

# Harney Groundwater Investigation

## Groundwater Study Update

Oregon Water Resources Department



# Harney Groundwater Investigation

## Presentation Outline

- OWRD Work Done Since April Meeting
- Quarterly Groundwater Level Update
- OWRD Work for Summer-Fall

# Harney Groundwater Investigation

## Work Done Since April Meeting

- Quarterly Groundwater Level Measurements (May 2017):
  - ✓ 115 Total Quarterly Wells.
  - ✓ 102 Wells Measured.
  - ✓ 6 Wells Pumping.
  - ✓ 4 Wells Unsuccessful Attempt.
  - ✓ 3 Wells Unable to Access Site



Source: OWRD

# Harney Groundwater Investigation

## Work Done Since April Meeting

- Data Entry:
  - ✓ GW Level Measurements.
  - ✓ All Located Wells.
  - ✓ Geologic Data on Well Logs.
  - ✓ Hydraulic Property Data.
  - ✓ Correlate USGS-OWRD Well ID
  - ✓ Spring Sites



Source: OWRD

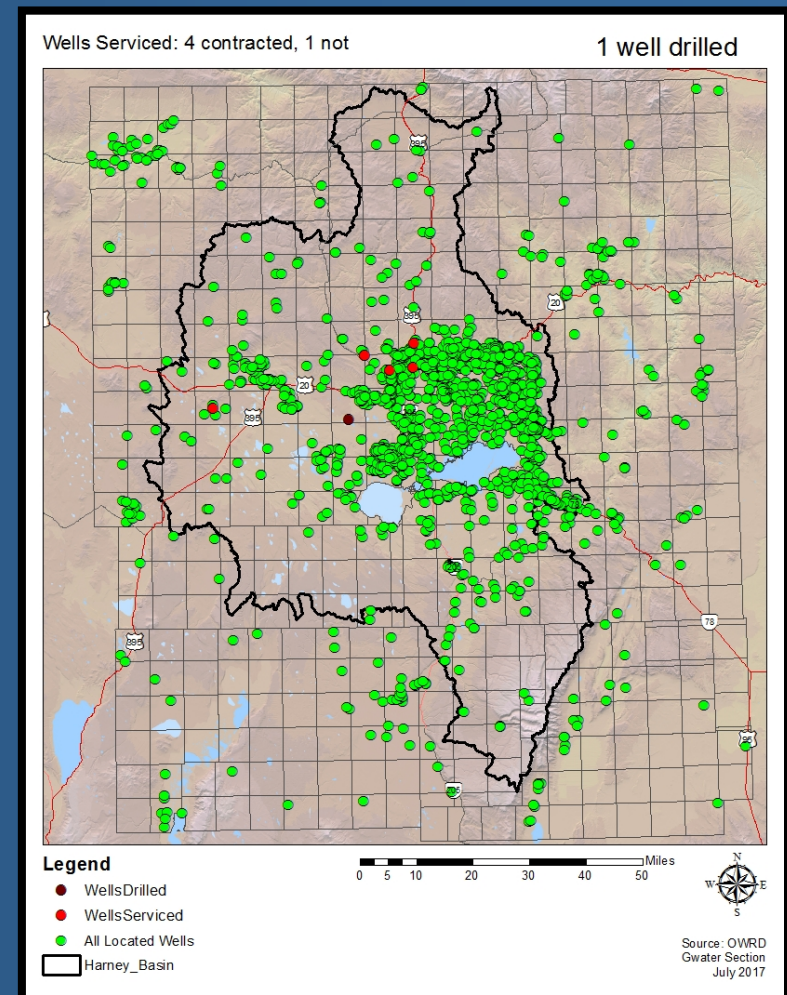
# Harney Groundwater Investigation

## Work Done Since April Meeting

- Well Drilling & Servicing.
  - ✓ 1 Well Drilled (Chain Lakes).
  - ✓ 4 Wells Serviced (State Contract).
  - ✓ 1 Well to be Serviced (Private).



Source: OWRD



# Harney Groundwater Investigation

## Work Done Since April Meeting

- Data Entry Statistics.

