the sun low on the horizon. In the foreground, there is a field of dry grass and some tall, brown weeds. A worker wearing a red hard hat and a light-colored jacket is visible on the right side, working with some equipment. In the background, there are several trees and a few small buildings, possibly a farm or a small town.

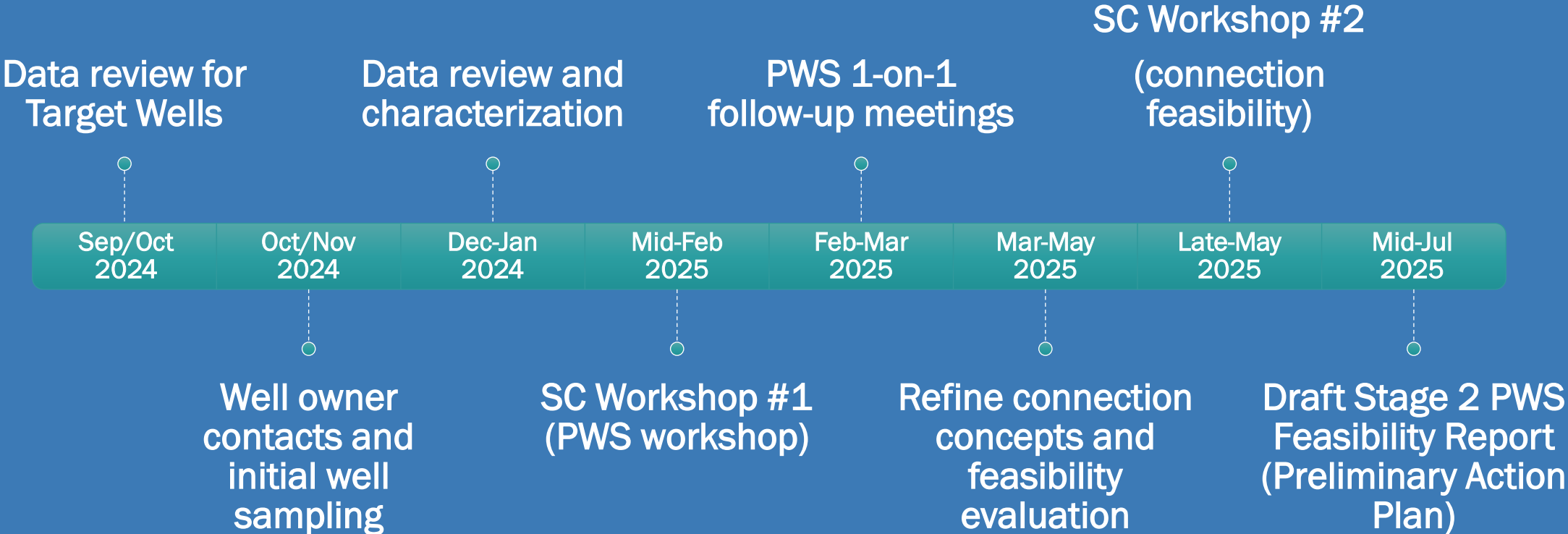
1. Project Update



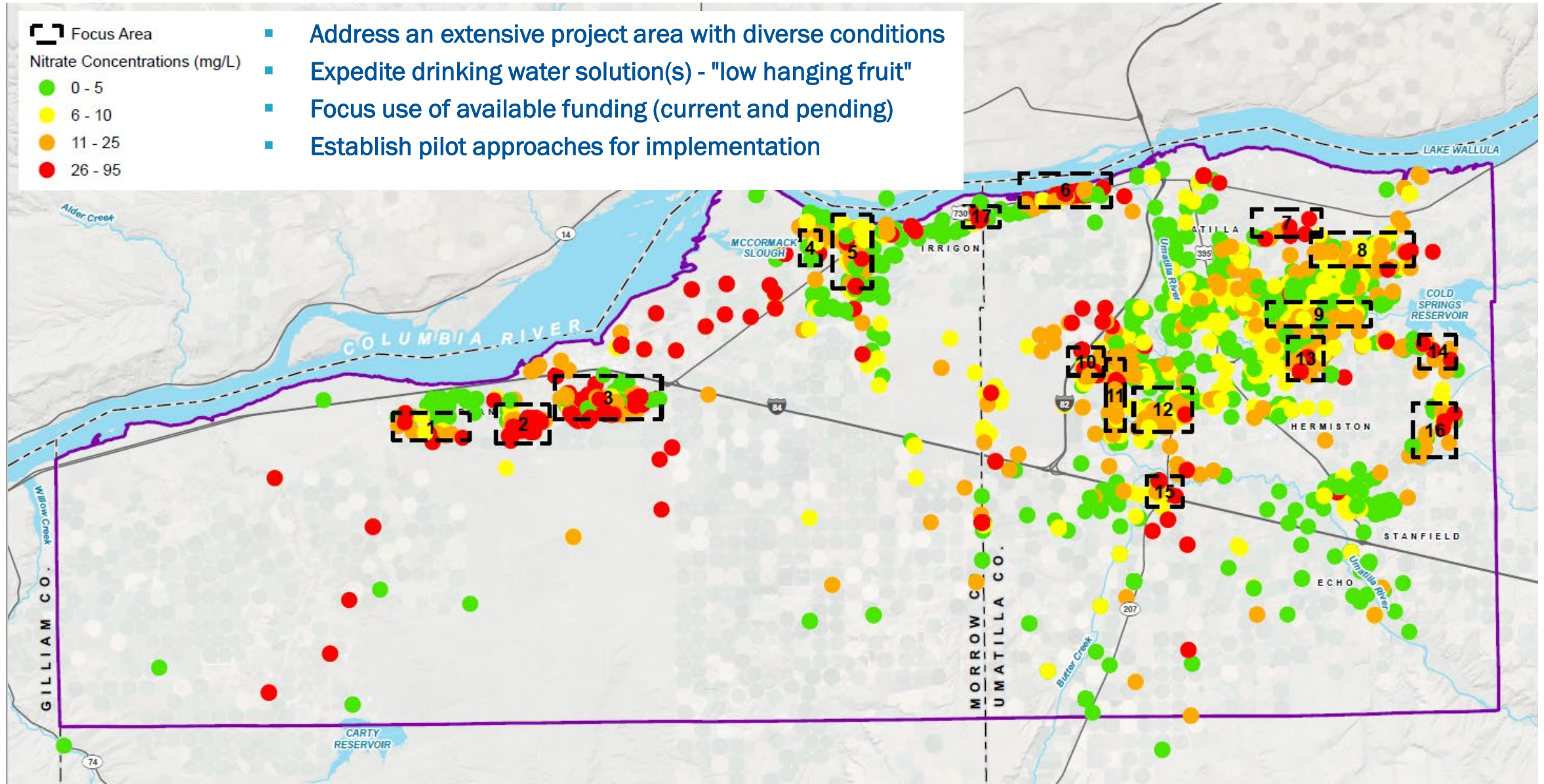
Stage 1 Status (2024)



