Mosier Well Evaluations

Mosier Watershed Council and Wasco County Soil & Water Conservation District

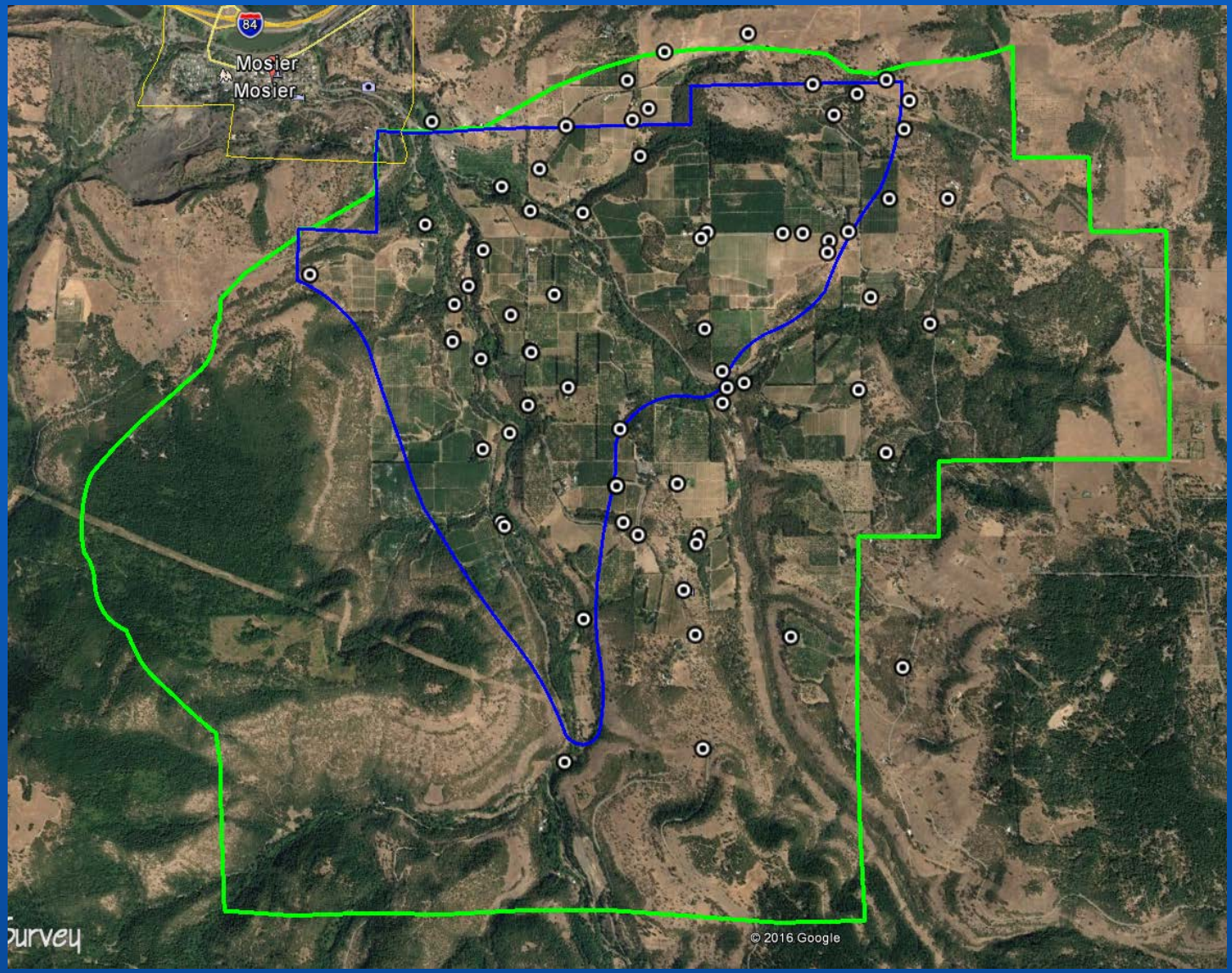
November 16, 2016

GSI Water Solutions, Inc.

Total Number of Wells to Date…

- Identified: 70
- Desktop Assessments Completed: 70
  - Not Commingling: 23
  - Well 24 was decommissioned in 2013
  - Potential for Commingling: 47
- Field Assessed: 28
  - GSI: 20
    - Well 57 has liner; water level taken but no video
    - Well 45 has liner
  - OWRD/USGS: 8
- Repaired: 1 (replaced)
- Remaining wells in need of follow up: 19

