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OREGON ADMINISTRATIVE RULES
WATER RESOURCES DEPARTMENT
CHAPTER 690
DIVISION 507

METHODS FOR DETERMINING AND DISTRIBUTING THE SUSTAINABLE ANNUAL YIELD
OF THE BASALT GROUND WATER RESERVOIR BY SUBAREA FOR THE BUTTER CREEK
CRITICAL GROUND WATER AREA

Purpose

690-507-0610 (1) The Director issued an order on August 18, 1986 declaring the Butter Creek Critical Ground Water Area. The order described the exterior boundaries and divided the area into six subareas for the purpose of managing the ground-water resource. The response of ground water levels to pumpage from each subarea is largely independent of pumpage within other subareas.

(2) To promote optimum use of the limited ground water supply in the Butter Creek Critical Ground Water Area, the Commission encourages development of water management plans to maintain a high standard of water use efficiency.

(3) The Commission recognizes that exempt users in the North subarea are a stress on the ground water resource in the Butter Creek Critical Ground Water Area. If, by 2000, reasonably stable water levels have not been achieved, the Department shall determine whether or not to require prior authorization under these rules for ground water uses that are exempt under ORS 537.545.

(4) The purpose of these rules is to stabilize water levels in the basalt ground water reservoir in the Butter Creek Critical Ground Water Area of Umatilla and Morrow counties. These rules carry out the authority granted to the Commission in ORS 536.900 to 536.935 and ORS 537.505 to 537.745.

Stat. Auth.: ORS Ch. 536 & 537

Hist.: WRD 9-1990, f. & cert. ef. 6-25-90, WRD -1999, f. & cert.ef. 3-3-99

Definitions

690-507-0620 The following definitions apply to OAR Chapter 690, Division 507:

(1) "Commission" means the Water Resources Commission.

(2) "Department" means the Water Resources Department.

(3) "Director" means the Director of the Water Resources Department.

(4) "Physically capable" means that the well, pump installed, and distribution system are able to produce and distribute the quantity of water requested.

(5) "Reasonably stable water level" means an annual static water level decline of less than one foot over the entire subarea as determined by averaging the annual water level change of the representative wells in the subarea, and the water level change for the subarea averaged over five consecutive years displays no decline.

(6) "Sustainable annual yield" means the volume of water that can be pumped on an annual basis while maintaining reasonably stable water levels. This is a measurement of the capacity of the available source.

(7) "Water user" means a person who pumps water from the basalt ground water reservoir.

Stat. Auth.: ORS Ch. 536 & 537

Hist.: WRD 9-1990, f. & cert. ef. 6-25-90, WRD -1999, f. & cert.ef. 3-3-99

General Requirements

690-507-0630 (1) Except as specified in OAR 690-507-650(3) and 690-507-670(7), the use of water from the basalt ground water reservoir within the Butter Creek Critical Ground Water Area shall be limited to the sustainable annual yield.

(2) The Commission delegates to the Director the authority to implement these rules.

(3) Water from the basalt ground water reservoir in the Butter Creek Critical Ground Water Area shall be used for irrigation only during the irrigation season. The irrigation season begins on the 15th of March and ends on the 1st of November.

(4) The Department shall not accept any new applications for appropriation of water from the basalt ground water reservoir within the Butter Creek Critical Area.

Stat. Auth.: ORS 537.515, 537.525, 537.545 & 537.730 - 537.745

Hist.: WRD 9-1990, f. & cert. ef. 6-25-90; WRD 3-1992, f. & cert. ef. 2-10-92; WRD 7-1992, f. & cert. ef. 5-14-92, WRD -1999, f. & cert.ef. 3-3-99

Water Users Exempt from Division Requirements

690-507-0635 Any school located in the Butter Creek Critical Ground Water Area using water from the basalt reservoir for watering lawns, grounds and fields not exceeding ten acres in area shall meet the requirements of OAR 690-507-640(2) to (5) and 690-507-645. All other water users exempt under the provisions of ORS 537.545(a), (b), (d), (e), and (f) are not subject to the provisions of OAR 690, Division 507.

Stat. Auth.: ORS Ch. 536 & 537

Hist.: WRD 9-1990, f. & cert. ef. 6-25-90, WRD -1999, f. & cert.ef. 3-3-99

Duties of Water Users

690-507-0640 (1) Appropriation of ground water from the Butter Creek Critical Ground Water Area is prohibited unless the water user meets the requirements of section (2) to (5) of this rule.