Stage 2 Schedule (2025)



Potential Focus Areas



Summary of Drinking Water Options

1a. Connection to existing PWS

1b. Connection to existing PWS + treatment

2. Connection to Regional Water System

3. Existing well with improvements/treatment*

4a. New well (deeper/not impacted)*

4b. New well with treatment*

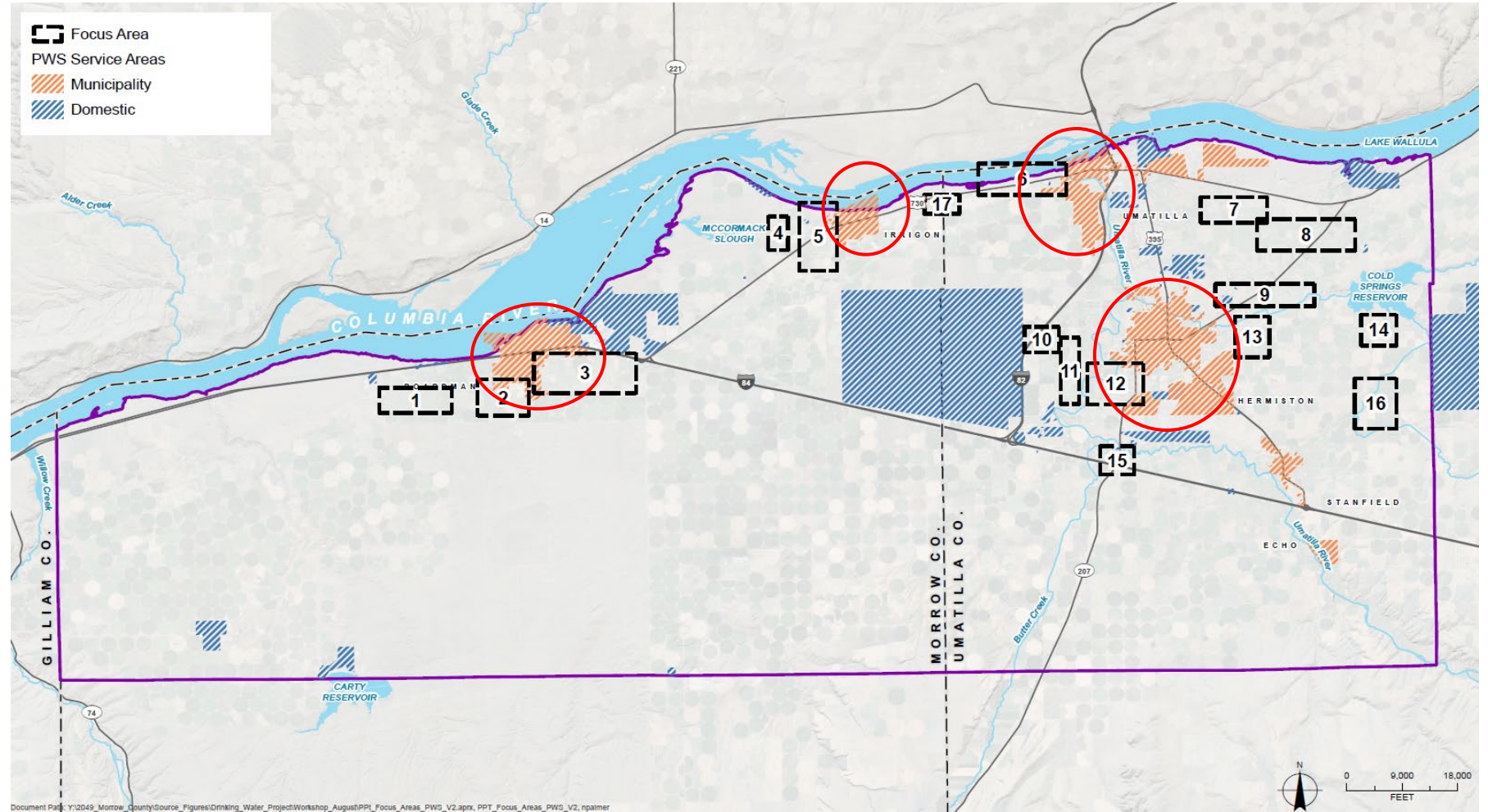
5. Point-of-use treatment

6. Aquifer storage and recovery/Aquifer recharge

**Sub-options for #2, 3, 4: with or without extensive distribution system requiring local improvement or special district.*

