Sonoma Water

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West County Water Quality and Recycled Water Supply Feasibility Study

Stakeholder Committee Meeting #4

August 27, 2025

sonomawater.org

AGENDA

1. Opening Remarks
2. Introductions and Agenda Review
3. Presentation: Review Study Scope of Work and Timeline
4. Presentation: Refined Evaluation of Regionalization Alternatives
5. Presentation: Unsewered Community Cluster Evaluation
6. Discussion: Opportunities and Challenges for Applying Unsewered Community Clusters to Refined Alternatives
7. Wrap Up/Next Steps
8. ADJOURN

Study Scope of Work and Timeline Overview

Parastou Hooshialsadat, Sonoma Water

Feasibility Study Scope of Work

1. Assess the feasibility and benefits of combining four existing wastewater districts within West County

2. Evaluate the potential for regional projects to serve unsewered communities

3. Assess the amount of recycled water that could be available for reuse

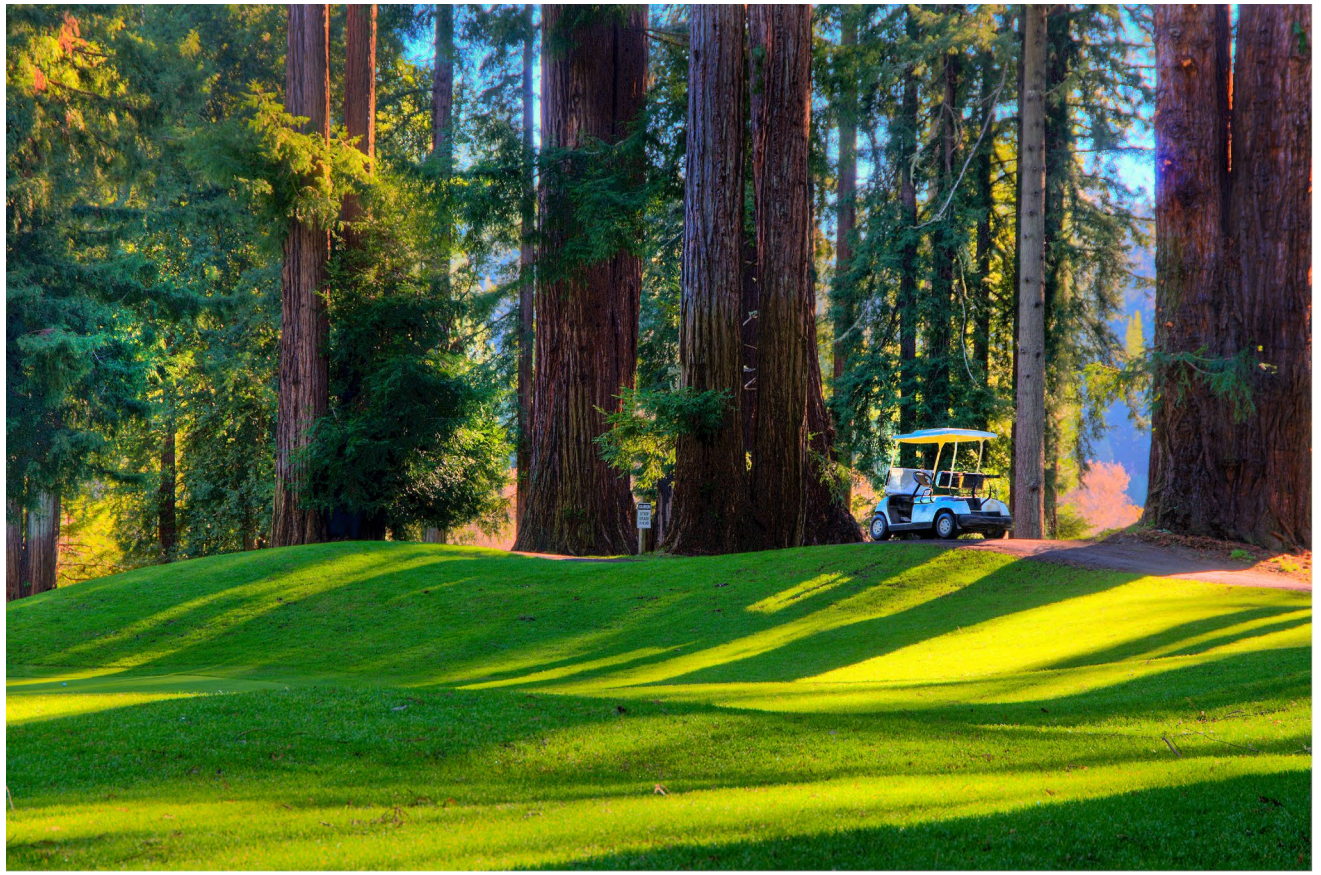
4. Evaluate the benefits of regionalization on climate adaptation and resiliency.

NOTE: THE STUDY IS NOT AN IMPLEMENTATION PLAN OR ENGINEERING DESIGN!

Timeline (approx.)	Description	Responsible Group	Dates
Q3 2024	• Service Area Description Workshop	TAC	8/27/24
Q4 2024	• Committee Meeting #1: Study Purpose and Initial Discussion of Study Concepts, Planning Area, and Charter	Committee	10/22/24
	• Wastewater Regionalization Alternative Review Workshop	TAC	11/26/24
Q1 2025	• Committee Meeting #2: Introduce Initial Regionalization Alternatives	Committee	2/5/25
	• Regional Alternatives Technical Memorandum	TAC	3/18/25
Q2 2025	• Committee Meeting #3: Continued Discussion of Regionalization Alternatives	Committee	5/14/25
	• Shortlisted Alternatives Workshop (Define Recommended Regionalization Alternatives) • Unsewered Community Ranking and Priority Area Connections Workshop	TAC	6/1/25
Q3 2025	• Committee Meeting #4: Recommended Regionalization Alternatives and Discussion of Unsewered Community Clusters	Committee	8/27/25
	• Unsewered Communities, Recycled Water Supply, and Climate Change Resiliency Workshop	TAC	9/10/25
Q4 2025	• Committee Meeting #5: Presentation of Comprehensive Regionalization Alternatives (with recycled water options and unsewered communities incorporated)	Committee	11/12/25
	• Draft Feasibility Study Report to North Coast RWQCB	TAC	11/28/25
Q1 2026	• Committee Meeting #6: Review DRAFT Feasibility Study Report	Committee	TBD
Q2 2026	• Committee Meeting #7: Review FINAL Feasibility Study Report	Committee	TBD
Q3 2026	• Committee Meeting #8: Project Advancement Report Preparation	Committee	TBD

Refined Evaluation of Regionalization Alternatives

Kathryn Gies, West Yost



Review of Alternatives

Alternative	Short Description	Detailed Description
Local Facility Scenarios		
1a*	**Two Local Facilities**	**RRCSD/Monte Rio/Villa Grande to RRCSD WWTP**
		FWD/OCSD/GCSD flows to FWD/GSCD WWTPs
1b	One Facility at RRCSD	All West County flows to Expanded RRCSD WWTP
1c	**One Facility at FWD**	**All West County flows to FWD/GCSD WWTPs**
Export Scenarios		
2a*	**Export to Windsor**	**All West County flows to Windsor WWTP**
2b	**Export to Santa Rosa**	**All West County flows to Santa Rosa WWTP**
2c	Export to Windsor and Santa Rosa	RRCSD/Monte Rio/Villa Grande to Windsor WWTP
		FWD/OCSD/GCSD flows to Santa Rosa WWTP
Combination Scenarios		
3a	Treat at RRCSD	RRCSD/Monte Rio/Villa Grande to RRCSD WWTP
	GCSD/FWD Export to Santa Rosa	FWD/OCSD/GCSD flows to Santa Rosa WWTP
3b*	**RRCSD Export to Windsor**	**RRCSD/Monte Rio/Villa Grande to Windsor WWTP**
	Treat at GCSD/FWD	**FWD/OCSD/GCSD flows to FWD/GCSD WWTPs**