(2) A water user authorized by OAR 690-507-670 to pump water from the basalt ground water reservoir shall satisfy the following conditions:

(a) Wells shall have an access port with a minimum diameter of 3/4 inch. The access shall be adequate to determine the water level at any time;

(b) A water user may install a functioning airline with a pressure gauge in addition to the access port. The airline shall be calibrated and yield accurate data. The airline shall not enter the well through the access port. The airline shall be adequate to determine the water level at any time;

(c) A water user shall install and maintain a totalizing flow meter on each well authorized by OAR 690-507-670. The meter shall meet the requirements of OAR 690-507-645.

(3) A water user shall record flow meter and power meter readings on a weekly basis at times when water is being used. The water user shall use forms provided by the Department and shall mail the readings to the Department in Salem by December 1st of the same year.

(4) A water user shall report broken flow meters to the watermaster in Pendleton within 48 hours after determining that the flow meter is broken. A water user shall not appropriate for more than 30 days without an operating flow meter. While the flow meter is broken, the water user shall record daily the hours the pump operates, the power meter reading and the time the power meter was read. The water user shall mail the data to the Department in Salem within one week of the installation of the repaired or replacement flow meter. The data shall include a statement of the initial reading on the newly installed flow meter and the current power meter reading. The water user shall notify the watermaster within 48 hours of installing the repaired or replacement flow meter.

(5) A water user shall notify the Department prior to commencing any repair or modification work on a pump or well. A water user shall mail a description of the repair or modification work to the Department within ten days of the completion of the repair or modification.

Stat. Auth.: ORS Ch. 536 & 537

Hist.: WRD 9-1990, f. & cert. ef. 6-25-90, WRD -1999, f. & cert. ef. 3-3-99

Flow Meter Specifications and Installation Guidelines

690-507-0645 (1) A flow meter shall meet the following specifications:

(a) A flow meter shall be of the velocity-propeller type or shunt line venturi type with enclosed propeller made of non-corrosive materials. Other types of flow meters may be used with the written approval of the Water Resources Director;

(b) A flow meter shall have a rated accuracy of plus or minus 2 percent of actual flow for all rates of flow within the range of flow for which the meter is designed. The flow meter shall register the full range of discharge from the source of water for which it is to be used;

(c) The register head of the flow meter shall have a visual, recording, mechanical, digital totalizer located on or adjacent to the flow meter and shall be equipped with a test sweep hand so that flow rate can be quickly determined. The register face shall be protected by a suitable plate or cover;

(d) Units of water measurement shall be in acre-feet, cubic feet, or gallons. The totalizer shall read directly in the above-described units. Flow meters recording in acre-feet shall read to the nearest 1/10th acre-foot, and the decimal multiplier shall be clearly indicated on the face of the register head;

(e) The totalizing part of the flow meter shall have a sufficient capacity to record the quantity of water authorized to be pumped over a period of 2 years;

(f) Both the register and the flow meter unit shall be provided with a method of sealing with a wire or lead seal to prevent unauthorized tampering with the placement or position of the flow meter.

(2) The flow meter installation shall be as follows:

(a) The flow meter shall be installed in accordance with manufacturer's specifications and in such a manner that there shall be a full pipe of water at all times during which water is being pumped;

(b) There shall be no turnouts or diversions between the source of water and the flow meter installation;

(c) The flow meter shall be placed in the pipe not less than five pipe diameters downstream from any valve, elbow, or other obstruction which might create turbulent flow, or install straightening vanes as recommended by the flow meter manufacturer. There shall also be at least one pipe diameter of unobstructed flow on the downstream side of the flow meter;

(d) All in-line saddle flow meters equipped with U-bolt fasteners shall be provided with a sealing wire

and lead seal near the terminal ends of the U-bolt following the complete installation of the flow meter;

(e) The flow meter and register shall not be locked in a building which would prevent access to the register. The register or flow meter shelter may be equipped with a lock to prevent tampering or breakage, provided that a lock is used and for which the watermaster has a key;

(f) Provisions shall be made for rating of the flow meter in accordance with the manufacturers specifications;

(g) The flow meter installation is subject to inspection and approval by the Director;

(h) In the case of artesian wells which flow at various times, the flow meter shall be installed in a manner which will measure both pumped and flowing discharges.

