# WATER RESOURCES DEPARTMENT CHAPTER 690 DIVISION 512 MALHEUR LAKE BASIN PROGRAM

#### 690-512-0010 Definition

Unless specified in these rules the definitions in OAR 690-300-0010 apply to the below rules.

- (1) "Adaptive Management Checkpoint" means the scheduled interval at which the Department adaptively manages the groundwater resource and adjusts the schedule for reductions in groundwater use.
- (2) "Exempt groundwater uses" are those defined in ORS 537.545.
- (3) "Groundwater Level Change Envelope" means the trajectory for groundwater levels within each subarea relative to the groundwater levels in 2028 that are modeled with the Harney Basin Groundwater Model.
- (4) "Initial Allocation" means the quantity of water authorized for use by each groundwater right upon completion of the contested case.
- (5) "Permissible Total Withdrawal" is the total volume of groundwater allowed to be pumped annually within a subarea of the critical groundwater area. The unit of measurement for the permissible total withdrawal is acre-feet.
- (6) "Public Uses" are those uses defined in OAR 690-077-0010(27).
- (7) "Subarea" means a portion of the critical groundwater area defined for administrative purposes.
- (8) "Target Groundwater Level Trend" means the goal for the rate of change in groundwater levels within a subarea of the critical groundwater area.
- (9) "Totalizing flow meter" is an instrument used to measure and display both the instantaneous flow rate of groundwater produced from a well and the total volume of groundwater produced from a well.

Statutory/Other Authority: ORS 536.300, ORS 536.027 & 537.545, ORS 537.735 Statutes/Others Implemented:

Rule Summary: This rule defines terms used in OAR chapter 690 Division 512, ORS 537.545 and ORS 537.735.

#### 690-512-0020 Administrative Boundaries

- (1) The Greater Harney Valley Groundwater Area of Concern (GHVGAC) is defined for administrative purposes and is described and shown in Exhibit 1.
- (2) The Malheur Lake Basin Boundary is delineated on the agency Map 12.6, dated January 1, 1966, shown in Exhibit 2.
- (3) The Serious Water Management Problem Area (SWMPA) boundary is defined as the Harney Basin within the Malheur Lake Basin and within portions of Grant and Harney Counties as shown in Exhibit 3.
- (4) The Groundwater Classification Boundary is defined as the Harney Basin within the Malheur Lake Basin and within portions of Grant and Harney Counties as shown in Exhibit 4.
- (5) The boundary of the Harney Basin Groundwater Reservoir is coincident with the Harney Basin boundary, as shown in Exhibit 5.
- (6) The boundary of the Harney Basin Critical Groundwater Area is defined as the GHVGAC boundary shown in Exhibit 1 and contains, in part, the Harney Basin Groundwater Reservoir.

Statutory/Other Authority: ORS 537.525, ORS 537.026, ORS 536.300, ORS 540.435, ORS 536.340, ORS 537.7350

Statutes/Others Implemented: ORS 536.300, ORS 540.435, ORS 536.350, ORS 537.35

Rule summary: This rule defines the administrative boundaries within the Malheur Lake Basin.

#### 690-512-0030 Classifications

- (1) Except as provided in OAR 690-512-0020(4), the groundwater and surface water of the Malheur Lake Basin are classified for direct appropriation of, or storage of surface water and use of, water for domestic, livestock, irrigation, municipal, quasi-municipal, industrial, mining, agricultural water use, commercial, power development, forest management, public uses, road watering, dust abatement, and wildlife refuge management.
- (2) Groundwater in the Groundwater Classification Boundary defined in OAR 690-512-0020(4) is classified for statutorily exempt groundwater uses as specified in ORS 537.545 and nonconsumptive geothermal uses below 259 degrees Fahrenheit.

Statutory/Other Authority: ORS 537.026, ORS 537.027 ORS 536.300, 536.340, 537.621(2),

537.777(1), &537.780(1) and (1)(h) & 537 Statutes/Others Implemented: ORS 536.340

Rule Summary: This rule classifies the Malheur Lake Basin and further classifies the area within the boundary defined in 690-512-0020(4).