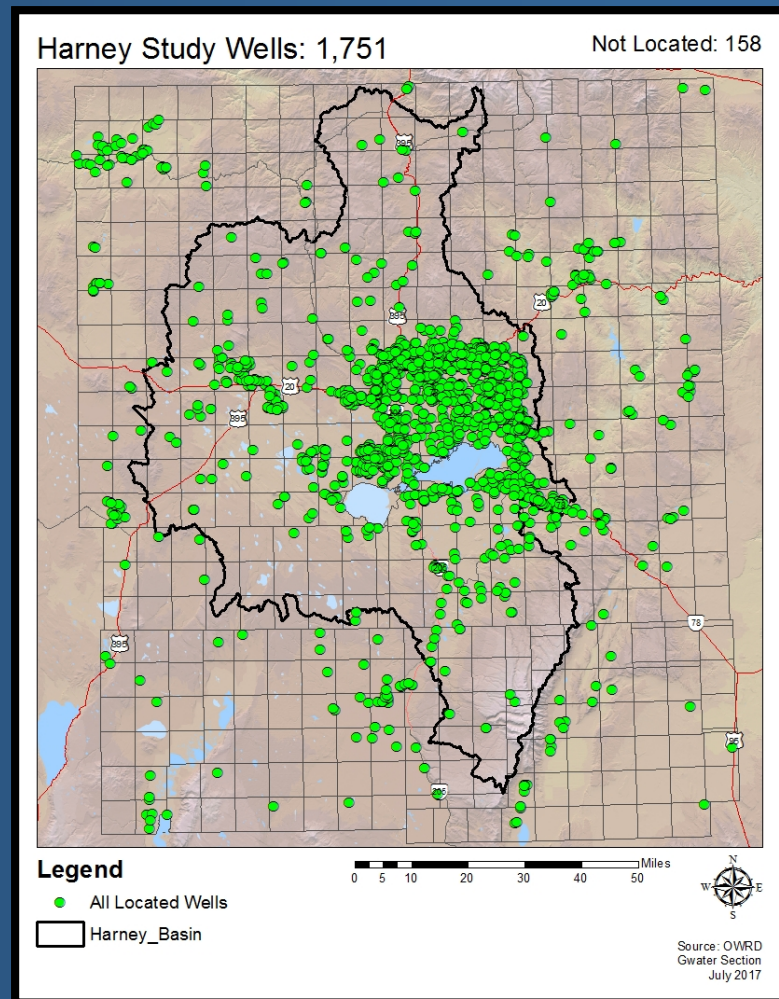
Wells	Total	In GW			Not Located
		Database	Lithcoded	Located	
<b>All Wells</b>	<b>2,602</b>	1,909	1,604	2,147	208
<b>Specific Capacity</b>	<b>776</b>	83	83	726	50
<b>No Log</b>	<b>305</b>	305	x	157	148
<b>Synoptic</b>	<b>197</b>	197	197	197	0
<b>Quarterly</b>	<b>115</b>	115	115	115	0
Springs	Total	In GW			Not Located
		Database	Lithcoded	Located	
<b>Springs</b>	<b>57</b>	57	x	0	57

Source: OWRD

# Harney Groundwater Investigation

## Work Done Since April Meeting

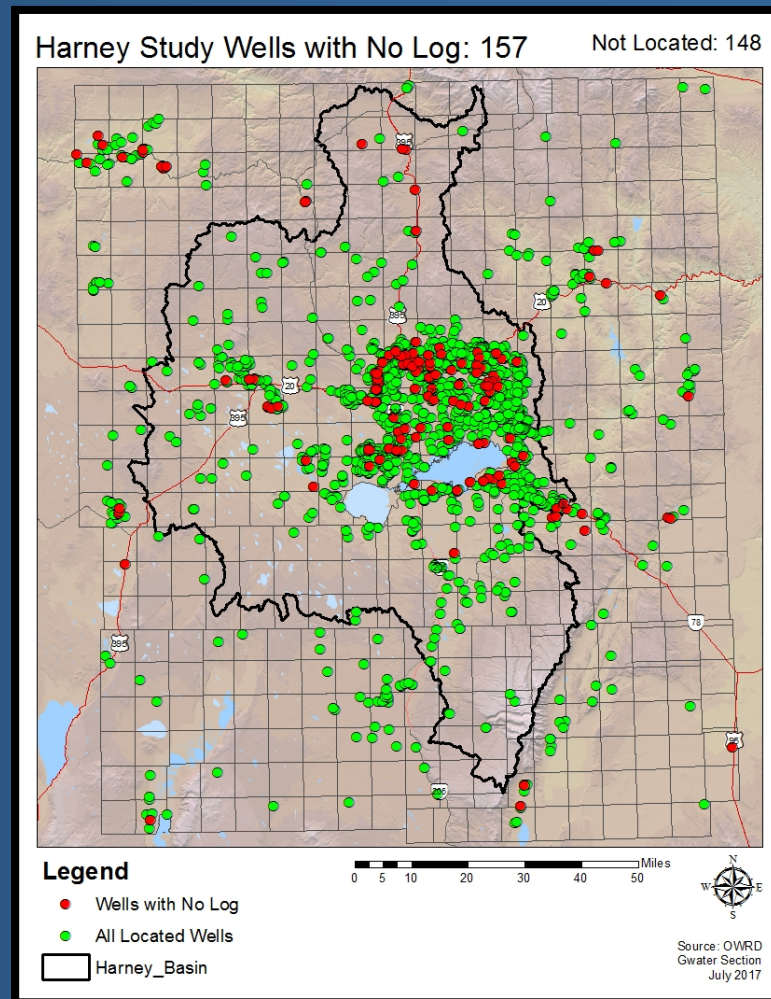
- Data Entry Statistics:
  - ✓ Wells In GW Database
    - 1751 Wells Located
    - 158 Wells Not Located