Desktop Assessed Wells



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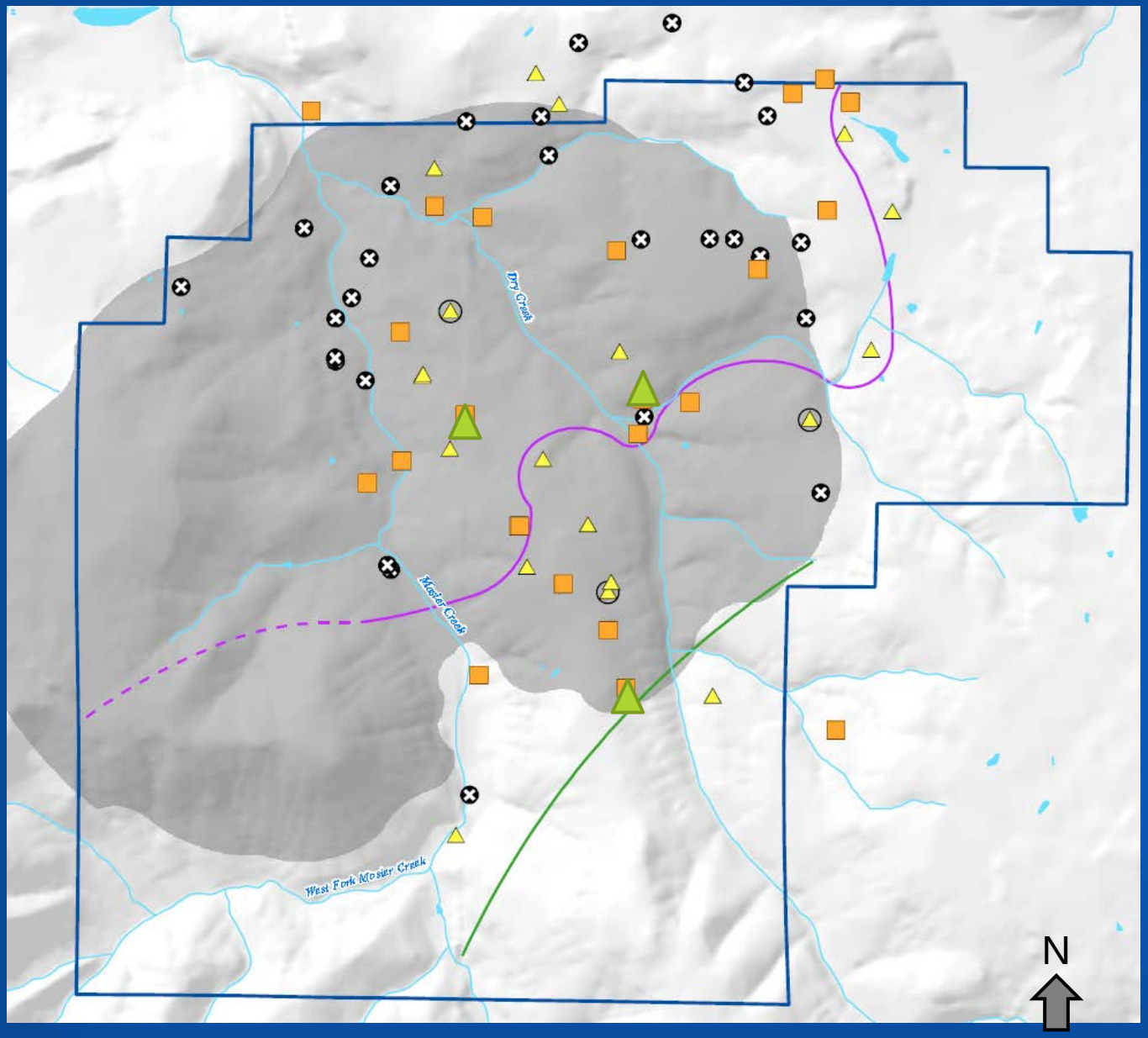
Well Evaluation Status



- Desktop and Field Evaluation Completed*
- Desktop Evaluation Completed
- Unlikely Commingling Based on Desktop Assessment and/or Discussion with OWRD Staff

All Other Features

- Pomona/Priest Rapids Administrative Area
- USGS Zone 1 Area
- Approximate Location where Composite Groundwater Elevation Intersects the Priest Rapids Basalt Aquifer. The Priest Rapids Basalt Aquifer is Generally Saturated at Lower Elevations and Unsaturated at Higher Elevations.
- Approximate Location where Composite Groundwater Elevation Intersects the Pomona Basalt Aquifer. The Pomona Aquifer is Generally Saturated at Lower Elevations and Unsaturated at Higher Elevations. (Dashed where Inferred)
- Watercourse
- Waterbody

Preliminary Repair and Replacement Prioritization

Wells	Proximity to Thrust Fault (points 1 to 8)	Contributing Aquifer (points 1 to 4)	Commingling Flow Estimate (points 1 to 8)	Total Points (points 4 to 20)
	8	4	2	14
	8	4	1	13
	8	4	1	13
	8	4	0	12
	4	4	2	10
	4	4	1	9
	4	4	1?	9?
	4	4	?*	8
	4	4	0	8
	4	4	0	8
	2	4	1	7
	2	4	1	7
	2	4	1	7
	2	4	1	7
	2	4	1	7
	2	4	1	7
	2	4	1	7
	2	4	0	6
	2	4	0	6
	2	4	?*	6
	2	4	?*	6
	2	4	?*	6
	0	4	0	4

Repair and Replacement Prioritization Scheme

Up-gradient proximity to the Rocky Prairie Thrust fault

- < 1/2 mile: 8 points
- 1/2-1 mile: 4 points
- > 1-2 miles: 2 points
- > 2 miles: 1 point

Contributing Aquifer

- Columbia River Basalt: 4 points
- Dalles Formation: 2 points
- Other: 1 point

Commingling Flow Rate
(highest rate estimated)

- > 10 gallons per minute: 8 points
- 6-10 gallons per minute: 4 points
- 3-5 gallons per minute: 2 points
- 1-2 gallons per minute: 1 point
- No commingling: 0 points

Total Possible Points: 2 - 20

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