#### 690-512-0040 Harney Basin Critical Groundwater Area

- (1) The target groundwater level trend within the Harney Basin Critical Groundwater Area is a median groundwater level decline rate of no more than 0 feet per year in each subarea. The median will be calculated for each subarea using representative wells with sufficient data as determined by the Department.
- (2) A review of the Harney Basin Critical Groundwater Area rules shall be completed once every 3 years. The review shall be presented at a Commission meeting which has been publicly noticed and provides opportunity for public comment.
- (3) A review of the conditions in the Harney Basin Critical Groundwater area shall be completed no less frequently than once every 10 years and the findings reported at a Commission meeting which has been publicly noticed and provides opportunity for public comment.
- (4) Except as defined in rule 690-512-0030(#) Classifications, the Department will not accept new applications for groundwater permits within the Harney Basin Critical Groundwater Area.
- (5) The Harney Basin Critical Groundwater area defined in section 690-512-0020(5) shall be divided into seven subareas for the purpose of management as shown in Exhibit 6.
  - a. The Dog Mountain subarea is shown in Exhibit 7.
  - b. The Lower Blitzen-Voltage subarea is shown in Exhibit 8.
  - c. The Northeast-Crane subarea is shown in Exhibit 9.
  - d. The Silver Creek subarea is shown in Exhibit 10.
  - e. The Silvies subarea is shown in Exhibit 11.
  - f. The Upper Blitzen subarea is shown in Exhibit 12.
  - g. The Weaver Springs subarea is shown in Exhibit 13.

Statutory/Other Authority: ORS 537.026, ORS 537.525, ORS 537.780, ORS 537.735, 690-010-0130(3)(a) – (c)

Statutory/Others Implemented:

Rule Summary: This rule characterizes the Harney Basin Groundwater Reservoir and defines the seven subareas within the Harney Basin Critical Groundwater Area. This rule also requires the department to conduct a periodic review once every ten years and three years.

## 690-512-0050 Permissible Total Withdrawal for Each Subarea Within the Harney Basin Critical Groundwater Area

- (1) The permissible total withdrawal for the Dog Mountain subarea shall be 4,200 acre-feet per year.
- (2) The permissible total withdrawal for the Lower Blitzen-Voltage subarea shall be 8,300 acre-feet per year.
- (3) The permissible total withdrawal for the Northeast-Crane subarea shall be 35,000 acrefeet per year.
- (4) The permissible total withdrawal for the Silver Creek subarea shall be 15,200 acre-feet.
- (5) The permissible total withdrawal for the Silvies subarea shall be 21,200 acre-feet per year.
- (6) The permissible total withdrawal for the Upper Blitzen subarea shall be 76 acre-feet per year.
- (7) The permissible total withdrawal for the Weaver Springs subarea shall be 4,800 acre-feet per year.

Statutory/Other Authority: ORS 537.780, ORS 537.735, ORS 537.026, ORS 537.525 Statutory/Others Implemented:

Summary: This rule sets the total permissible withdrawal for the 15 subareas in the Harney Basin Critical Groundwater Area.

#### 690-512-0060 Determination of Initial Allocation for All Groundwater Rights

(1) To establish a schedule for reductions in groundwater use, the Department will determine an initial allocation for each groundwater right within the critical

groundwater area which will be implemented through an order after completion of the contested case process as required in OAR 690-010. The initial allocation shall not exceed the total quantity of water authorized on the water right.

- (2) In determining the initial allocation for each groundwater right with an irrigation use, the Department will:
  - a. Use a duty of 2.7 acre-feet per acre for groundwater rights for primary and supplemental irrigation and
  - b. Consider the historical, beneficial use when identifying the number of acres that will be allocated water.
- (3) The initial allocation for municipal and quasi-municipal rights shall be a quantity of water equal to 110% of the greatest single-year quantity reported to the Department in the six years preceding the adoption of these rules.
- (4) In determining the initial allocation for each groundwater right with use types other than irrigation, municipal, and quasi-municipal. The department will consider:
  - a. The limits of the groundwater rights;
  - b. Historical beneficial use;
  - c. Whether or not a water user is physically capable of pumping and putting the allocated water to a beneficial use; and
  - d. Any other factors deemed appropriate by the Department

Statutory/Other Authority: ORS 537.780, ORS 537.525

Statutory/Others Implemented: ORS 537.735

This rule describes how the Department will determine the initial allocation for each groundwater right within the critical groundwater area.