(3) Flow meters shall be kept clear of debris or other foreign or vegetative growth which could impede their operation. All flow meters shall be lubricated as specified by the manufacturer.

Stat. Auth.: ORS Ch. 536 & 537

Hist.: WRD 9-1990, f. & cert. ef. 6-25-90

New Subarea Boundaries

690-507-0647 (1)The Echo Junction Subarea shall be divided into two separate subareas being the Fourmile Canyon Subarea and the Echo Junction Subarea with boundaries as prescribed in sections (a) and (b) of this rule:

(a) Echo Junction Subarea: Beginning at a point approximately 3,290 feet east of the northwest corner of Section 3, Township 3 North, Range 28 East, WM; thence southerly through Emigrant Buttes in the east half of Section 3, Township 3 North, Range 28 East, WM; thence southerly through the center of Section 22, Township 3 North, Range 28 East, WM; and continuing southerly towards Service Buttes to a point approximately 750 feet east of the southwest corner of Section 10, Township 2 North, Range 28 East, WM; thence west to the southwest corner of Section 10, Township 2 North, Range 28 East, WM; thence southwest along a straight line to the southwest corner, northwest quarter southwest quarter, Section 22, Township 2 North, Range 27 East, WM; thence north along the west line of said Section 22 to the west quarter corner of Section 22, Township 2 North, Range 27 East, WM; thence northeast along a straight line to the southwest corner, northwest quarter southwest quarter, Section 19, Township 3 North, Range 28 East, WM; thence north along the Range line common to Range 27 East and Range 28 East to the northwest corner of Township 3 North, Range 28 East, WM; thence east along the Township line to a point approximately 3,290 feet east of the northwest corner of Section 3, Township 3 North, Range 28 East, WM; the point of beginning.

(b) Fourmile Canyon Subarea: Beginning at the southwest corner, northwest quarter southwest quarter, Section 22, Township 2 North, Range 27 East, WM; thence southwest along a straight line to the southwest corner of Section 21, Township 2 North, Range 27 East, WM; thence northwest along a straight line to the northwest corner of Section 1, Township 2 North, Range 26 East, WM; thence east along the Township line common to Township 2 North and Township 3 North, to the southwest corner of Section 35, Township 3 North, Range 27 East, WM; thence northeast along a straight line to the southwest corner of Section 6, Township 3 North, Range 28 East, WM; thence south along the Range line common to Range 27 East and Range 28 East to the southwest corner, northwest quarter southwest quarter, Section 19, Township 3 North, Range 28 East, WM; thence southwest along a straight line to the west quarter corner of Section 22, Township 2 North, Range 27 East, WM; thence south to the southwest

corner, northwest quarter southwest quarter, Section 22, Township 2 North, Range 27 East, WM; the point of beginning.

(2) The North Subarea shall be divided into two separate subareas being the "North Subarea" and "Section 21" with boundaries as prescribed in sections (a) and (b) of this rule:

(a) North Subarea: Being the basalt aquifer underlying the following area; beginning at the center of Section 9, Township 5 North, Range 28 East, WM, at the Columbia River; thence southerly through Umatilla Butte in the east half of Section 28, Township 5 North, Range 28 East, WM; thence continuing southerly through Hermiston Butte within the northeast quarter of the northwest quarter, Section 10, Township 4 North, Range 28 East, WM and continuing southerly towards Emigrant buttes in the east half of Section 3, Township 3 North, Range 28 East, WM, to a point on the Township line common to Township 3 North and Township 4 North, Range 28 East, WM; thence westerly along the Township line common to Township 3 North and Township 4 North, to the Southwest corner of Township 4 North, Range 28 East, WM; thence northerly along the west boundary line of Range 28 East to the Northwest corner of Township 4 North, Range 28 East, WM; thence easterly along the Township line to the southwest corner of Section 31, Township 5 North, Range 28 East, WM; thence north along the west boundary line of Range 28 East to the Columbia River; thence easterly along the south edge of the Columbia River to the point of beginning, excepting therefrom the following:

(b) Section 21: Being the basalt aquifer underlying the following area above 100 feet in elevation above mean sea level, described as follows: beginning at a point 1725 feet west of the northeast corner of Section 21, Township 5 North, Range 28 East, WM on the section line common to Section 16 and Section 21, Township 5 North, Range 28 East, WM; thence southerly to a point 1100 feet west of the southeast corner of Section 21, Township 5 North, Range 28 East, WM on the section line common to Section 21 and Section 28, Township 5 North, Range 28 East, WM; thence westerly along the section line common to Section 21 and Section 28, Township 5 North, Range 28 East, WM to the southwest corner of Section 21, Township 5 North, Range 28 East, WM; thence northerly along the section line common to Section 20 and Section 21, Township 5 North, Range 28 East, WM to the northwest corner of Section 21, Township 5 North, Range 28 East, WM; thence easterly along the section line common to Section 16 and Section 21, Township 5 North, Range 28 East, WM to the point of the beginning., all that portion of Section 21, Township 5 North, Range 28 East, WM within the North Subarea.