Focus Areas near Municipal Water Systems

Focus Areas with municipal system opportunities



Morrow County projects focused on West Glen

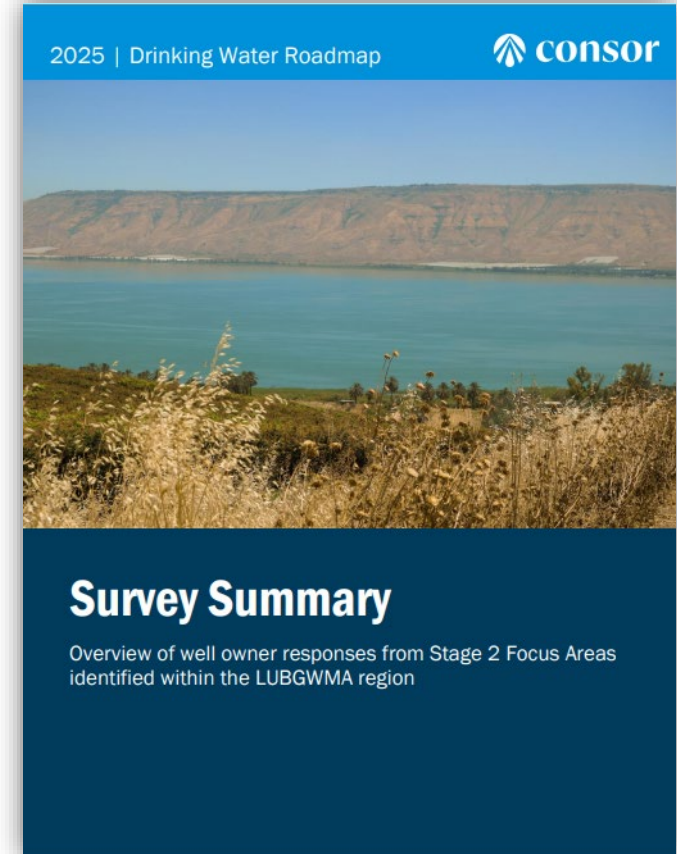
- Water and Sewer Service Feasibility – Meier Architecture+Engineering
- Outreach support – Rural Engagement & Vitality Center/EOU
- Non-connection Alternatives – Willamette Partnership

Completed 2nd Sampling Round (Spring 2025)

- Identified 97 potential target wells (FA-5, -6, -10, -11, and -12)
 - Researched contact information
- Coordinated with counties and agencies (OHA, OWRD, DEQ)
- Completed pre-sampling screening to finalize sampling schedule
 - Well owners who were successfully contacted and agreeable
 - Well conditions suitable for sampling
- Completed sampling from 9 well owners from May 12-15
 - Focus Areas: 3, 5, and 11

Well Owner Survey - Approach

- Activated in April 2025
- Mailed to Focus Areas of Stage 2
- Offered via print and digital versions in Morrow & Umatilla Counties
- Spanish & English format
- 103 responses to date.

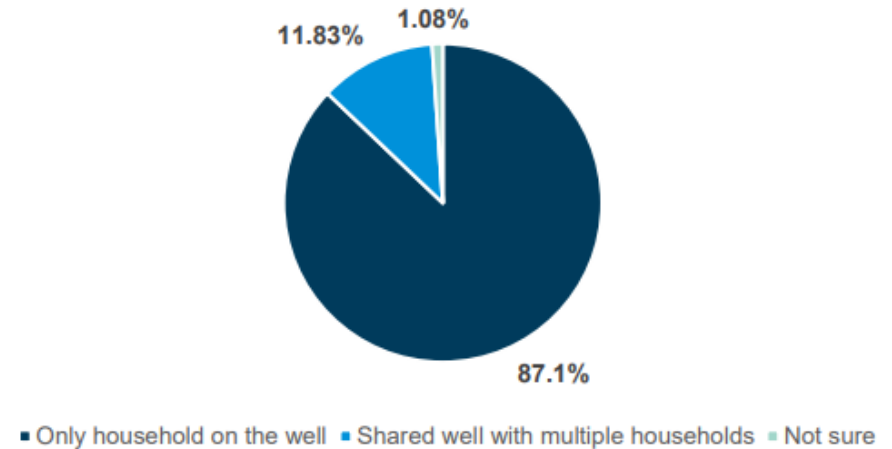


Full report available at drinkingwaterroadmap.org

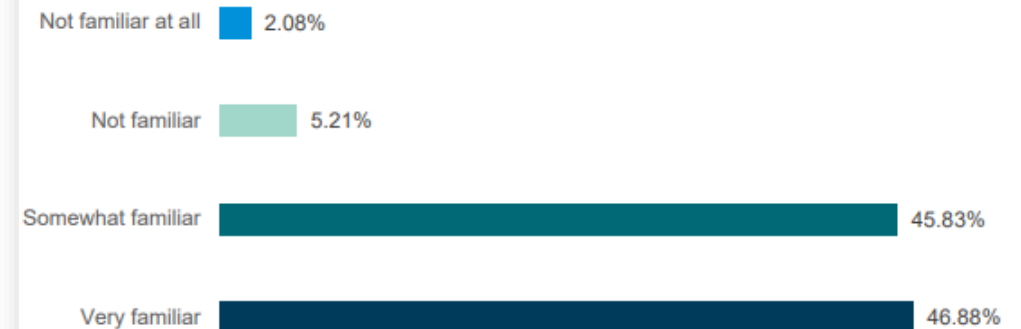
Well Owner Survey – Respondent Profile

- Equal distribution/response rate from Irrigon, Hermiston and Boardman (30%)
- Most wells belonged to a single household (87%)
- Most (93%) indicated familiarity with nitrates
- County Health Department leads as main source for information on nitrate contamination (72%)

Well shared with other households?

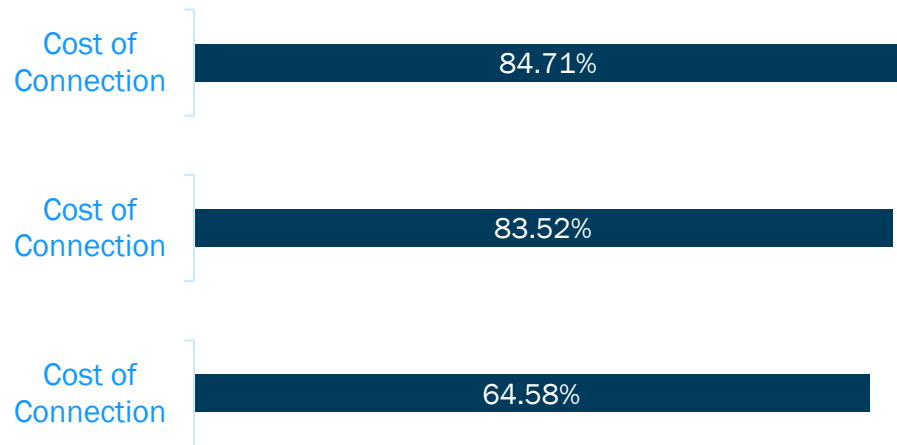


How familiar are you with nitrates in drinking water?