#### 690-512-0070 Scheduling Water Use Reductions to Meet the Permissible Total Withdrawal

The Department's goal is to reduce groundwater level declines as quickly as possible while minimizing impacts to the groundwater user community. To accomplish this:

- (1) Notwithstanding adjustments made by the adaptive management methodology defined in OAR 690-512-0080, upon consideration of all water rights and determining the initial allocation for each:
  - a. Water use within the Weaver Springs subarea will be scheduled to be reduced to the permissible total withdrawal with 75% of the total reduction being scheduled for 2028 and the remaining 25% of the reduction scheduled for 2034.

- b. Water use within all remaining subareas of the Critical Groundwater Area will be scheduled for reduction to the permissible total withdrawal with 40% of the total reduction scheduled in 2028, 30% of the total reduction scheduled for 2034, 15% of the total reduction scheduled for 2040, 10% of the total reduction scheduled for 2046, and 5% of the total reduction scheduled for 2052.
- c. The schedule for reductions will be based on the relative priority dates of the water rights within each subarea, with the most junior water rights being curtailed first.
- d. Municipal and quasi-municipal water use will be evaluated at each adaptive management checkpoint and the schedule of reductions may be adjusted so that the allocation for each municipal or quasi-municipal right is increased or decreased to 110% of the greatest single year quantity reported to the Department in the preceding 6 years. The allocation shall not exceed the total quantity of water authorized on the water right.
- e. Uses exempt under ORS 537.545 are not subject to reduction.
- f. Corrective control orders reducing use will not be enforced until the completion of the contested case process specified in OAR 690-010-0170 through 230.
- g. If reductions in use are unable to be implemented as scheduled in 2028, then at the time when reductions in use are implemented through regulatory orders, all reductions scheduled to be implemented by that point in time will be enforced including any adjustments that should have occurred at the adaptive management checkpoints defined in 690-512-0080.

Statutory/Other Authority: ORS 537.780, ORS 537.742, ORS 537.525, ORS 537.735 Statutory/Others Implemented: ORS 537.742

Summary: This rule describes how the Department will reduce groundwater use at each 6-year interval over 24 years.

### 690-521-0080 Adaptive Management of the Harney Basin Critical Groundwater Area

The purpose of this section is to define how the Department will adaptively manage the Harney Basin Critical Groundwater Area over a 30-year period starting in calendar year 2028 with adaptive management checkpoints in calendar years 2033, 2039, 2045, and 2051.

(1) Weaver Spring subarea is exempt from the adaptive management process as defined in this rule.

- (2) Groundwater level changes will be evaluated using representative wells with sufficient data as determined by the Department.
  - a. For each representative well the groundwater level change will be evaluated based on a reference groundwater level determined by the Department. The reference groundwater level for a well shall be the spring high static water level measurement in calendar year 2028, if one exists. Otherwise, the Director may establish the reference groundwater level based on an analysis of other waterlevel data.
  - b. For each representative well, the groundwater level change will be calculated as the difference between the current spring high static water level at the adaptive management checkpoint and the reference groundwater level.
- (3) The median groundwater level change for each subarea will be evaluated at each adaptive management checkpoint using representative wells with sufficient data as determined by the Department.
- (4) The groundwater level change envelope for each subarea is defined in Exhibit 14.
- (5) At each adaptive management checkpoint, the Department will compare the median groundwater level change for each subarea defined in OAR 690-512-0040 with the groundwater level change envelope. If the median groundwater level change for a subarea is:
  - a. Below the 10<sup>th</sup> percentile, the scheduled quantity of reduction will be doubled.
  - b. Between the 10<sup>th</sup> and 25<sup>th</sup> percentiles, the scheduled quantity of reduction will be increased by one and a half times.
  - c. Between the 25<sup>th</sup> and 75<sup>th</sup> percentiles, no adjustment will be made.
  - d. Between the 75<sup>th</sup> and 90<sup>th</sup> percentiles, the scheduled quantity of reduction will be halved.
  - e. Above the 90<sup>th</sup> percentile, the scheduled quantity of reduction will be reduced to zero.
- (6) At the end of each adaptive management checkpoint and after the Department has completed sections 1 through 4 of this rule, the Department will hold at least one public meeting at a location within the critical groundwater area boundary at which the Department will present:

- a. The findings of the evaluation of groundwater level changes.
- b. The comparison to the groundwater level change envelope.
- c. Any adjustments to the scheduled reductions.
- (7) No sooner than 2058, the Department will evaluate the groundwater level decline rate to identify if the target groundwater level trend has been achieved. The groundwater level decline rate will be calculated using the Sen's slope method using annual high measurements for representative wells with sufficient data as determined by the Department from the 6 years preceding the evaluation.
- (8) After the evaluation in section 7 of this rule, if the target water level trend has not been achieved and all scheduled reductions have not been implemented, the Department will evaluate groundwater conditions and implement additional reductions as needed to achieve the target water level trend. Pumping in each subarea shall not be reduced below the permissible total withdrawal as defined in OAR 690-512-0050.

#### 690-512-0090 Serious Water Management Problem Area (SWMPA)

- (1) Groundwater conditions within the SWMPA boundary defined in 690-512-0020(3) meet the criteria defined in 690-085-0020(1)(a) and 690-085-0020(1)(f).
- (2) By no later than March 1, 2028, each groundwater right holder, well owner, or well operator shall properly install and thereafter properly maintain a totalizing flow meter on each well listed as a point of appropriation on a valid water right within the Harney SWMPA boundary as defined in 690-512-0020(3). The Department may extend the deadline as needed. If the deadline is extended, the Department will notify each groundwater right holder, well owner, or well operator at least 60 days before March 1, 2028.
- (3) Totalizing flow meters shall be properly installed according to manufacturer specifications and must meet the specifications in subsection 5.
  - a. Groundwater wells that are regulated off do not require a totalizing flow meter to be installed.
- (4) Totalizing flow meters and the method of flow meter installation may be subject to approval by Department staff. Once installed, totalizing flow meters must be maintained in good working order. Department staff shall have reasonable access to the totalizing flow meters upon request pursuant to ORS 537.780(1)(e).
- (5) The groundwater right holder, well owner, or well operator shall keep a complete record of the volume of water appropriated each month. The groundwater right holder, well owner, or well operator shall submit annually a report that includes water use

measurements to the Department by December 31 of each calendar year for water used between November 1<sup>st</sup> of the preceding year and October 31<sup>st</sup> of the current year. Reports shall be submitted using a form developed and maintained by the Department.

- Groundwater wells regulated off are not required to report until use is permitted to resume.
- b. Any governmental entity required to submit water use reports under OAR 690-085 is exempt from the reporting requirements of this rule.
- (6) A totalizing flow meter shall meet the following specifications:
  - a. A totalizing flow meter shall have a rated accuracy of plus or minus 2 percent of actual flow for all flow rates for which the meter is expected to measure.
  - b. A totalizing flow meter shall measure the entire discharge from the well.
  - c. A totalizing flow meter shall have a visual and recording, mechanical or digital totalizer located on or adjacent to the flow meter and shall be equipped with a sweep hand or digital readout so that instantaneous flow rate can be read.
  - d. The totalizing part of the flow meter shall have sufficient capacity to record at minimum the quantity of water authorized to be pumped over a period of 2 years. Units of water measurement shall be in acre-feet, cubic-feet, or gallons, and the totalizer shall read directly in one of these units. Flow meters recording in acre-feet shall, at a minimum, read to the nearest 1/10th acre-foot, and the decimal multiplier shall be clearly indicated on the face of the register head.
  - e. Totalizers on each meter shall not be field reset without notice to and written permission from the local watermaster. Prior to resetting the totalizers, the final reading must be recorded and reported.
  - f. The totalizing flow meter shall be installed in accordance with all manufacturer specifications. There shall be no turnouts or diversions between the well and the flow meter.
  - g. The totalizing flow meter shall be installed no more than 100 feet from the well head unless an exception is approved by the watermaster in writing.
- (7) A water user shall report broken flow meters to the local watermaster's office within 48 hours after determining that the flow meter is broken. A water user shall not appropriate water for more than 60 days without an operating flow meter.
- (8) While the flow meter is broken, the water user shall use other methods of reporting as defined under OAR 690-085-0015(5)until the flow meter is replaced or repaired. The water user shall keep the monthly data and mail the data to the local watermaster upon request. The data shall include a statement of the initial reading on the newly installed flow meter,

the current power meter reading and the time of operation. The water user shall notify the local watermaster within 48 hours of installing the repaired or replacement flow meter.