Stat. Auth.: ORS 537.515, 537.525, 537.545 & 537.730 - 537.745

Hist.: WRD 3-1992, f. & cert. ef. 2-10-92, WRD -1999, f. & cert. ef. 3-3-99

Sustainable Annual Yield

690-507-0650 (1) Each of the eight subareas in the Butter Creek Critical Ground Water Area shall be managed according to the sustainable annual yield within that subarea. The Department shall refine the sustainable annual yield value over time through the use of pumpage data and the response of ground water levels.

(2) The initial sustainable annual yield for each of the eight subareas was calculated using data from the 1983 through the 1989 irrigation seasons and is listed below by subarea followed by the Sustainable Annual Yield in Acre Feet:

- (a) North, 250 Acre Feet;
- (b) Section 21, 28 Acre Feet;
- (c) Echo Junction, 1,260 Acre Feet;
- (d) Fourmile Canyon, 1,300 Acre Feet;
- (e) West, 5,670 Acre Feet;
- (f) East, 720 Acre Feet;
- (g) Pine City, 4,150 Acre Feet;
- (h) South, 1,000 Acre Feet.

Stat. Auth.: ORS 537.515, 537.525, 537.545 & 537.730 - 537.745

Hist.: WRD 9-1990, f. & cert. ef. 6-25-90; WRD 3-1992, f. & cert. ef. 2-10-92; WRD 7-1992, f. & cert. ef. 5-14-92, WRD -1999, f. & cert. ef. 3-3-99

Method for Determining the Sustainable Annual Yield

690-507-0660 (1) The Department shall determine the sustainable annual yield for each subarea by comparing the volume of ground water pumped annually from each subarea for a given year to the average of the annual changes in ground water levels for the subarea for the same year.

(a) The Department shall calculate pumpage from each well based on data collected by the Department and as submitted under OAR 690-507-640. The pumpage for each subarea shall be calculated by totalling the pumpage from each non-exempt well in the subarea;

(b) The Department shall calculate annual change in ground water levels for a subarea by subtracting the current year's February or March water level from the previous year's February or March water level. The average shall be calculated by adding the change at each well in the subarea and dividing by the number of wells with available water level data. Data from all permitted or certificated wells in each subarea that are measurable shall be used to calculate the average annual change. If water level data cannot be collected at a particular well, data from a nearby well may be substituted.

(2) The total volume of ground water pumped from each subarea for a given year shall be plotted against the average change in ground water levels from that subarea for that year.

(3) A line of regression is drawn through the data using the least squares fit method and extended through the zero decline axis.

Stat. Auth.: ORS Ch. 536 & 537

Hist.: WRD 9-1990, f. & cert. ef. 6-25-90, WRD -1999, f. & cert. ef. 3-3-99

Distribution of Sustainable Annual Yield

690-507-0670 (1) The method for distributing the sustainable annual yield from the basalt ground water reservoir within each subarea in the Butter Creek Critical Ground Water Area is as follows:

(a) Except as provided in sections (5) of this rule, a water user who intends to pump water during any year shall make a request to the Department in Salem by July 1st of the preceding year on forms provided by the Department;

(b) The distribution of ground water shall be based on the priority dates of the water rights within the individual subarea;

(c) In determining the amount of ground water each water user is allocated to pump during the next

calendar year or irrigation season, the Department may consider:

- (A) Request for allocations received;
- (B) The sustainable annual yield;
- (C) The limits of the ground water rights;
- (D) The relative dates of priority;
- (E) Historical usage;
- (F) Whether or not a water user is physically capable of pumping and putting to a beneficial use the quantity requested; and
- (G) Any other factors deemed appropriate by the Department.

