



Oregon

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MEMORANDUM

TO: Water Resources Commission

FROM: Justin Iverson, Groundwater Section Manager 

SUBJECT: Agenda Item B, February 21, 2019
Water Resources Commission Meeting

Greater Harney Valley Groundwater Area of Concern (GHVGAC) Update

I. Introduction

This informational report provides an update on the Department's work in the Greater Harney Valley area.

II. Background

In 2015, initial groundwater level data analysis and aquifer recharge estimates indicated annual groundwater use and other discharge likely exceeded annual recharge in the Greater Harney Valley Area. As a result, no new permits could be issued without harming existing water users or appropriating water beyond the capacity of the resource. Consequently, beginning in 2015, the Department stopped issuing new groundwater permits in the area pending completion of a more detailed groundwater study.

The Department then began significant outreach to the local community to build awareness of the situation, seek input, and initiate efforts to address water needs for the area. In April 2016, the Commission established the Greater Harney Valley Groundwater Area of Concern (GHVGAC) in the Malheur Lakes Basin Program Rules (OAR Chapter 690, Division 512). The purpose of the rules were to ensure that groundwater in the GHVGAC is appropriated within the capacity of the resource and to maintain reasonably stable groundwater levels to protect existing water users. The rules:

- Established the GHVGAC within a portion of the Malheur Lake Basin, classifying groundwater in the Greater Harney Valley for exempt uses only (i.e., exempt groundwater uses are not limited).
- Provided a path forward for pending groundwater permit applications if they are able to meet certain criteria outlined in the rules.
- Required the Department to complete a Groundwater Study by 2020 and to convene a local Groundwater Study Advisory Committee, jointly appointed by the Department and the Harney County Court.

The rules require the Department to report annually to the Water Resources Commission on certain issues early each calendar year. The rules specifically require that the report include: an overview of new groundwater permits issued within the GHVGAC after April 15, 2016; an update on groundwater level data and the groundwater study; and staff recommendations, if any, regarding whether the rules should be amended or repealed. Staff previously presented reports on this topic in June 2018, March 2018 (as part of the Director’s report), and January 2017.

In addition, in 2016, the Department awarded a grant to the Harney County Watershed Council to undertake a place-based integrated water resources planning effort. The Place-Based Planning group is currently moving toward Planning Step 4 of the 2015 Draft Place-Based Planning Guidelines, “Develop Integrated Solutions for Meeting Long-Term Water Needs”, in which they will recommend a suite of actions to address the community’s water-related challenges with the goal of meeting both instream and out-of-stream needs. Meeting summaries and materials are online at: <http://hcwatershedcouncil.com/community-based-water-planning/>.

III. Permit Issuance Update

Since April 15, 2016, six permits have been issued within the GHVGAC (Table 1).

Table 1: Summary of recent water right permits issued within the GHVGAC

	App #	Priority Date	Permit#	Issue Date	Name	Acres
G	17575	8/22/2012	18086	9/12/2018	JAMES AND SUE GILMOUR	40.7
G	17799	3/19/2014	17765	6/8/2017	BO THORENFELDT	693.0
G	17916	9/2/2014	17918	12/7/2017	PHILLIP W. SINGHOSE	900.0
G	17940	9/23/2014	17745	8/30/2017	PATRICIA M. JAGER	101.95
G	18000	2/17/2015	17667	10/13/2016	RIDDLE RANCH INC.	125.6
G	18129	8/11/2015	17647	8/30/2016	OTLEY BROTHERS INC.	426.0

A final order on the Gilmour application was issued in May of 2014 approving the application. This was done prior to the realization of the Department that the groundwater in this area was over-allocated. Before issuing the final order, the Department had found that groundwater was available. The permit was not issued at the same time as the final order because the applicant had a well construction issue that needed to be addressed. In 2018, the applicant addressed the well construction issue and the permit was subsequently issued in May.

The Singhose permit was issued from within the Northwest Sub-Area. The Riddle Ranch and Otley Brothers permits on the list were issued from within the South Sub-Area. The permits issued from within the sub-areas were not required to provide offset water to have their permits issued. Depending on the outcome of the ongoing groundwater study these permits may be required to provide offset water in order for their permits to continue.

The Thorenfeldt and Jager permits were not in either of the sub-areas and provided mitigation in order for their permits to be issued.

IV. Groundwater Study and Water Level Data Update

Consistent with the rules, the Department has been working on a groundwater basin study in cooperation with the U.S. Geological Survey (USGS). As shown in Table 2, Groundwater Section staff have significantly increased the amount of data collected in the Harney Basin since the study began. Attachment 1 shows a map of the GHVGAC and observation well network. Additional water level data is available from the permit condition water level reporting program, and from the community groundwater monitoring program initiated by the Harney County Watershed Council with supporting funds from the Oregon Watershed Enhancement Board.

Table 2: Summary of Water Level Monitoring Activities in the Harney Basin

Date	1/2019	1/2014
Total Wells Field-Located	634	51
Total Water-Level Synoptic Wells	231	-
Total Water-Level Quarterly Wells	111	23
Spring 2018 Water Level Synoptic Measurements	205	-
Fall 2017 Water Level Synoptic Measurements	221	-
Total Water Levels Measured 2015 (by OWRD staff)	400	-
Total Water Levels Measured 2016 (by OWRD staff)	672	-
Total Water Levels Measured 2017 (by OWRD staff)	688	-
Total Water Levels Measured 2018 (by OWRD staff)	555	-
Continuous Recorder Instruments Installed	24	2
New Observation Wells Constructed	12	-

OWRD and USGS staff reduced the amount of new water level data they collected in the basin in 2018 as they transitioned to focusing their efforts on data analysis. The data analysis stage of the study will continue in 2019 and the peer-review and publication process will begin in early 2020.