*Alternatives 1a, 2a and 3b have been preliminarily identified as preferred by Stakeholders

Summary of Estimated Project Costs

Cost Component	Alternative 1a: Two Local Facilities	Alternative 1c: One Facility at FWD	Alternative 2a: Export to Windsor	Alternative 2b: Export to the Laguna WWTP	Alternative 3b: Treat at GCSD/FWD; Export RRCSD to Windsor
CapEx	$84.1 M	$251.1 M	$296.1 M	$273.5 M	$312.5 M
20-Year Present Worth OpEx	$9.5 M	-$56.0 M	-$14.9 M	-$14.9 M	-$13.2 M
Total 20-Year Project Cost	**$93.6 M**	**$197.7 M**	**$281.2 M**	**$258.6 M**	**$299.3 M**

The costs shown do not include conveyance or treatment related to unsewered communities, nor potential need to expand the recycled water infrastructure. These additional costs are currently under evaluation and development.

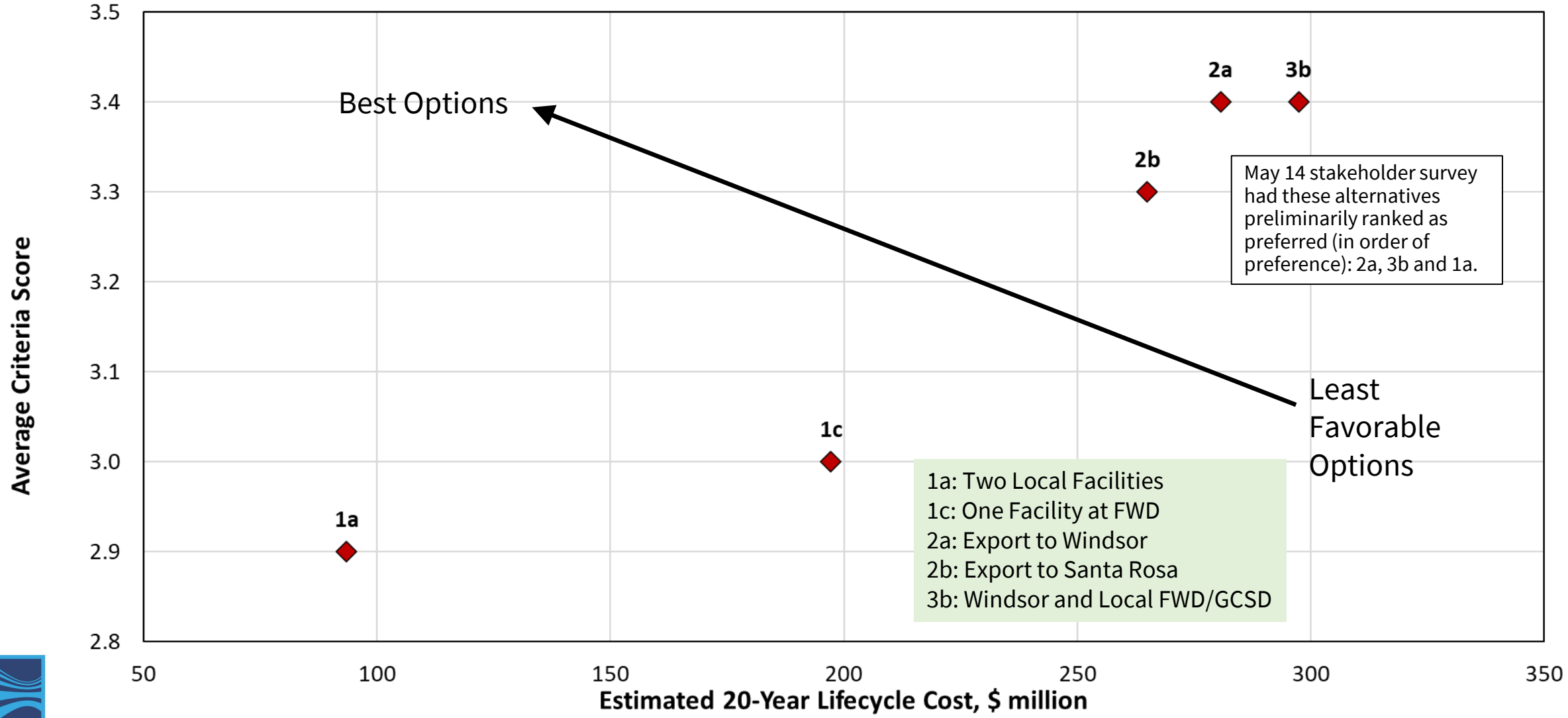
Weighting of Screening Criteria Scores from May 14 Stakeholder Meeting

- Average stakeholder ranking calculated (lowest score is best/highest ranking).
- Flexibility for adding unsewered communities identified as most important criteria, with environmental the next most important.

Screening Criteria	Average Stakeholder Ranking	Weighting[(a)]
Reliability/Ease of Operation	3.42	13.2%
Long-Term Regulatory Compliance	3.57	12.7%
Flexibility for Adding Unsewered Communities	2.40	18.8%
Local Recycled Water Benefits	3.42	13.2%
Environmental	3.00	15.1%
Resiliency	3.28	13.8%
Ease of Implementation	3.42	13.2%

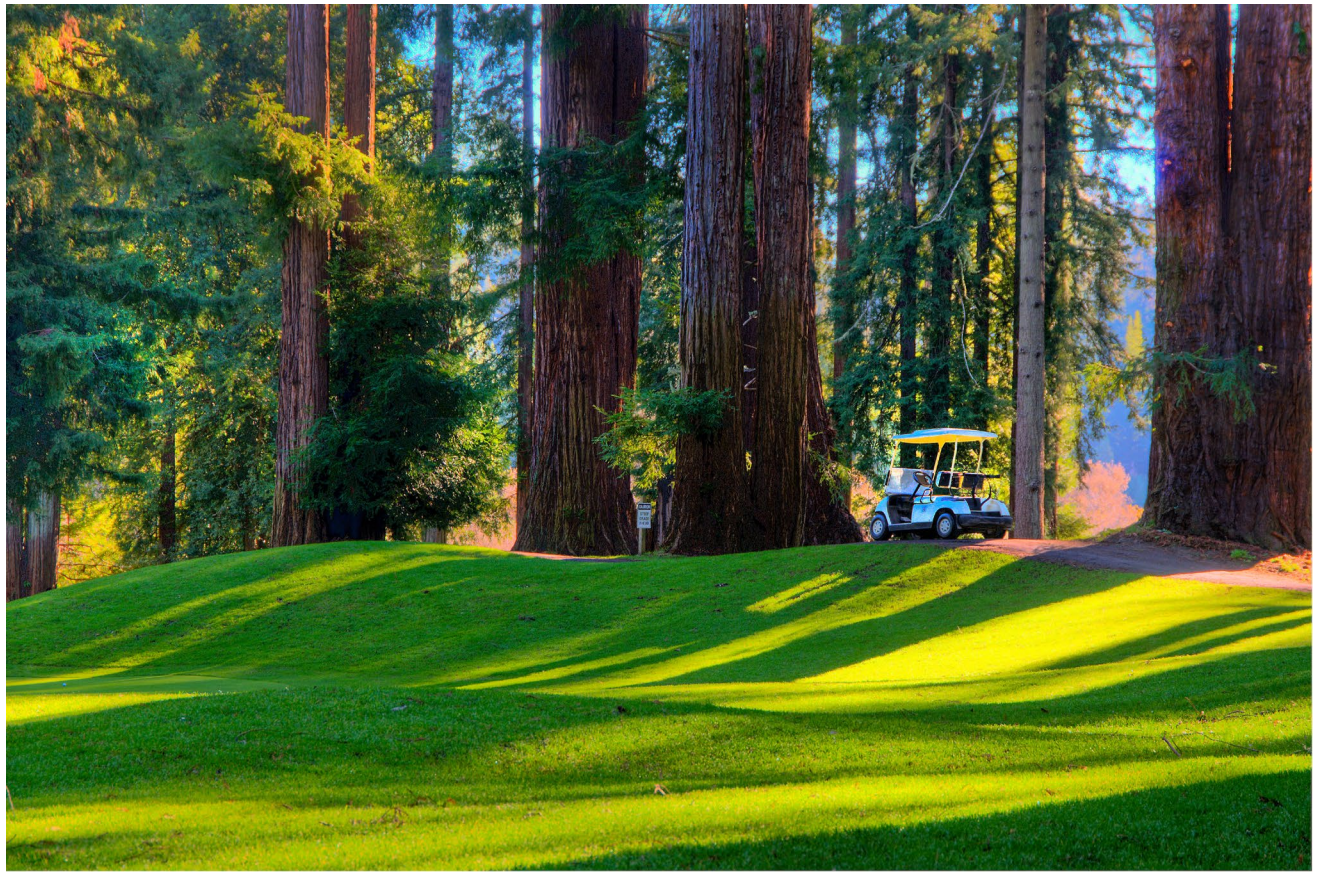
(a) Weighting calculated from ratio of respective average ranking value to sum of all average rankings.