(d) The Department shall notify, by certified mail with return receipt requested, each water user by August 1st of the amount of ground water allocated under these rules to each water user for the next calendar year or irrigation season.

(2) If pumpage for a particular year exceeds the sustainable annual yield for a subarea, the total subarea allocation for the second year after that occurrence shall be reduced by that volume.

(3) If any water user requests more water than has been historically used, the Department may allocate less water than requested if, upon investigation, it appears unlikely the user will pump the volume requested.

(4) If any water user requests less water than has been historically used, the Department may allocate more water than requested if, upon investigation, it appears likely that the user will pump more than the volume requested.

(5) The method of requesting and distributing water in section (1) of this rule may not apply if a voluntary agreement among ground water users in any subarea is reached. The Director may approve the agreement if it is consistent with ORS 537.730 to 537.740 and the requirements of these rules (Division 507). The Department shall be a party to any agreement reached.

(6) Any agreement approved by the Director may be terminated by the lapse of time as provided in the agreement, by consent of the parties to the agreement or by the Director if the Director finds, after investigation and a public hearing upon adequate notice, that:

- (a) The agreement is not being substantially complied with by the parties thereto;
- (b) Changed conditions have made the continuance of the agreement a detriment to the public welfare, safety and health or contrary in any particular to the intent, purposes and requirements of ORS 537.505 to 537.795 or OAR Division 690, Chapter 507; or
- (c) That the agreement is ineffective in achieving reasonably stable water levels.

Stat. Auth.: ORS 537.515, 537.525, 537.545 & 537.730 - 537.745

Hist.: WRD 9-1990, f. & cert. ef. 6-25-90; WRD 3-1992, f. & cert. ef. 2-10-92; WRD 7-1992, f. & cert. ef. 5-14-92, WRD -1999, f. & cert. ef. 3-3-99

Process of Periodic Review of Sustainable Annual Yield

690-507-0680 (1) The Department shall determine whether a reasonably stable water level was achieved in the basalt ground water reservoir in each subarea in 2000 and every five years there-after.

(2) For any subarea in which a reasonably stable water level was achieved, the Department may increase the sustainable annual yield if the evaluation under section (1) of this rule indicates that more water is available than the existing sustainable annual yield.

(3) For any subarea in which a reasonably stable water level was not achieved, the Department may decrease the sustainable annual yield or modify subarea boundaries, or both, if the evaluation under section (1) of this rule indicates that less water is available than the existing sustainable annual yield.

(4) For any subarea in which a reasonably stable water level was achieved but for which individual wells, in the Director's judgement, show significant water level declines, the Department may propose modification of subarea boundaries.

(5) If the Department proposes to modify sustainable annual yields or subarea boundaries, it shall conduct a rulemaking hearing as part of the basin program.

(6) The Department may propose modification of subarea boundaries at times other than the five year review required in section (1) of this rule.

(7) Individuals with a ground water right in the Butter Creek Critical Ground Water Area may petition the Department to modify subarea boundaries under the following conditions:

(a) The petition shall be in writing;

(b) The petition shall contain evidence in support of the proposed boundary change; and

(c) The petition shall specify the proposed location of the boundary.

Stat. Auth.: ORS Ch. 536 & 537

Hist.: WRD 9-1990, f. & cert. ef. 6-25-90, WRD -1999, f. & cert.ef. 3-3-99

Annual Reporting

690-507-0690 The Department shall publish a report for the Butter Creek Critical Ground Water Area by May 31 of each year. The report shall include the water user's name, well locations, permit numbers, priority dates, authorized diversions, actual diversion and water levels.

Stat. Auth.: ORS Ch. 536 & 537

Hist.: WRD 9-1990, f. & cert. ef. 6-25-90, WRD -1999, f. & cert.ef. 3-3-99

Violation Policy

690-507-0700 Whenever the Department has reason to believe a violation of a rule in OAR 690, Division 507 has occurred, it shall investigate. If a violation has occurred, the Director may take enforcement action.

Stat. Auth.: ORS Ch. 536 & 537

Hist.: WRD 9-1990, f. & cert. ef. 6-25-90

Methods for Determining and Distributing the Sustainable Annual Yield of the Basalt Ground water Reservoir by Subarea for the Stage Gulch Critical Ground water Area

Purpose

690-507-0750 (1) The Director issued an order on May 15, 1991 declaring the Stage Gulch Critical Ground water Area. The order described the exterior boundaries and divided the area with eight subareas for the purposes of managing the Ground water resource. The response of ground-water levels to

pumpage in each subarea is largely independent of pumpage within other subareas.