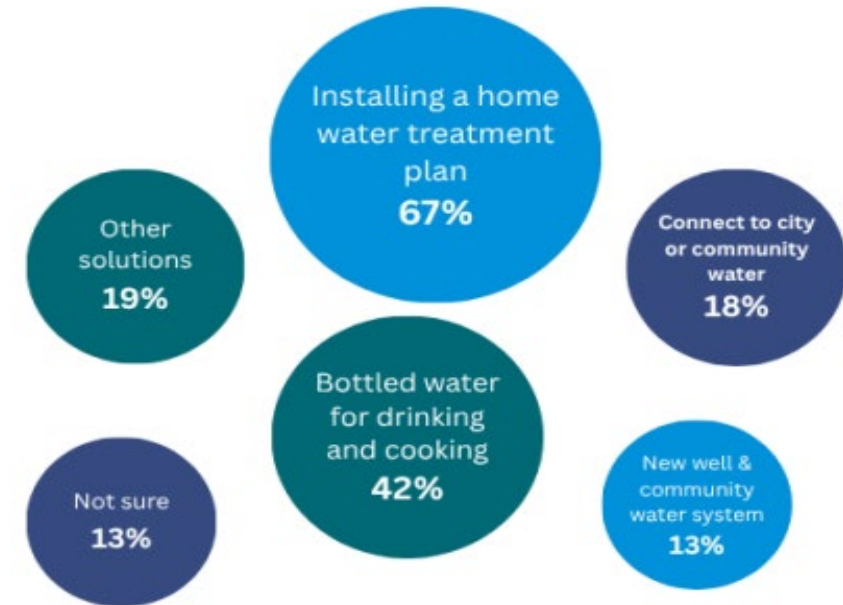


Well Owner Survey – Findings

Concerns about, connection to City Water, new well or community system, and installing a home water system



Preferred solutions to addressing nitrate contamination



Well Owner Survey - Highlights

- Health Departments are the most trusted sources for information
- Cost is the leading concern across all water solutions
- Strong desire for independence from City systems
- Mixed views on home treatment systems
- Community meetings ranked low for engagement
- Shared systems raise social and ownership concerns

A photograph of a rural landscape. In the foreground, a large, leafless tree with a thick trunk and many thin branches stands on the left. Behind it is a wooden fence with vertical posts and horizontal rails. To the left of the tree, a portion of a grey metal barn is visible. The ground is covered with dry grass and some green patches. In the background, more trees and a distant hill are visible under a bright blue sky with large, white, fluffy clouds. A dark blue rectangular box is overlaid on the right side of the image, containing white text.

2. Connection Concepts Update

PWS Connection Concepts and Considerations

- Information Gathering
- Common Issues
- City Specific Issues
- PWS Connection Concept Designs
- Construction Cost Estimates

Information Gathering for PWS

- One-on-One Workshops
- Water Masterplan Review
- GIS Mapping Backgrounds
- Demand Data Analysis

Common Issues

- Financials
 - Affordability for new customers
 - Equity between existing and new customers
 - Long-term maintenance
- Governance
 - City vs. special district
- Annexation
 - Constraints on future development
- Road and sewer infrastructure
- Irrigation needs/demands
- Funding – near and long term
- Public opinion
- Water rights on served properties

Water Demand Data

<i>City</i>	<i>Focus Area</i>	<i>Current Household Count</i>	<i>Near ADD (gpd)</i>	<i>Near MDD (gpd)</i>	<i>Projected Household Count (20-year)</i>	<i>Future ADD (gpd)</i>	<i>Future MDD (gpd)</i>
Boardman	2	102	92,045	276,135	152	137,165	411,495
	3	139	125,435	376,305	207	186,795	560,385
	Total	241	217,480	652,435	359	323,960	971,885
Irrigon	5N	130	106,315	297,680	193	157,835	441,940
	5S	151	123,490	345,770	224	183,185	512,920
	Total	281	229,805	643,445	417	341,020	954,863
Hermiston	12	125	88,125	211,500	168	118,440	284,255
	11	104	73,320	175,970	140	98,700	236,880
	10	23	16,215	38,915	31	21,855	52,450
	Total	252	177,660	426,384	339	217,140	521,136
Umatilla	6A	95	42,750	100,890	128	57,600	135,935
	6B	75	33,750	79,650	101	45,450	107,260
	Total	170	76,500	241,074	229	103,050	324,972

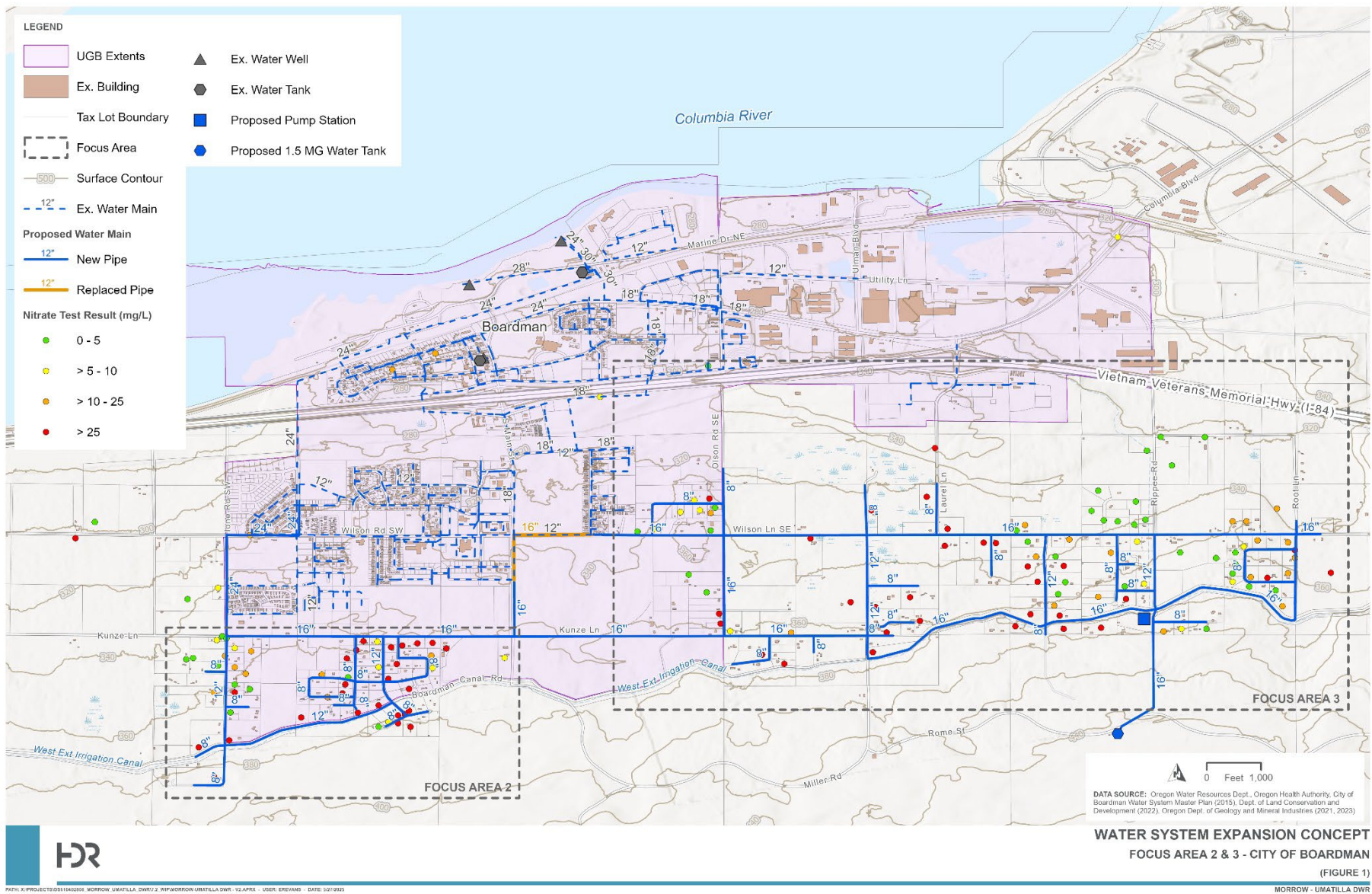
City-Specific Issues: Boardman (FA-2, FA-3)