Cost vs. Screening Scores Weighted Proportional to Rankings



Unsewered Community Cluster Evaluation

Kathryn Gies, West Yost



GIS Scoring Criteria for Unsewered Parcels

Criterion Description	Score			
	1	2	3	4
Opportunities				
Proximity to Existing Sanitation District Service Area boundary	Outside > 3.0 miles	Outside 1.5-3.0 miles	Outside < 1.5 mile	Inside boundary (Value of 0)
Proximity to major roads/highways (Highway 116, Bohemian Highway, River Road, Graton Road, Mirabel Road)	> 1/2 mile (2,640 feet)	500 feet – 1/2 mile	250 – 500 feet	< 250 feet
Parcel density	> 10 ac/parcel	2 – 10 ac/parcel	0.25 – 2 ac/parcel	≤ 0.25 acres/parcel
Failure Likelihood/Consequences				
Slope of parcel	Acceptable (< 25 percent)			Not Acceptable (> 25 percent)
Rating for Septic Tank Adsorption			Somewhat limited	Very limited
Proximity to Russian River or other surface water body	> 1,000 feet	500- 1,000 feet	250 - 500 feet	< 250 feet
Proximity to 100-year floodplain	Outside floodplain > 600 feet	Outside floodplain by 200-600 feet	Outside floodplain < 200 feet	In floodplain
Proximity to water wells	No wells within 100 feet			Wells within 100 feet

Percent of Parcels Meeting Scoring Criteria

Criterion Description	Score			
	1	2	3	4
Opportunities				
Proximity to Existing Sanitation District Service Area boundary	< 1%	**36%**	**60%**	4%
Proximity to major roads/highways (Highway 116, Bohemian Highway, River Road, Graton Road, Mirabel Road)	**33%**	**43%**	9%	15%
Parcel density	7%	**24%**	**41%**	**28%**
Failure Likelihood/Consequences				
Slope of parcel	**86%**			14%
Rating for Septic Tank Adsorption			6%	**94%**
Proximity to Russian River or other surface water body	**79%**	9%	5%	6%
Proximity to 100-year floodplain	**69%**	11%	8%	12%
Proximity to water wells	**83%**			17%

GIS Scoring Results and Distribution

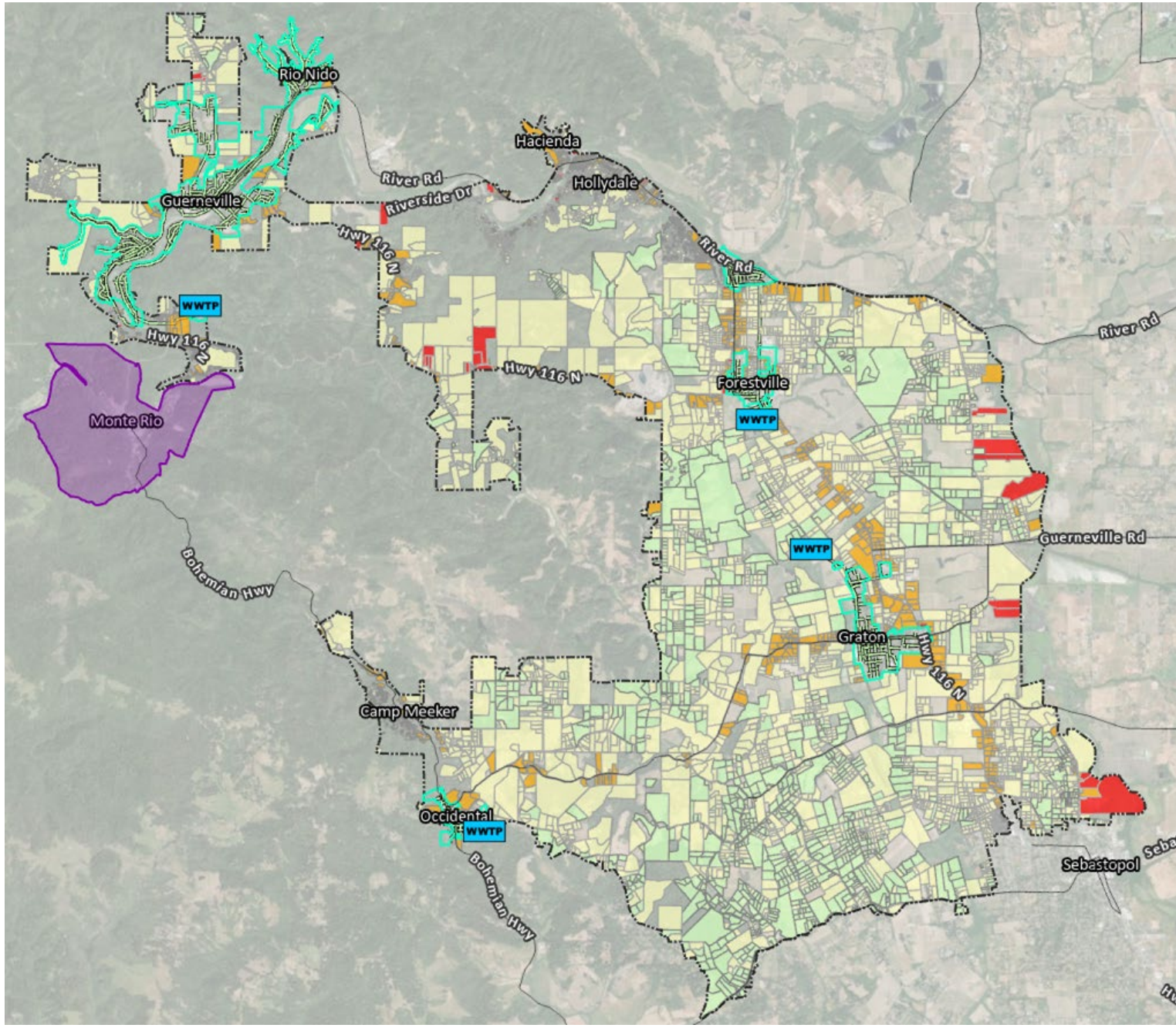
Likelihood/ Consequence Score	Opportunities Scores								
	12	11	10	9	8	7	6	5	4
19-20	-	-	-	-	<1%	-	<1%	-	-
17-18	-	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%
15-16	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%
13-14	<1%	<1%	2%	2%	3%	1%	<1%	<1%	<1%
11-12	<1%	2%	3%	4%	5%	6%	6%	3%	<1%
9-10	-	<1%	2%	2%	3%	2%	1%	<1%	<1%
7-8	<1%	1%	4%	7%	10%	11%	9%	5%	<1%