(2) To promote optimum use of the limited Ground water supply in the Stage Gulch Critical Ground water Area, the Commission encourages development of water management plans to maintain a high standard of water use efficiency.

(3) The purpose of these rules is to stabilize water levels in the basalt Ground water reservoir in the Stage Gulch Critical Ground water area of Umatilla County. These rules carry out the authority granted to the Commission in ORS 536.900 to 536.935 and ORS 537.505 to 537.745.

Stat. Auth.: ORS 536.900 - 536.935 & 537.505 - 537.745

Hist.: WRD 6-1991, f. & cert. ef. 6-14-91

Definitions

690-507-0760 The following definitions apply to OAR Chapter 690, Division 507:

(1) "Commission" means the Water Resources Commission.

(2) "Department" means the Water Resources Department.

(3) "Director" means the Director of the Water Resources Department.

(4) "Physically Capable" means that the well, pump installed, and distribution system are able to produce and distribute the quantity of water requested.

(5) "Reasonably Stable Water Level" means an annual static water level decline of less than one foot over the entire subarea as determined by averaging the annual water level change of the representative wells in the subarea, and the water level change for the subarea averaged over five consecutive years displays no decline.

(6) "Sustainable Annual Yield" means the volume of water that can be pumped on an annual basis while maintaining reasonably stable water levels. This is a measurement of the capacity of the available source.

(7) "Water User" means a person who pumps water from the basalt Ground water reservoir.

Stat. Auth.: ORS 536.900 - 536.935 & 537.505 - 537.745

Hist.: WRD 6-1991, f. & cert. ef. 6-14-91

General Requirements

690-507-0770 (1) The use of water from the basalt Ground water reservoir within the Stage Gulch Critical Ground water Area shall be limited to the sustainable annual yield.

(2) The Commission delegates to the Director the authority to implement these rules.

(3) Water from the basalt Ground water reservoir in the Stage Gulch Critical Ground water Area shall be used for irrigation only during the irrigation season. The irrigation season shall begin on the 1st of March and end on the 30th of November. Water for all other authorized uses may be used at any time :

(a) A water user who wishes to use water for irrigation at any time other than the irrigation season designated in this section shall make a written request to the Department in Salem;

(b) If the request is authorized, the Department may require the water user to submit to the Department in Salem a static water level measurement for each well authorized to be pumped. Water level measurements shall be made by a Certified Water Rights Examiner, Licensed Water Well Driller, Registered Geologist, Licensed Land Surveyor, Registered Professional Engineer, pump installer, or the

water user.

(4) The Department shall not accept any new applications for appropriation of water from the basalt Ground water reservoir within the Stage Gulch Critical Ground water Area.

Stat. Auth.: ORS 536.900 - 536.935 & 537.505 - 537.745

Hist.: WRD 6-1991, f. & cert. ef. 6-14-91

Water Users Exempt from Division Requirements

690-507-0775 (1) Any school located in the Stage Gulch Critical Ground water Area using water from the basalt reservoir for watering lawns, grounds and fields not exceeding ten (10) acres in area shall meet the requirements of OAR 690-507-780(2) to (5) and 690-507-785. Except as provided in section (2) of this rule, water users with wells located in Subarea E of the Stage Gulch Critical Ground water Area and all other water users exempt under the provisions of ORS 537.545(a), (b), (d), (e) and (f) are not subject to the provisions of OAR 690, Division 507.

(2) Permitted wells located in Subarea E of the Stage Gulch Critical Ground water Area shall not be deepened to a point where the well would penetrate the deep basalt reservoir underlying said subarea.

Stat. Auth.: ORS 536.900 - 536.935 & 537.505 - 537.745

Hist.: WRD 6-1991, f. & cert. ef. 6-14-91

Duties of Water Users

690-507-0780 (1) Appropriation of Ground water from the Stage Gulch Critical Ground water Area is prohibited unless the water user meets the requirements of sections (2) to (5) of this rule.

(2) A water user authorized by OAR 690-507-810 to pump water from the basalt Ground water reservoir shall satisfy the following conditions:

(a) Wells shall have an access port with a minimum diameter of 3/4 inch. The access shall be adequate to determine the water level at any time;

(b) A water user may install a functioning airline with a pressure gage in addition to the access port. The airline shall be calibrated and yield accurate data. The airline shall not enter the well through the access port. The airline shall be adequate to determine the water level at any time;

(c) A water user shall install and maintain a totalizing flow meter on each well authorized by OAR 690-507-810 except wells authorized for irrigation of ten acres or less. The meter shall meet the requirements of OAR 690-507-785.