- Importance of public opinion
- Many roadways need to be brought up to City standards
- Concerned about private utility districts

Approximate Households - Boardman



Concept Design – City of Boardman



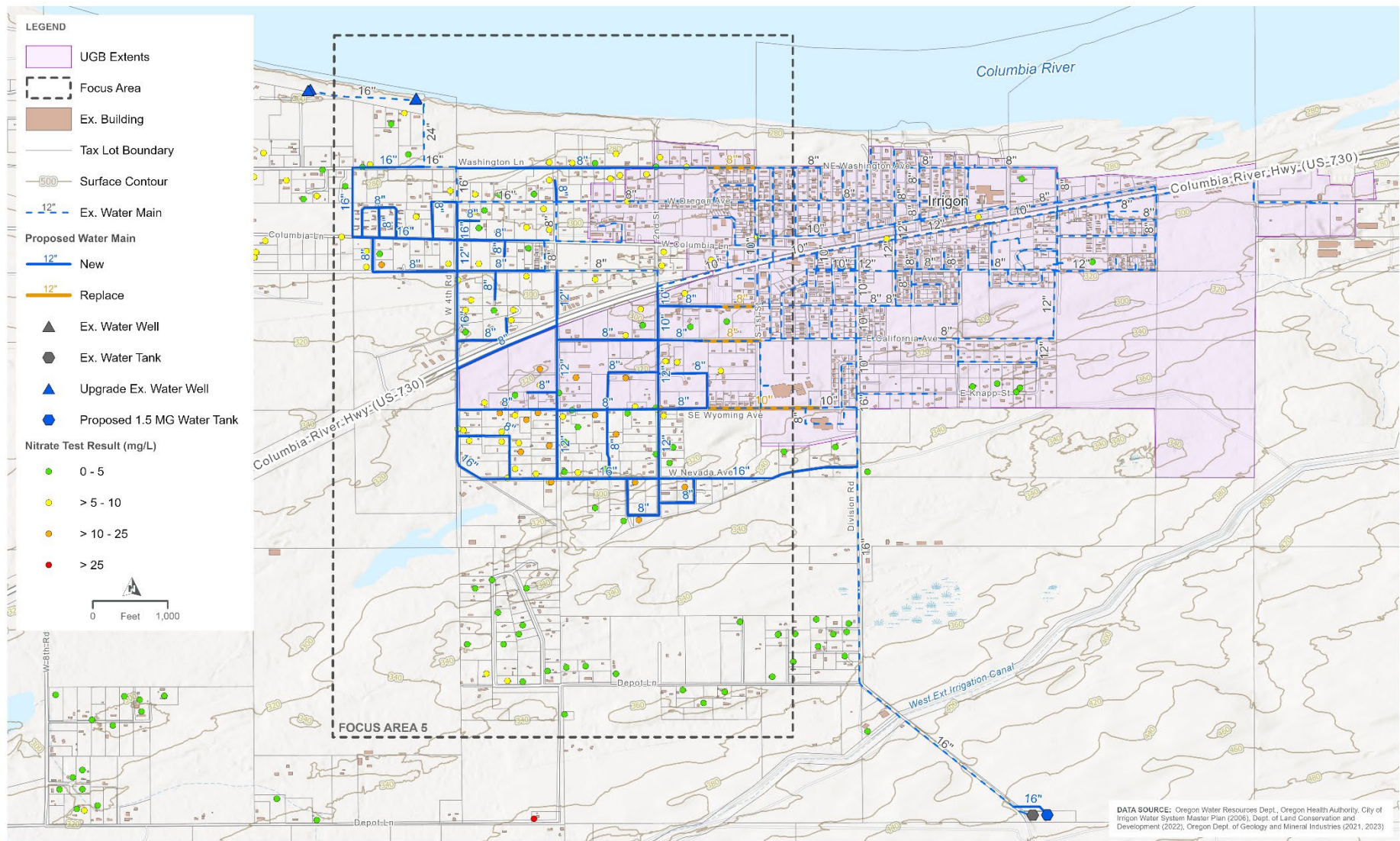
City-Specific Issues: Irrigon (FA-5)

- Water and sewer viewed as a package deal
- Some public relations challenges north of Hwy 730
- Considering ‘Urban Reserves’ as way to manage growth outside of UGB
- Concerned about incentives for annexation
- Concerned about special districts
- See expansion of public utilities further south and to northeast
- Needing well retrofits with new filtration systems