# Harney Groundwater Investigation

## Work Done Since April Meeting

- Data Entry Statistics:
  - ✓ Wells with No Well Log
    - 157 Wells Located
    - 148 Wells Not Located

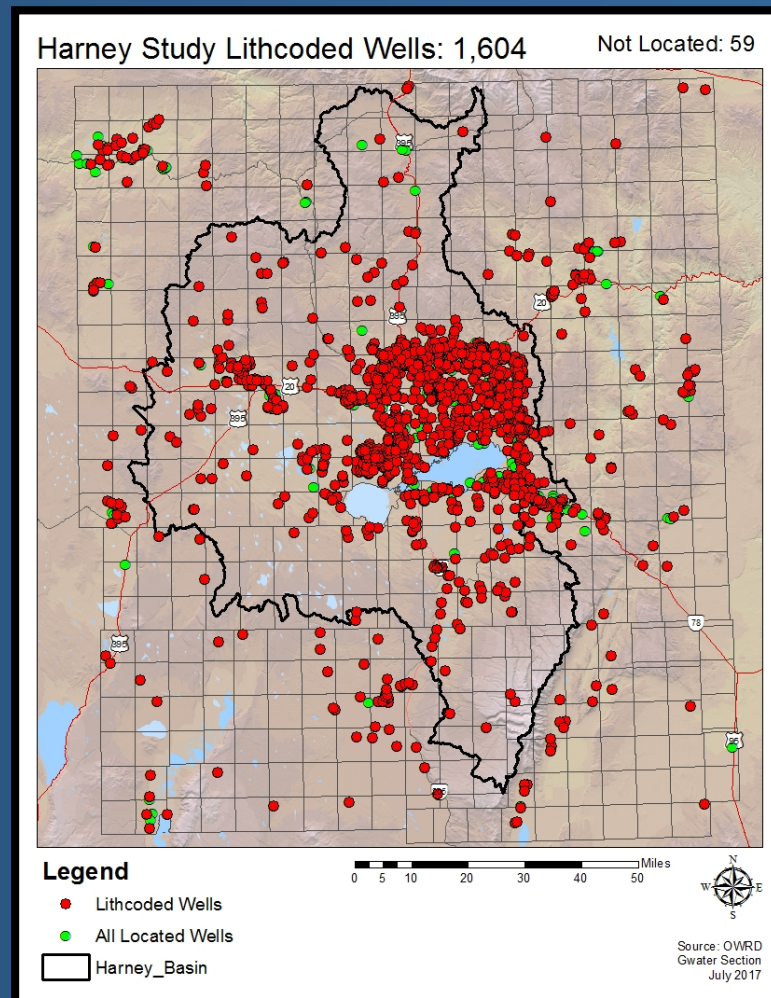




# Harney Groundwater Investigation

## Work Done Since April Meeting

- Data Entry Statistics:
  - ✓ Wells: Geology Lithcoded
    - 1604 Wells Located
    - 59 Wells Not Located