Relative Score	Total Parcels	Percentage of Parcels
Low	1,054	16%
Medium	3,338	51%
Medium-High	1,784	27%
High	344	5%

33%

Spatial Distribution of Unsewered Analysis Results

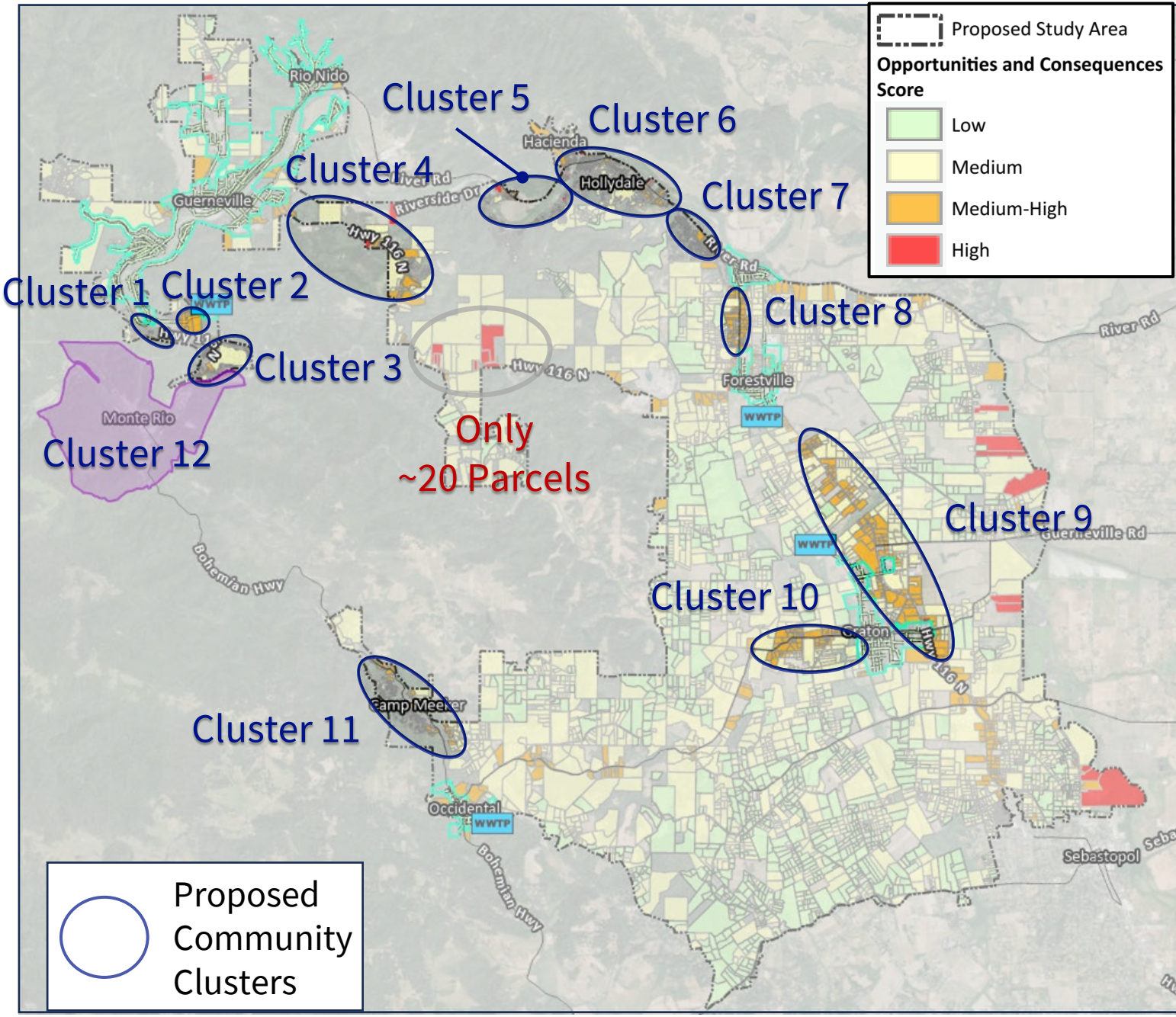
- Red parcels generally smaller parcels and along major roadways.
- Groupings of red parcels around each West County service area.
- Orange parcels generally surrounding red parcels and along major roadways.
- Cluster needs to be at least 50 red and orange parcels.



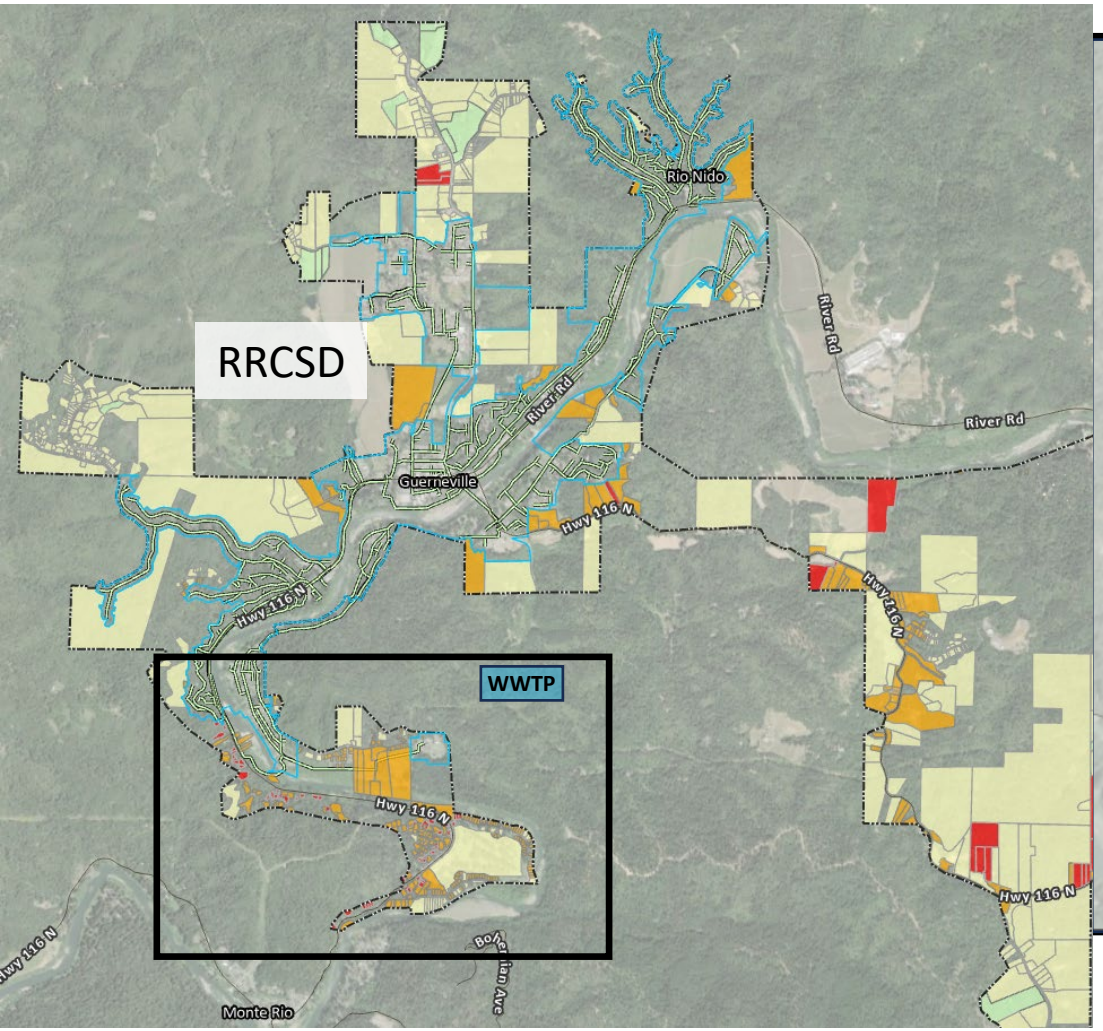
Selection and Ranking of Community Clusters