Approximate Households - Irrigon



Concept Design – City of Irrigon



WATER SYSTEM EXPANSION CONCEPT
FOCUS AREA 5 - CITY OF IRRIGON
(FIGURE 2)

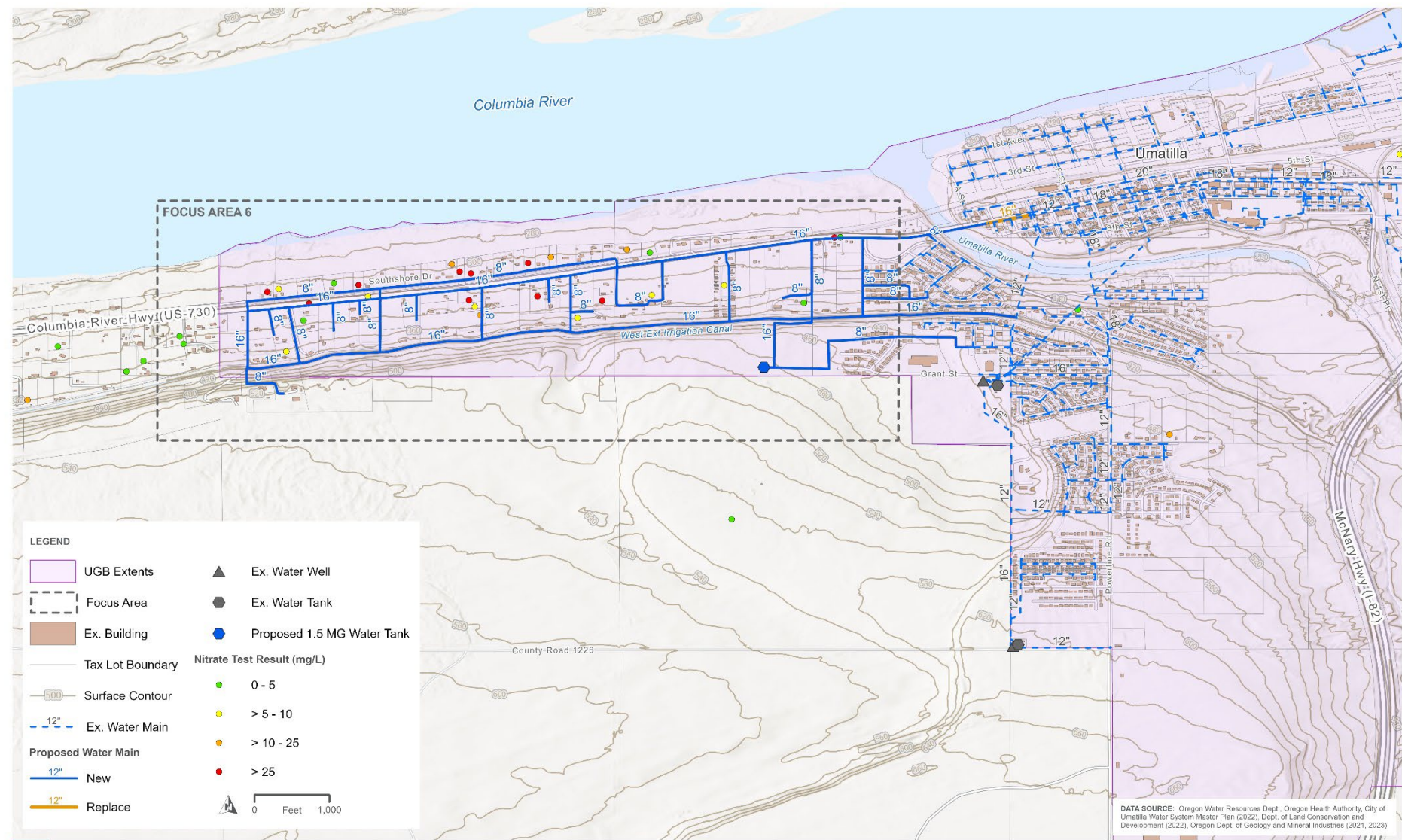
City-Specific Issues: Umatilla (FA-6)

- Views expansion of the water system as generally feasible
- Also expand sanitary sewer at the same time
- Water supply transitioning from majority groundwater to surface
- Looking for purple pipe opportunities
- Special circumstances with Power City and failing septic systems