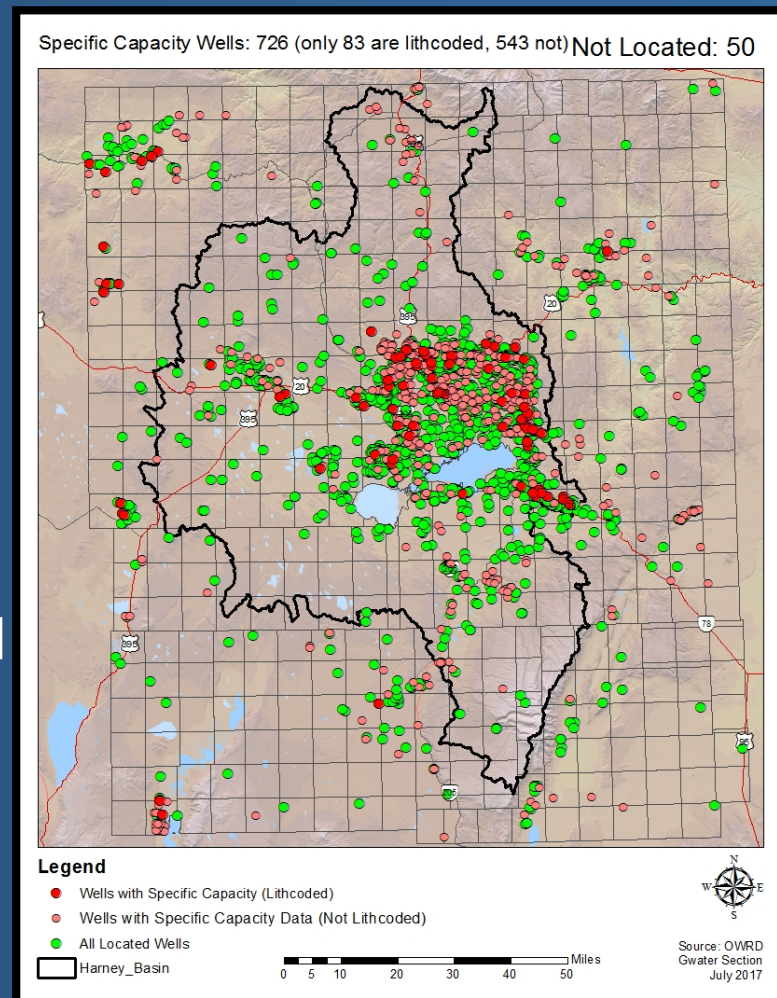


# Harney Groundwater Investigation

## Work Done Since April Meeting

### ■ Data Entry Statistics:

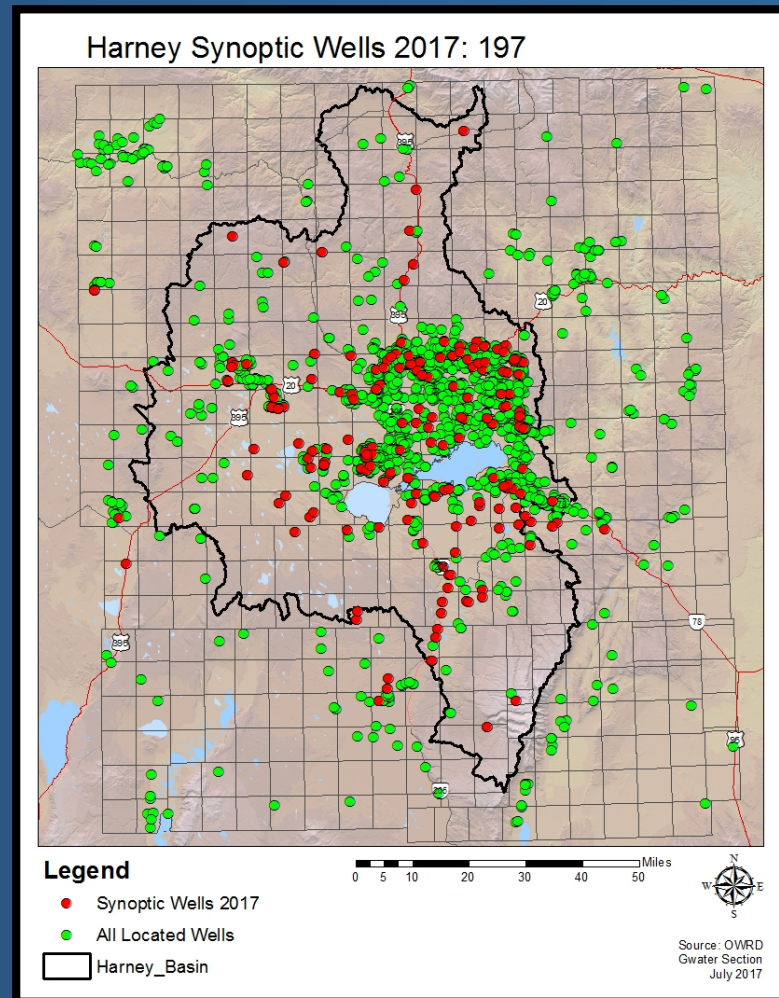
- ✓ Wells: Aquifer Properties
  - 726 Wells Located
  - 50 Wells Not Located
  - 83 Wells Lithcoded
  - 543 Wells Not Lithcoded