V. Groundwater Study Advisory Committee and Local Community Coordination

The Groundwater Study Advisory Committee has been established to foster an open exchange of information, data, and ideas between Harney County residents, interested parties, and the groundwater study team. The Committee has met quarterly since July 2016. All meetings are announced online, in the local paper, and to a mailing list of 141 recipients. Meeting summaries and materials are online at: <https://www.oregon.gov/OWRD/programs/GWWL/GW/HarneyBasinStudy/Pages/default.aspx>

During 2019, the study team will present near-final data analysis products to the Committee and request their feedback. The analysis communicated in the maps, plots, and tables presented during these meetings constitute the bulk of the content of the study publications planned for release in late 2020.

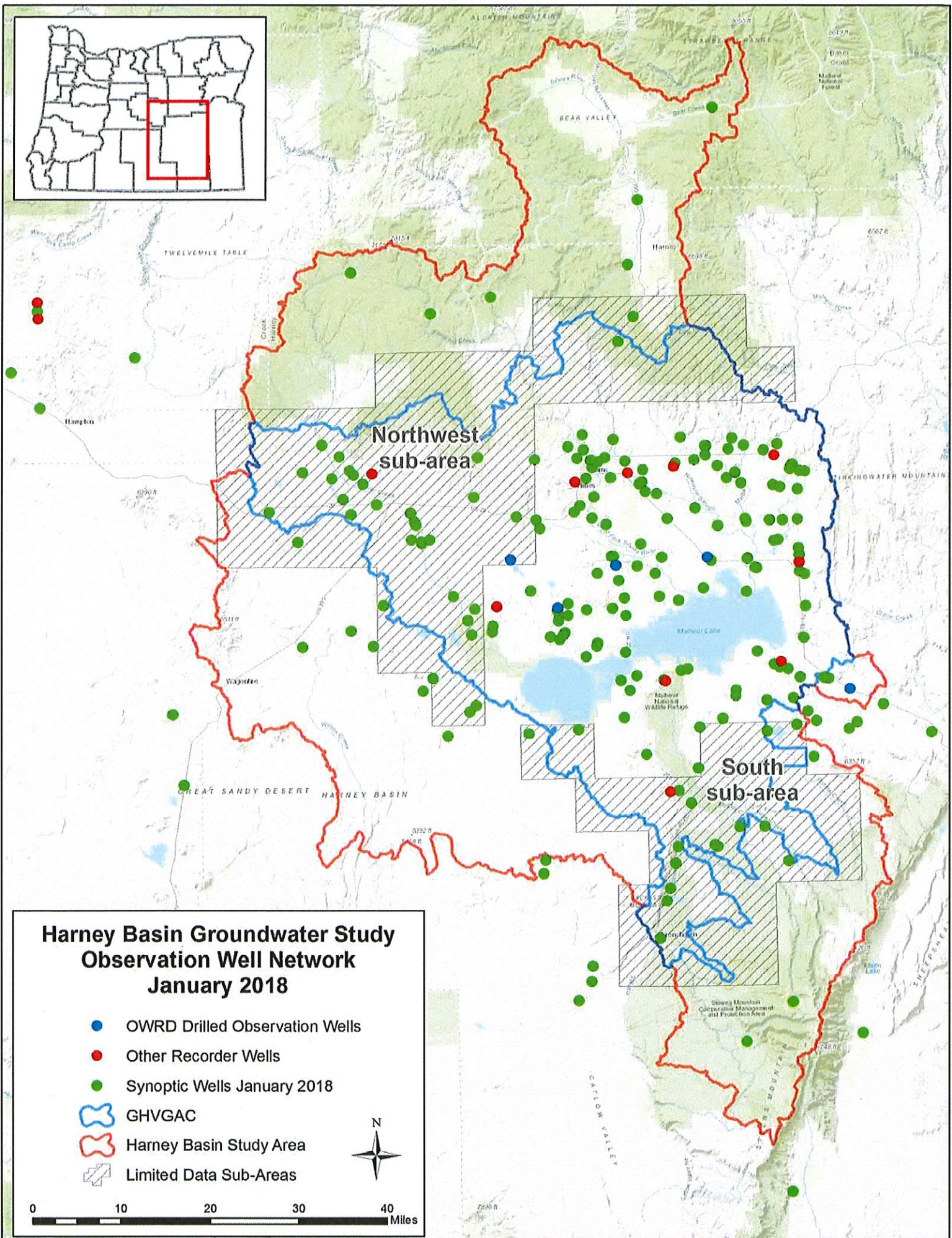
VI. Conclusion

Since April 15, 2016, six permits have been issued within the GHVGAC. The Department is actively coordinating with the local Study Advisory Committee and has transitioned to the data analysis phase of the study. Place-based planning is also underway, helping a diverse group of stakeholders understand the water situation in the basin and identify actions to meet the water needs of the community, the economy, and the environment. No changes to the Division 512 rules are recommended at this time.

Attachments:

1. Observation Well Locations within the Harney Basin (January 2018)

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**Harney Basin Groundwater Study
Observation Well Network
January 2018**

- OWRD Drilled Observation Wells
- Other Recorder Wells
- Synoptic Wells January 2018
- ⬭ GHVGAC
- ⬭ Harney Basin Study Area
- Limited Data Sub-Areas