Approximate Households - Umatilla



Concept Design – City of Umatilla

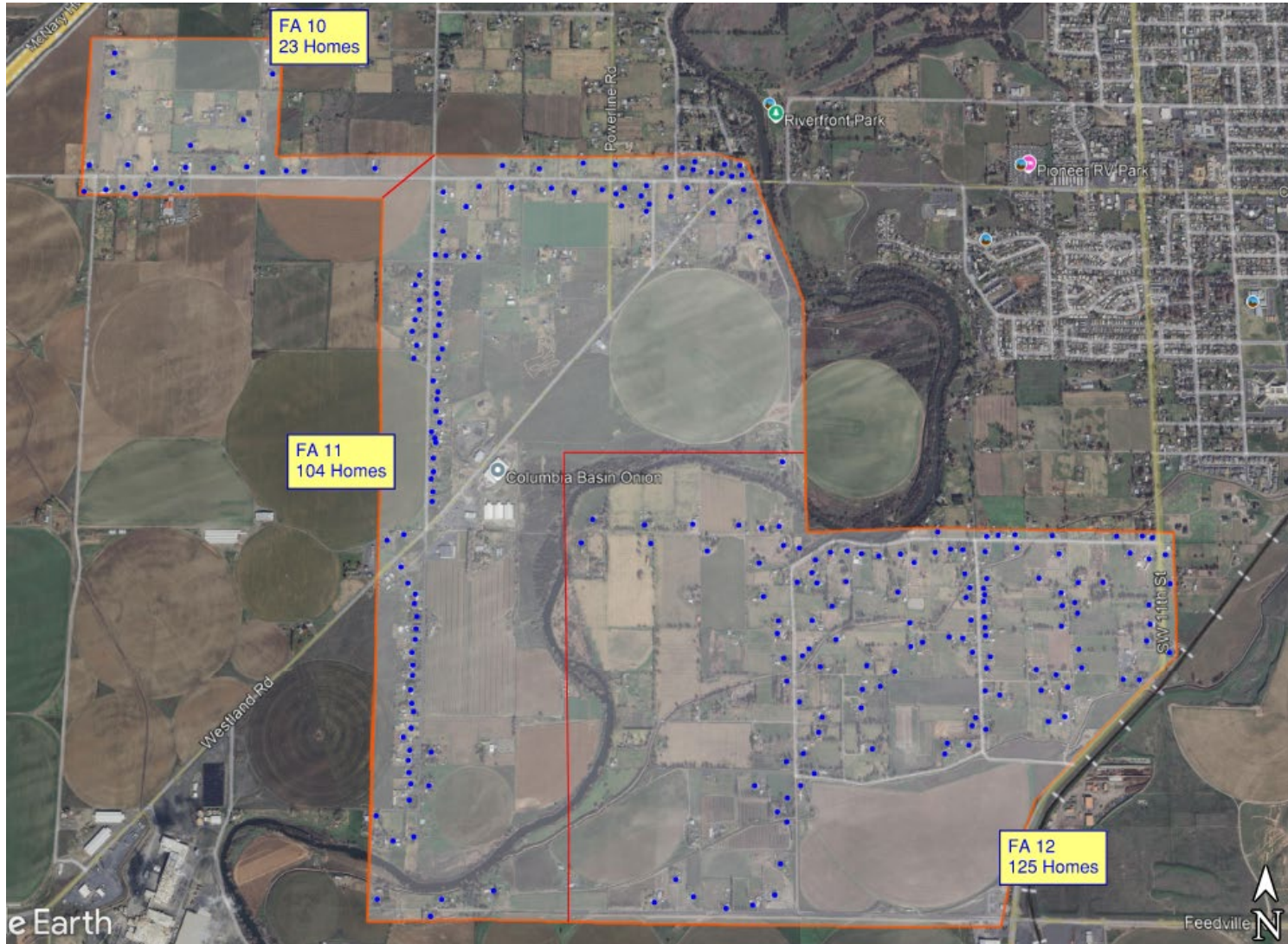


WATER SYSTEM EXPANSION CONCEPT
FOCUS AREA 6 - CITY OF UMATILLA
(FIGURE 3)

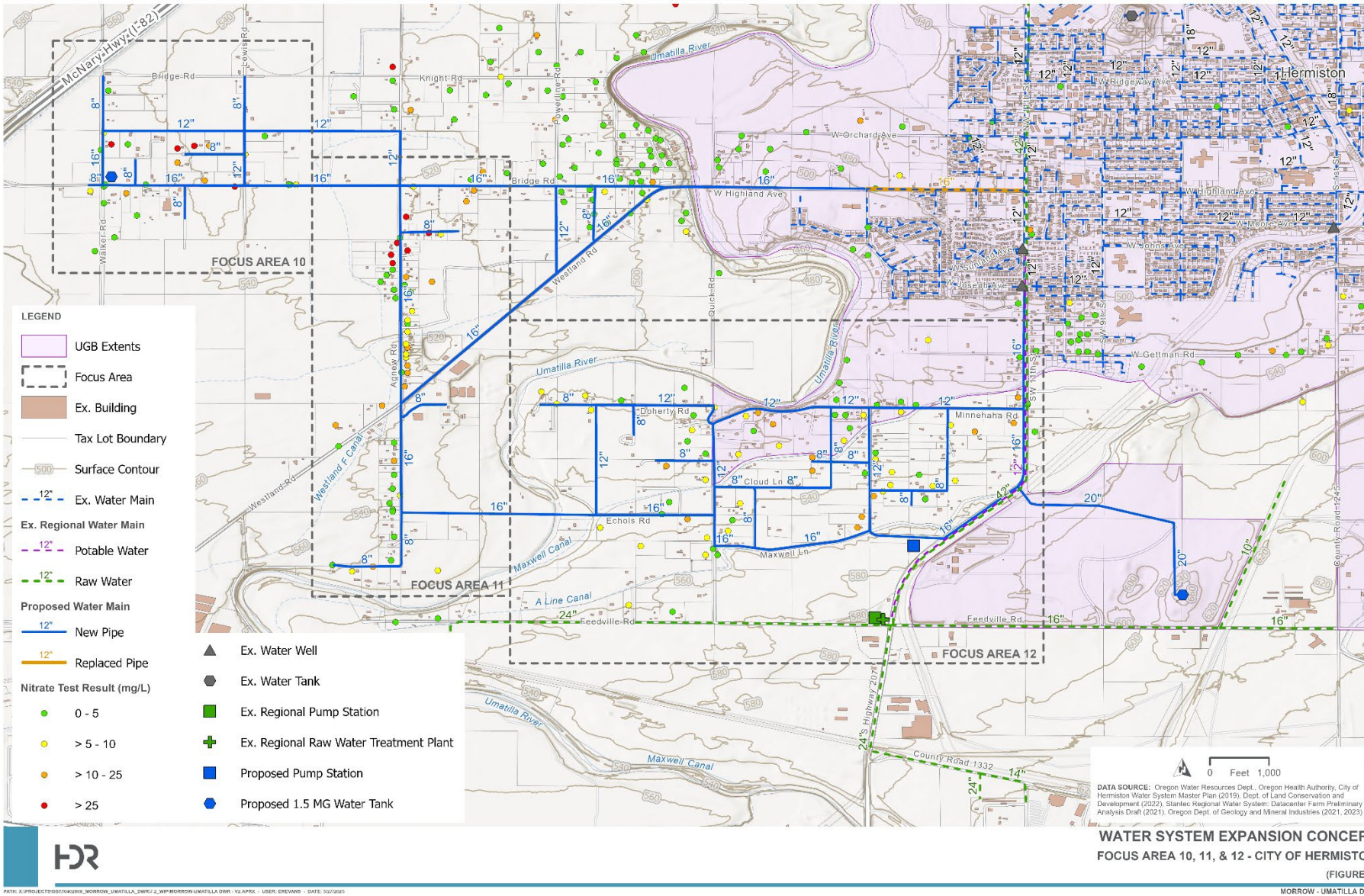
City-Specific Issues: Hermiston (FA-10, 11, 12)

- Monthly base charge commensurate with density
- Transfer of water rights to City
- Waiver of right to oppose annexation
- Requires expansion of PW department for O&M
- Geographic challenges with Umatilla River
- RWS could be upgraded for additional potable supply