# Harney Groundwater Investigation

## Work Done Since April Meeting

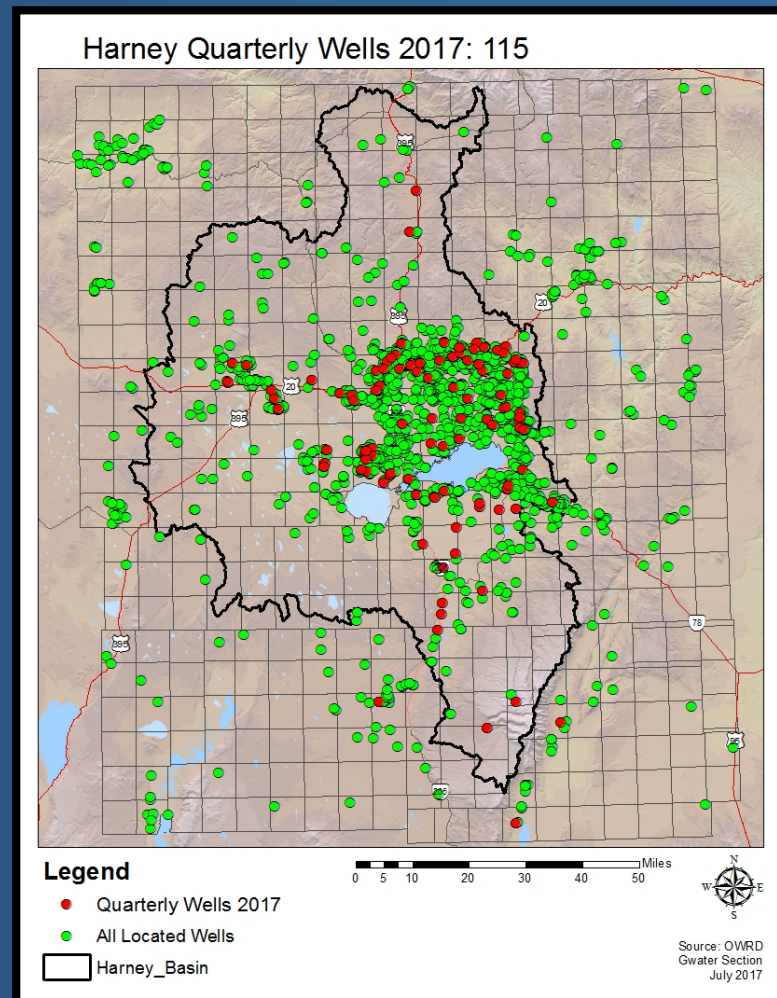
- Data Entry Statistics:
  - ✓ GW Level Synoptic Wells
    - 197 Active Wells
    - All Located
    - All Lithcoded



# Harney Groundwater Investigation

## Work Done Since April Meeting

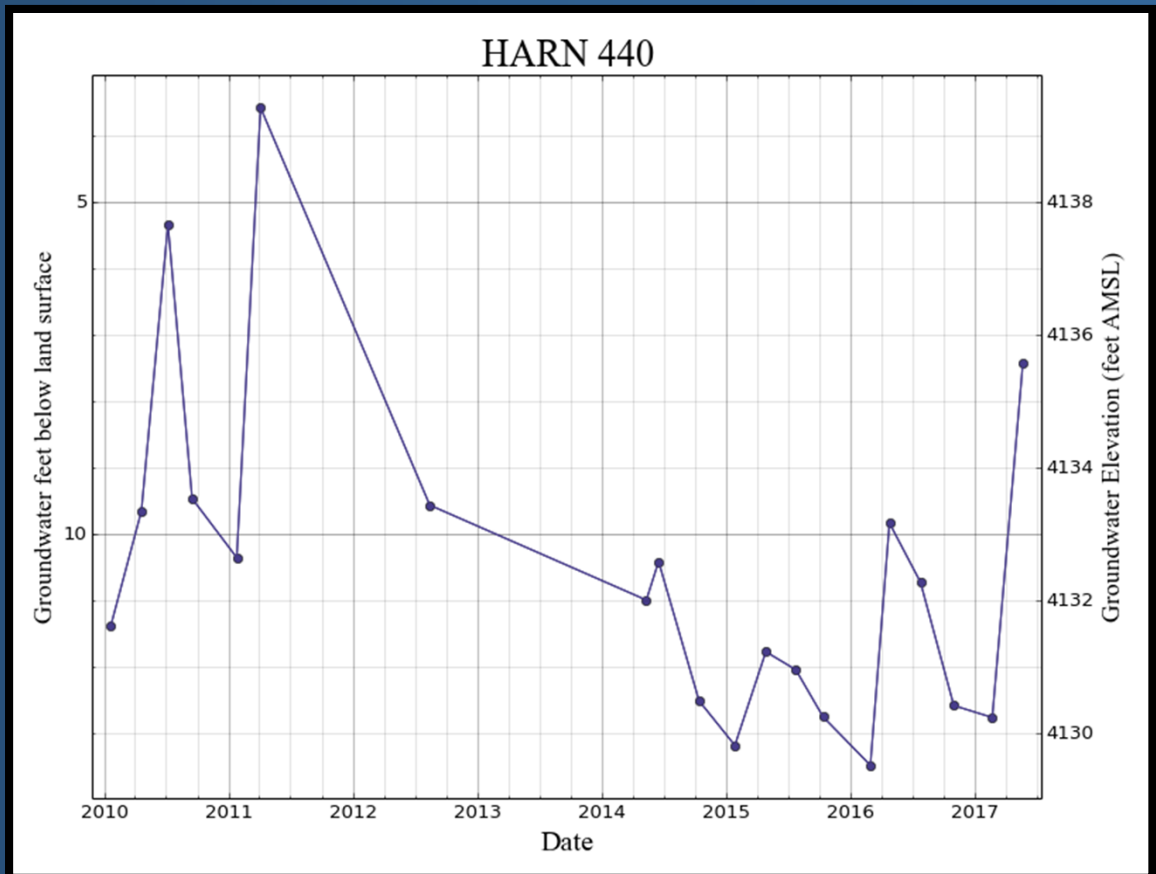
- Data Entry Statistics:
  - ✓ GW Level Quarterly Wells
    - 115 Active Wells
    - All Located
    - All Lithcoded