- (9) Failure to have and maintain a properly installed, functioning totalizing flow meter by the deadline will result in the local watermaster regulating and controlling the unmetered well such that no groundwater may be pumped or appropriated until a flow meter is installed consistent with these rules.
- (10) Consistent with ORS 536.900, ORS 183.745, and OAR 690-260, the Department may assess civil penalties for violation of these rules.

Statutory/Other Authority: ORS 537.026, ORS 540.435

Statutes/Others Implemented: ORS 540.435

Rule Summary: This rule describes the requirements for the Serious Water Management Problem Area designation.

#### 690-512-0100 Whitehorse and Willow Creeks

Willow Creek and tributaries, and Whitehorse Creek and tributaries are withdrawn from future appropriations except as described in the order of the Water Resources Commission effective April 24, 1992.

Statutory/Other Authority: ORS 536.410 Statutes/Other Implemented: ORS 536.410

#### **Rule Summary:**

#### 690-512-00110 Home Creek Reservation

- 1) Reservations of water for economic development are established pursuant to ORS 537.249 and 537.356 economic benefits through both instream and out-of-stream uses of water. 4,550 acre-feet of unappropriated water in Home Creek and tributaries are reserved for multipurpose storage for future economic development as allowed under ORS 537.356 with a priority date of February 25, 2009.
- (2) "Multipurpose reservoir", as used in OAR 690-512-0100 means a reservoir storing water to serve more than two potential beneficial uses including but not limited to irrigation, power generation, municipal water supply, recreation and flow augmentation for instream purposes.
- (3) Reservations of water for future economic development allocate surface water for storage in multipurpose reservoirs.

- (4) For the purposes of review of applications to store reserved water under OAR chapter 690, division 310, and subject to the provisions of section (6), the reserved quantities of water listed in OAR 690-512-0100(1) are available for appropriation.
- (5) The determination of water availability under section (4) shall not substitute for consideration during the public interest review of site-specific information related to the capacity of the resource to support the proposed project, as required under OAR chapter 690, division 310.
- (6) In addition to the requirements of ORS Chapter 537 and applicable rules, the Department will only issue an order approving an application for a permit to store water in the Home Creek basin reserved under any reservation if it first finds:
- (a) The proposed reservoir and any water rights secondary with the storage right are consistent with the purpose and intent of the reservation following consultation with Harney County Court;
- (b) The proposed reservoir and any water rights secondary to the storage right will protect instream values, including but not limited to instream flows and water quality based upon a written assessment of these values developed in consultation with Department of Fish and Wildlife and Department of Environmental Quality; and
- (c) Whether minimum bypass flows are required.
- (7) In addition to the requirements of ORS Chapter 537 and applicable rules, any final order approving an application for a permit to store water and any order for water rights secondary with the storage right under the Home Creek Reservation shall contain the findings required in (6)(a)–(c) above, and will also contain conditions that:
- (a) Set the appropriate storage season,
- (b) Ensure no injury to senior water rights, including instream water rights,
- (c) Protect instream values; and
- (d) Set minimum bypass flows if identified under (6)(c) above.
- (8) If the Department has not received applications for multipurpose reservoir permits for the full quantity of reserved water by July 1, 2014, the Department shall provide the Parties involved in the Home Creek Settlement Agreement with a progress report on development of the reservations. The report shall include information on the continued need for the reservations and the quantities of water reserved. The Department shall continue to provide progress reports at five year intervals while these rules are in effect unless the Department receives applications for multipurpose reservoir permits for the full quantity of reserved water.

(9) If the Department has not received applications for multipurpose reservoir permits for the full quantity of water reserved by July 1, 2029, applications for remaining quantities of unallocated water under OAR 690-0512-0100(1) may not be accepted after July 1, 2029, unless this deadline is extended through rulemaking by the Water Resources Commission.

Statutory/Other Authority: ORS 536 & 537

Statutes/Other Implemented: ORS 536.310, 537.249, 537.356 & 537.358

**Rule Summary:**