Approximate Households - Hermiston



Concept Design – City of Hermiston



Construction Cost Summary

CITY OF UMATILLA				
Item	Quantity	Units	Unit Cost	Item Cost
8" Water Main Complete	25,300	LF	\$ 200	\$ 5,060,000
16" Water Main Complete	23,800	LF	\$ 300	\$ 7,140,000
Water Storage Tank - 1.5 Mil. Gallon	1	LS	\$ 2,250,000	\$ 2,250,000
Booster Pump Station	1	LS	\$ 1,000,000	\$ 1,000,000
Trenchless Crossing	500	LF	\$ 500	\$ 250,000
Residential Service	170	EA	\$ 3,000	\$ 510,000
Total				\$ 16,210,000
CITY OF IRRIGON				
Item	Quantity	Units	Unit Cost	Item Cost
8" Water Main Complete	31,700	LF	\$ 200	\$ 6,340,000
10" Water Main Complete	2,500	LF	\$ 225	\$ 562,500
12" Water Main Complete	7,300	LF	\$ 250	\$ 1,825,000
16" Water Main Complete	14,200	LF	\$ 300	\$ 4,260,000
Water Storage Tank - 1.5 Mil. Gallon	1	LS	\$ 2,250,000	\$ 2,250,000
Booster Pump Station	1	LS	\$ 1,000,000	\$ 1,000,000
Residential Service	281	EA	\$ 3,000	\$ 843,000
Total				\$ 17,380,500

Construction Cost Summary

CITY OF BOARDMAN				
Item	Quantity	Units	Unit Cost	Item Cost
8" Water Main Complete	30,000	LF	\$ 200	\$ 6,000,000
12" Water Main Complete	15,100	LF	\$ 250	\$ 3,775,000
16" Water Main Complete	47,800	LF	\$ 300	\$ 14,340,000
24" Water Main Complete	4,900	LF	\$ 350	\$ 1,715,000
Water Storage Tank - 1.5 Mil. Gallon	1	LS	\$ 2,250,000	\$ 2,250,000
Booster Pump Station	1	LS	\$ 1,000,000	\$ 1,000,000
Trenchless Crossing	200	LF	\$ 350	\$ 70,000
Residential Service	241	EA	\$ 3,000	\$ 723,000
Total				\$ 29,873,000
CITY OF HERMISTON				
Item	Quantity	Units	Unit Cost	Item Cost
8" Water Main Complete	23,700	LF	\$ 200	\$ 4,740,000
12" Water Main Complete	25,600	LF	\$ 250	\$ 6,400,000
16" Water Main Complete	48,600	LF	\$ 300	\$ 14,580,000
20" Water Main Complete	4,900	LF	\$ 350	\$ 1,715,000
Water Storage Tank - 1.5 Mil. Gallon	1	LS	\$ 2,250,000	\$ 2,250,000
Booster Pump Station	1	LS	\$ 1,000,000	\$ 1,000,000
Trenchless Crossing	500	LF	\$ 500	\$ 250,000
Residential Service	252	EA	\$ 3,000	\$ 756,000.00
Total				\$ 31,691,000

Next Steps for PWS Connection Concepts

- Compare to non-connection alternatives
- Analyze financials and rates
- Develop funding approach
- Develop approach for City needs/policies
- Consider public outreach/education
- Complete feasibility study with 10% design



3. Perspectives from Cities

Steering Committee and City Perspectives

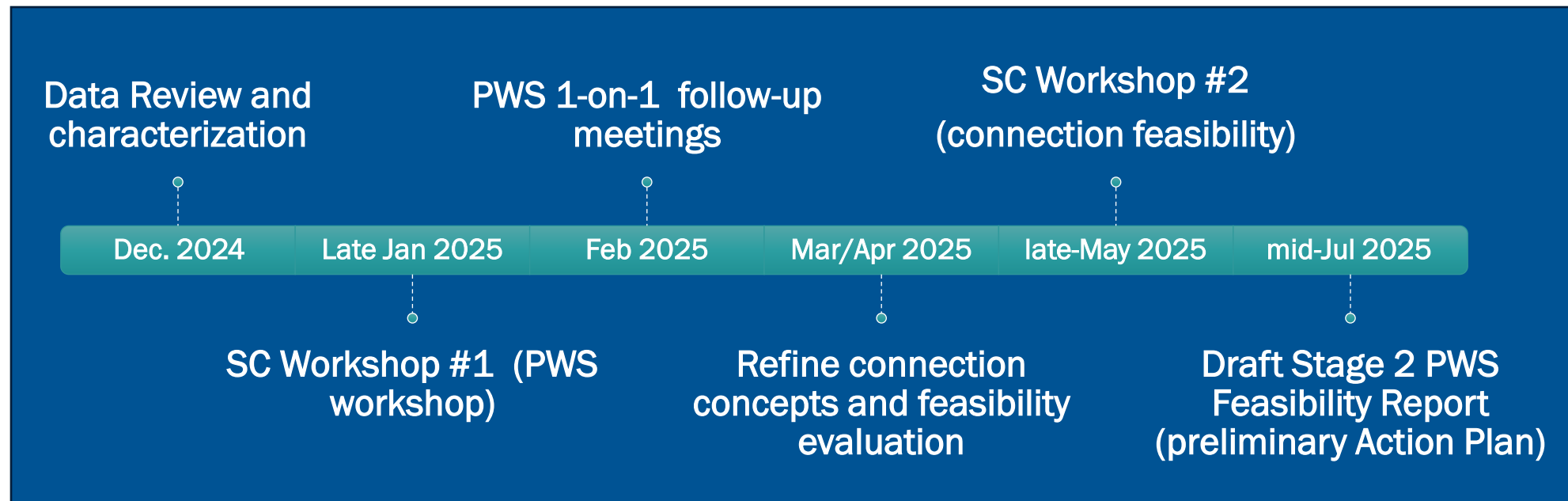
- Refinements, corrections to information you heard
- Water system needs



Discussion

(Near-term) Next Steps

- Roadmap Public Meeting Update June 26, 2025
- Stage 2 PWS Feasibility Report
- Transition into Stage 3 – Non-connection Options



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Thank you!