# Harney Groundwater Investigation

## Groundwater Level Update

- Quarterly Groundwater Level Measurements (May 2017).
  - ✓ SW Influence?
  - ✓ HARN 440  
(Near Burns Airport)

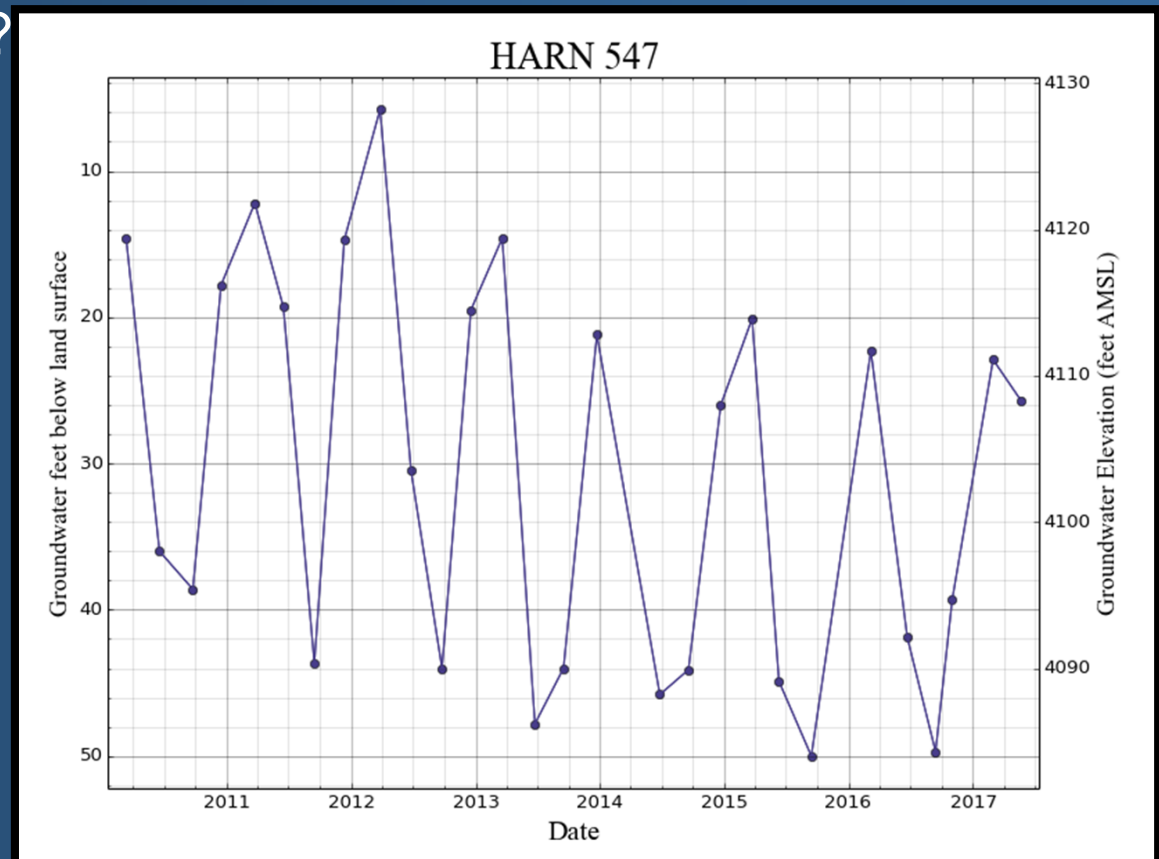


Source: OWRD

# Harney Groundwater Investigation

## Groundwater Level Update

- Quarterly Groundwater Level Measurements (May 2017).