(3) If a flow meter is required, a water user shall record flow meter and power meter readings on a weekly basis at times when water is being used. The water user shall use forms provided by the Department and shall mail the readings to the Department in Salem by December 1st of the same year. The Department may accept other power-use information from a water user in lieu of weekly power meter readings. Acceptable power-use information may include, but is not limited to, copies of monthly statements provided by the water user or directly by the utility.

(4) A water user shall report broken flow meters to the watermaster in Pendleton within 48 hours after determining that the flow meter is broken. A water user shall not appropriate for more than 60 days without an operating flow meter. While the flow meter is broken, the water user shall record daily the hours the pump operates, the power meter reading and the time the power meter was read. The water user

shall mail the data to the Department in Salem within one week of the installation of the repaired or replacement flow meter. The data shall include a statement of the initial reading on the newly installed flow meter and the current power meter reading. The water user shall notify the watermaster within 48 hours of installing the repaired or replacement flow meter.

(5) A water user shall notify the Department in Salem or the watermaster in Pendleton prior to commencing any repair or modification work on a pump or well. If emergency repairs are required at times that preclude prior Department notification, a water user shall notify the Department by 5 p.m. on the first business day following commencement of the repair work. A water user shall mail a description of the repair or modification work to the Department within ten days of the completion of the repair or modification.

Stat. Auth.: ORS 536.900 - 536.935 & 537.505 - 537.745

Hist.: WRD 6-1991, f. & cert. ef. 6-14-91

Flow Meter Specifications and Installation Guidelines

690-507-0785 (1) A flow meter shall meet the following specifications:

(a) A flow meter shall be of the velocity-propeller type or shunt line venturi type with enclosed propeller made of non-corrosive materials. Other types of flow meters may be used with the written approval of the Water Resources Director;

(b) A flow meter shall have a rated accuracy of plus or minus two percent of actual flow for all rates of flow within the range of flow for which the meter is designed. The flow meter shall register the full range of discharge from the source of water for which it is to be used;

(c) The register head of the flow meter shall have a visual, recording, mechanical, digital totalizer located on or adjacent to the flow meter and shall be equipped with a test sweep hand so that flow rate can be quickly determined. The register face shall be protected by a suitable plate or cover;

(d) Units of water measurement shall be in acre-feet, cubic feet, or gallons. The totalizer shall read directly in the above-described units. Flow meters recording in acre-feet shall read to the nearest 1/10th acre-foot, and the decimal multiplier shall be clearly indicated on the face of the register head;

(e) The totalizing part of the flow meter shall have a sufficient capacity to record the quantity of water authorized to be pumped over a period of two (2) years;

(f) Both the register and the flow meter unit shall be provided with a method of sealing with a wire or lead seal to prevent unauthorized tampering with the placement or position of the flow meter.

(2) The flow meter installation shall be as follows:

(a) The flow meter shall be installed in accordance with manufacturer's specifications and in such a manner that there shall be a full pipe of water at all times during which water is being pumped;

(b) There shall be no turnouts or diversions between the source of water and the flow meter installation;

(c) The flow meter shall be placed in the pipe not less than five pipe diameters downstream from any valve, elbow, or other obstruction which might create turbulent flow, or install straightening vanes as recommended by the flow meter manufacturer. There shall also be at least one pipe diameter of unobstructed flow on the downstream side of the flow meter;

(d) All in-line saddle flow meters equipped with U-bolt fasteners shall be provided with a sealing wire and lead seal near the terminal ends of the U-bolt following the complete installation of the flow meter;

(e) Except for wells authorized for municipal use, the flow meter and register shall not be locked in a building which would prevent access to the register. The register or flow meter shelter may be equipped with a lock to prevent tampering or breakage, provided that a lock is used and for which that watermaster has a key;

(f) The flow meter installation is subject to inspection and approval by the Director;

(g) In the case of artesian wells which flow at various times, the flow meter shall be installed in a manner which will measure both pumped and flowing discharges.

(3) Flow meters shall be kept clear of debris or other foreign or vegetative growth which could impede their operation. All flow meters shall be lubricated as specified by the manufacturer.