ID	Name	No. of Parcels
1	Guerneville South of River	50
2	Guerneville North of River	50
3	Northwood	165
4	Hwy 116 East of Guerneville	55
5	Summerhome Park Road	65
6	Hacienda and Hollydale (DACs)	335
7	River Road North of Forestville	360
8	Forestville	100
9	Hwy 116 East of Graton	135
10	Graton West	60
11	Camp Meeker (DAC)	340
12	**Monte Rio/Villa Grande**	780

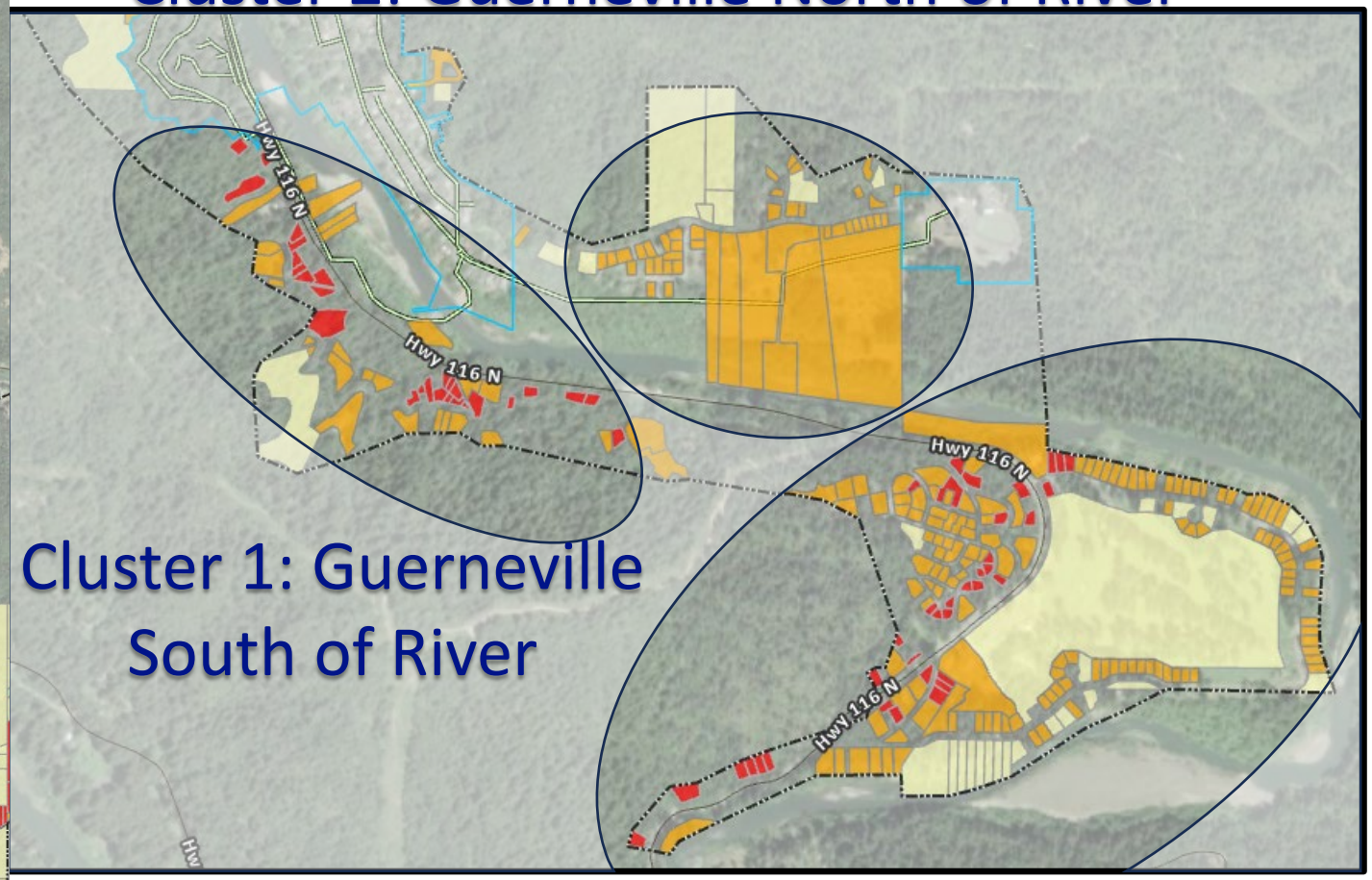
Please note that the number of parcels and cluster boundaries are defined for evaluation purposes only. Values shown are both approximate and preliminary.