  - ✓ GW Use Influence?
  - ✓ HARN 547  
(Near Burns Airport)



Source: OWRD

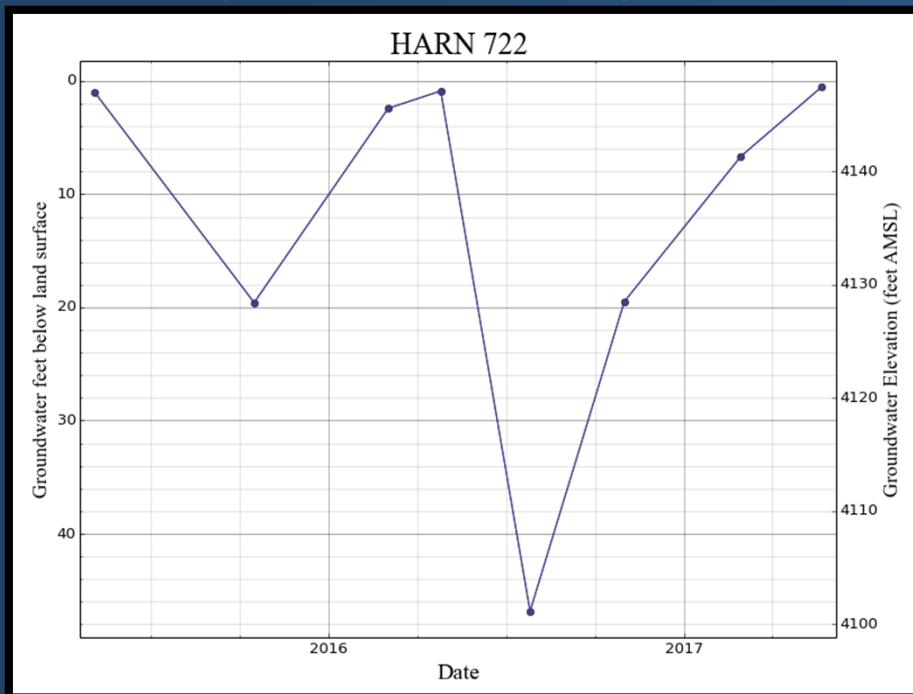
# Harney Groundwater Investigation

## Groundwater Level Update

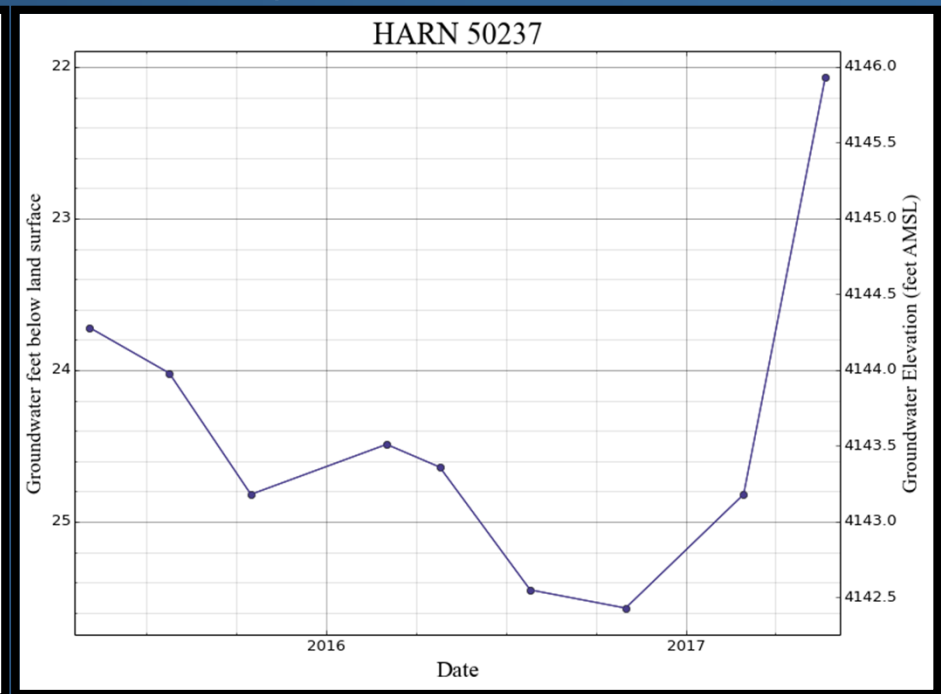
- Quarterly Groundwater Level Measurements (May 2017).

- ✓ Shallow vs. Deep

(Buchanan Deep)



(Buchanan Shallow)



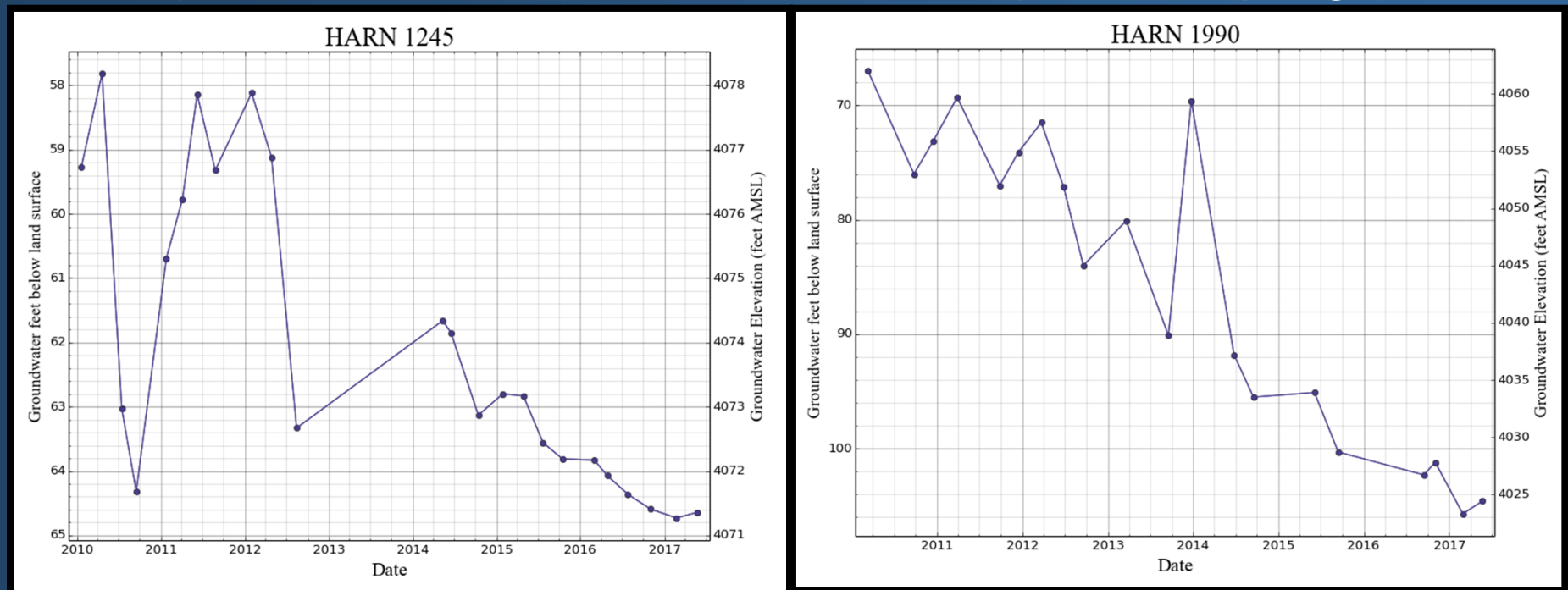
# Harney Groundwater Investigation

## Groundwater Level Update

### Quarterly Groundwater Level Measurements (May 2017).

✓ Ongoing Decline  
(Crane-Buchanan)

(Weaver Springs)



Source: OWRD



# Harney Groundwater Investigation

## OWRD Work for Summer - Fall

- Quarterly Groundwater Level Measurements (August 2017).
- Locate Additional Wells for Synoptic Groundwater Level Measurement.
- Additional Data Entry & Site Locating.
- Correlate USGS-OWRD Well ID
- ID Sites for Aquifer Tests
- ID SW Sites for Flow Measurements (Selected Springs & Stream Reaches).
- SW-GW in Warm Springs Valley (Summer Intern: Halley Barnett).



Source: OWRD

# Harney Groundwater Investigation

Questions & Thank You



Photo by Chad Sobotka