Clusters 1-3: Guerneville Area



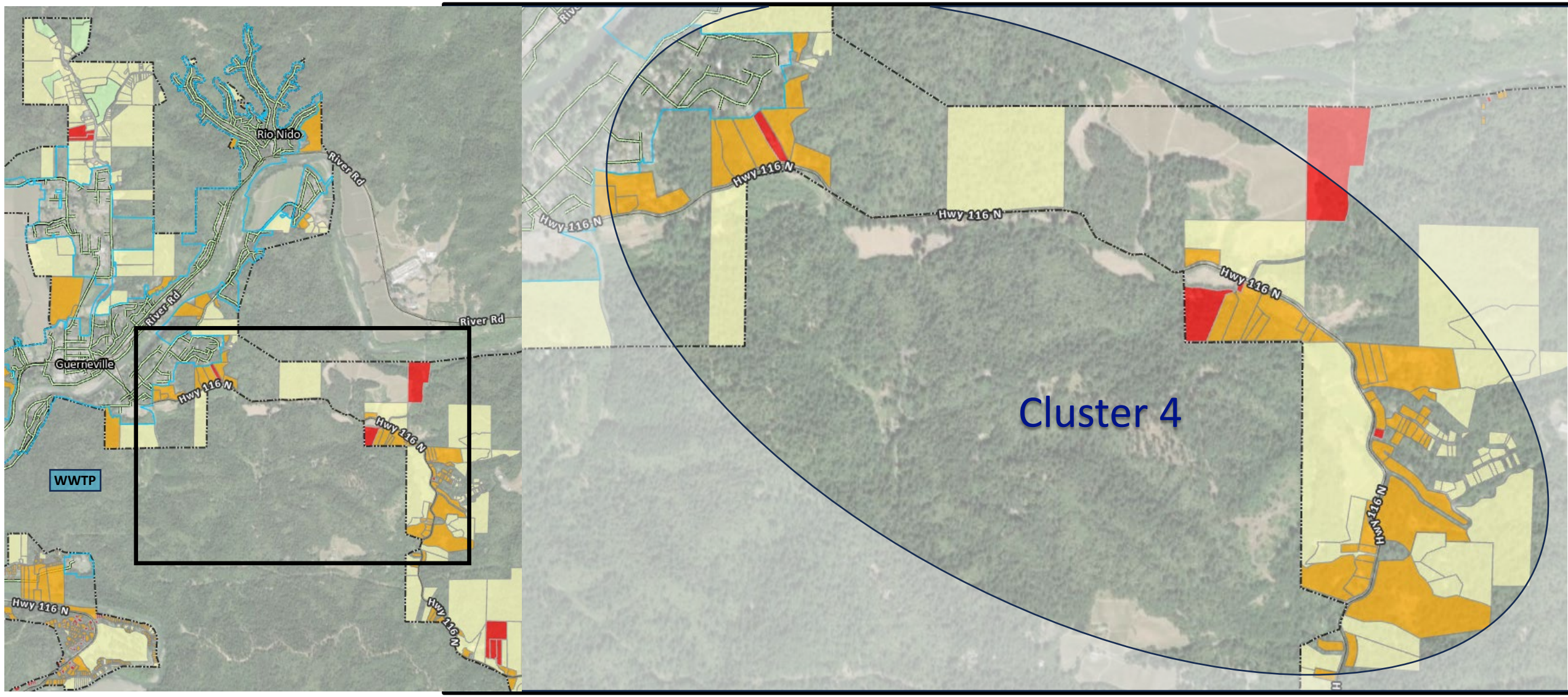
Cluster 2: Guerneville North of River



Cluster 1: Guerneville South of River

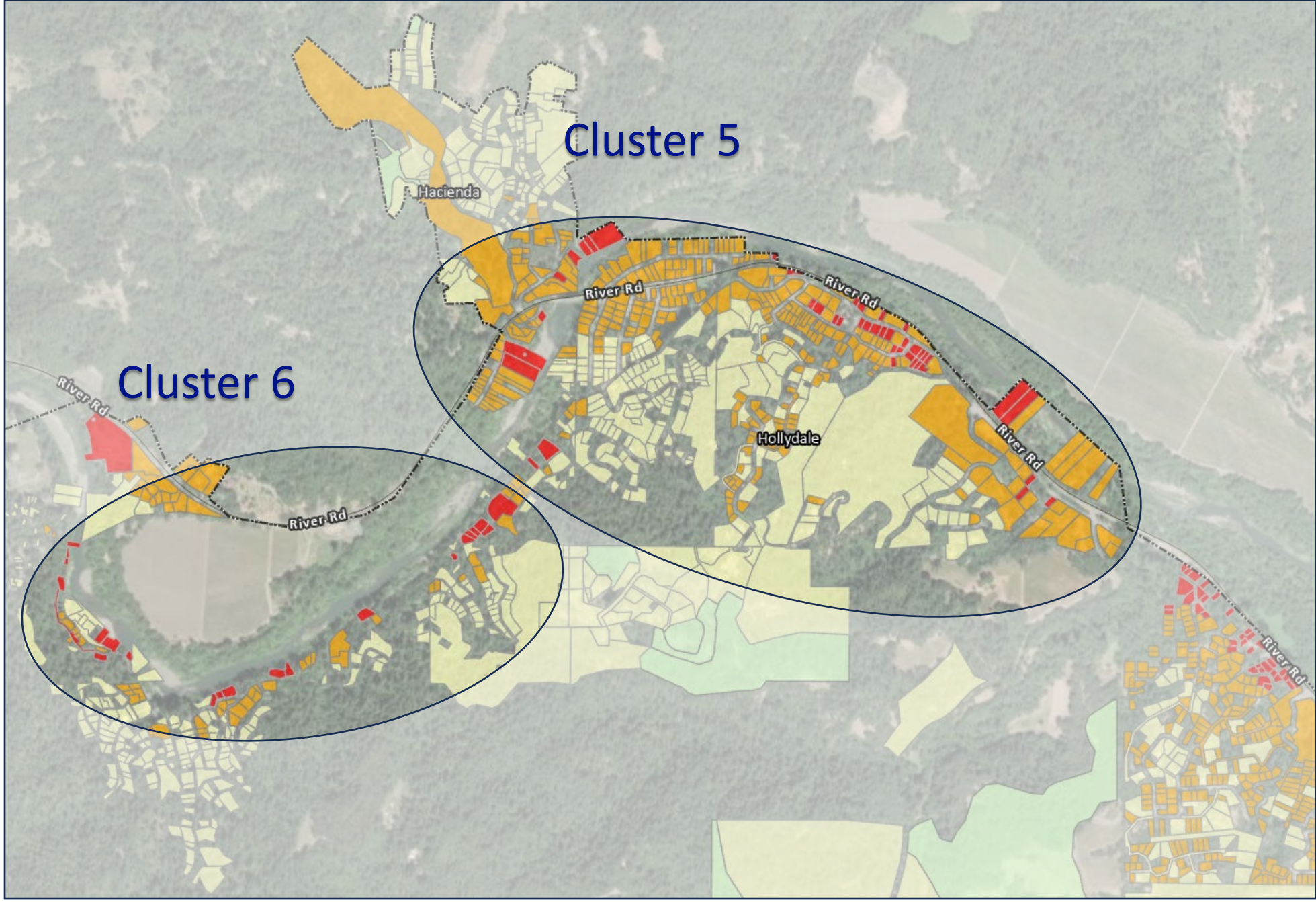
Cluster 3: Northwood

Cluster 4: Hwy 116 E. of Guerneville



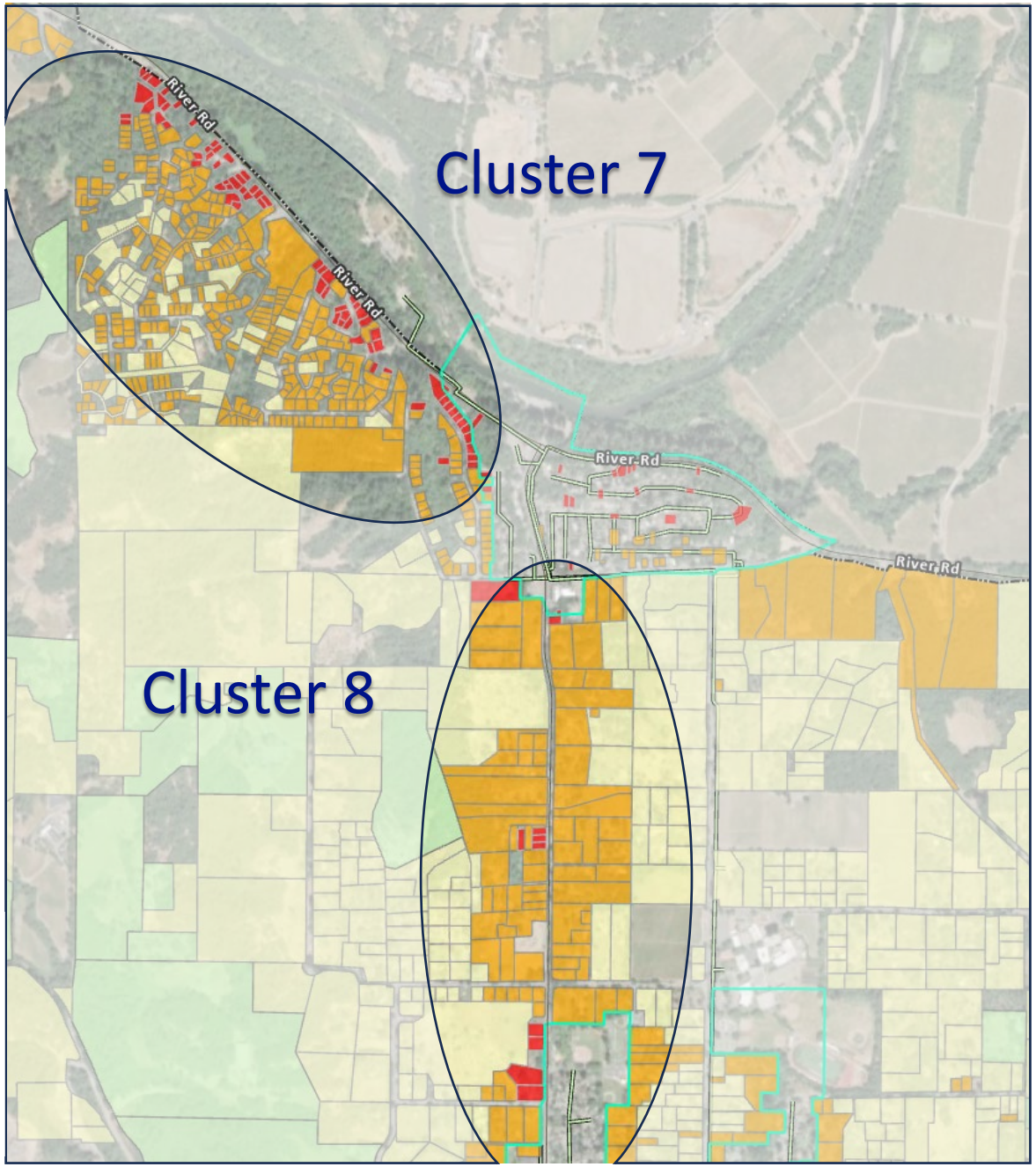
Clusters 5: Hacienda and Hollydale

Cluster 6: Summerhome Park Road

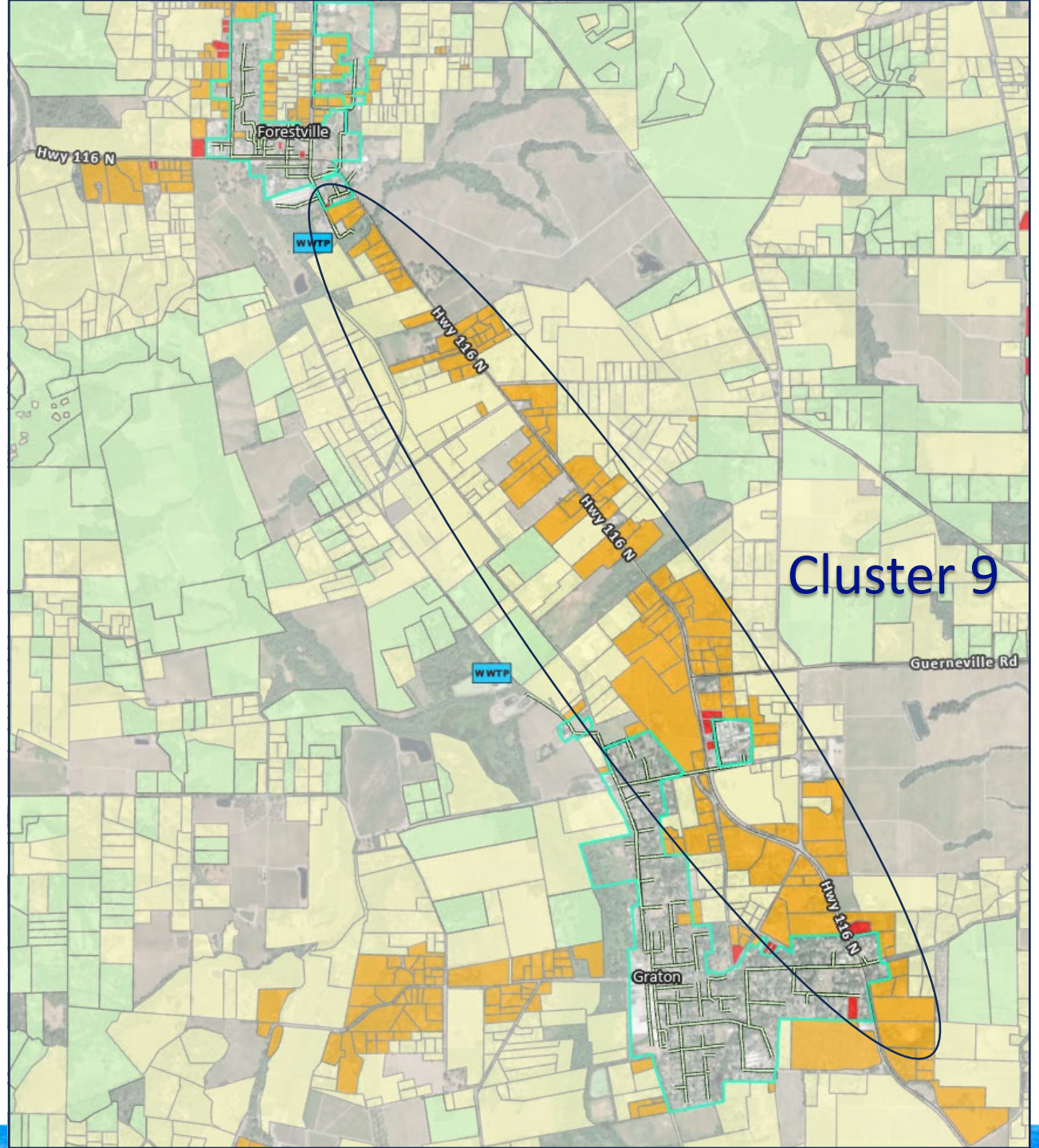


Cluster 7: North of Forestville

Cluster 8: Forestville

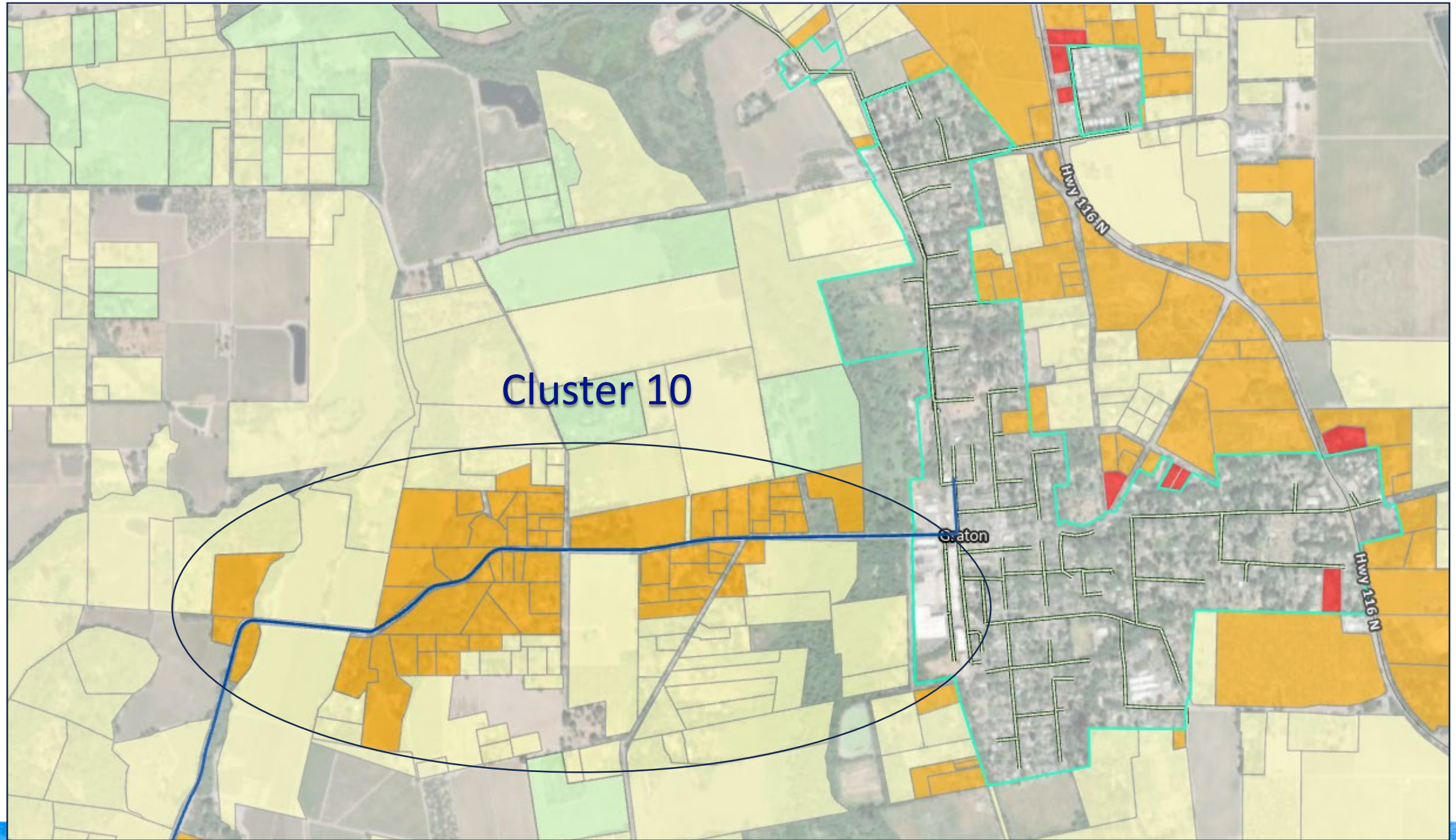


FWD staff indicated already hoping to connect parcels along these roads.

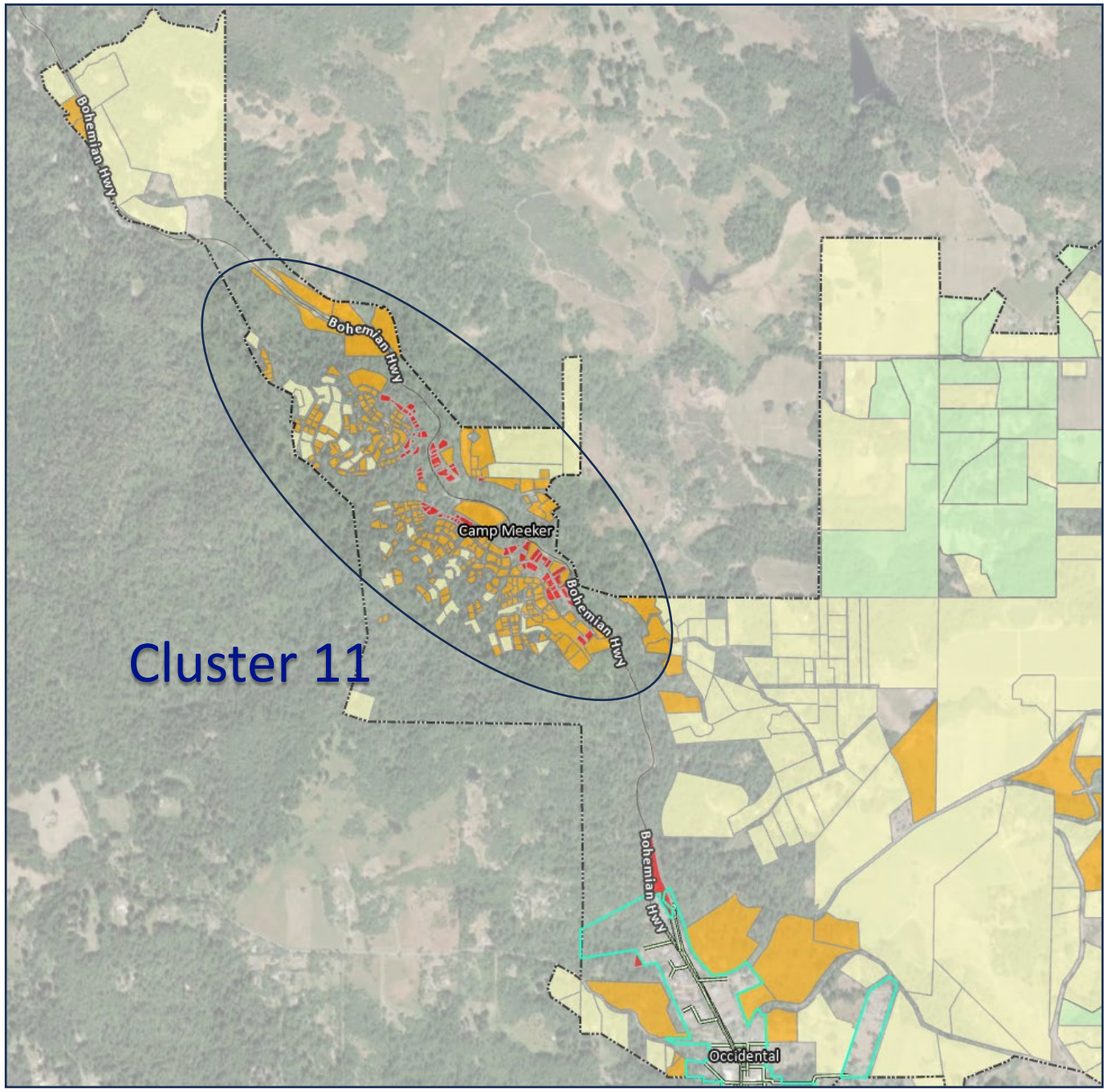


Cluster 9: Hwy 116 East of Graton

Cluster 10: Graton West



Cluster 11: Camp Meeker



Next Steps on Priority Areas (Unsewered Areas)

- Estimate dedicated collection system costs for each cluster based on unit costs for Monte Rio/Villa Grande.
- Estimate additional costs for major new (or upsized) conveyance pipelines to WWTPs.
- Estimate costs for expanded treatment.
- Compare alternatives with unsewered communities included.

Discussion: Opportunities and Challenges for Applying Unsewered Community Clusters to Refined Alternatives

Stakeholder Committee Members

Regionalization Alternatives: Questions for Consideration

- What additional feedback or concerns do you have about the top five alternatives based on the new information around capital and operating costs?
- What questions do you have about the identified Community Clusters? What's missing?
- Which alternatives are most supportive of connecting unsewered communities? Which may be more challenging? Why?

Thank you!

Project Manager/Engineering Lead: Parastou Hooshialsadat parastou.hooshialsadat@scwa.ca.gov	**Outreach and Communications Lead:** Andrea Rodriguez andrea.rodriguez@scwa.ca.gov
Committee Facilitator: Sam Magill s.magill@csus.edu	
Project Website: https://www.sonomawater.org/westcountystudy	

Next Meeting: November 12, 2025 at 4pm

WOULD YOU BE INTERESTED IN ATTENDING IN-PERSON?

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