Stat. Auth.: ORS 536.900 - 536.935 & 537.505 - 537.745

Hist.: WRD 6-1991, f. & cert. ef. 6-14-91

Sustainable Annual Yield

690-507-0790 (1) Each of the subareas in the Stage Gulch Critical Ground water Area shall be managed according to the sustainable annual yield within that subarea. The Department shall refine the sustainable annual yield over time through the use of pumpage data and the response of ground-water levels.

(2) The initial sustainable annual yield for each of the seven managed subareas in the Stage Gulch Critical Ground water Area was determined using data from the 1980 through the 1989 irrigation season and is listed below:

Subarea	Sustainable Annual Yield
A	11,450 Acre Feet
B	200
C	400
D	3,250
F	200
G	2,750
H	8,850

Stat. Auth.: ORS 536.900 - 536.935 & 537.505 - 537.745

Hist.: WRD 6-1991, f. & cert. ef. 6-14-91

Method for Determining the Sustainable Annual Yield

690-507-0800 (1) The Department shall determine the sustainable annual yield for each subarea by comparing the volume of Ground water pumped annually from each subarea for a given year to the average of the annual changes in Ground water levels for the area for the same year:

(a) The Department shall calculate pumpage from each well based on data collected by the Department and as submitted under OAR 690-507-780. The pumpage for each subarea shall be calculated by totaling the pumpage from each well in the subarea required to have a flow meter;

(b) The Department shall calculate annual change in Ground water levels for a subarea by subtracting

the current year's February or March water level from the previous year's February or March water level. The average shall be calculated by adding the change at each well in the subarea and dividing by the number of wells with available water level data. Data from all permitted or certificated wells in each subarea that are measurable shall be used to calculate the average annual change. If water level data cannot be collected at a particular well, data from a nearby well may be substituted.

(2) The total volume of Ground water pumped from each subarea for a given year shall be plotted against the average change in Ground water levels from that subarea for that year.

(3) A line of regression is drawn through the data using the least squares fit method and extended through the zero decline axis.

(4) The initial determination of sustainable annual yield for subareas B, C, and F of the Stage Gulch Critical Ground water Area shall be based on the average annual pumpage in each subarea during the period 1985 through 1989, rounded upward to the nearest 50 acre-feet.

Stat. Auth.: ORS 536.900 - 536.935 & 537.505 - 537.745

Hist.: WRD 6-1991, f. & cert. ef. 6-14-91

Distribution of Sustainable Annual Yield

690-507-0810 (1) The method for distributing the sustainable annual yield from the basalt Ground water reservoir within each managed subarea in the Stage Gulch Critical Ground water Area is as follows:

(a) Except as provided in section (5) of this rule, a water user who intends to pump water for any authorized use except municipal use during any year shall make a request to the Department in Salem by July 1st of the preceding year on forms provided by the Department;

(b) The Department shall assume that municipal water users intend to pump a quantity of water equivalent to the average pumped for the previous three (3) years, unless the municipal water user informs the Department otherwise by July 1st;

(c) Except as provided in section (5) of this rule, the distribution of Ground water for any authorized use except municipal use shall be based on the priority dates of the water rights within the individual subarea;

(d) In determining the amount of Ground water each water user is allocated to pump during the next calendar year or irrigation season, the Department may consider:

(A) Requests for allocations received;

(B) The sustainable annual yield;

(C) The limits of the Ground water rights;

(D) The relative dates of priority, with preference given without regard to priority date for municipal use;

(E) Historical usage;

(F) Whether or not a water user is physically capable of pumping and putting to a beneficial use the quantity requested; and

(G) Any other factors deemed appropriate by the Department.

(e) The Department shall notify by certified mail with return receipt requested, each water user by August 1st of the amount of Ground water allocated under these rules to each water user for the next calendar year or irrigation season;

(f) Persons who wish to challenge the allocation determined under this rule shall request a hearing

before the Department pursuant to ORS 183.415 to 183.470.

(2) If pumpage for a particular year exceeds the sustainable annual yield for a subarea, the total subarea allocation for the second year after that occurrence shall be reduced by that volume.

(3) If any water user requests more water than has been historically used, the Department may allocate less water than requested if, upon investigation, it appears unlikely the user will pump the volume requested.

(4) If any water user requests less water than has been historically used, the Department may allocate more water than requested if, upon investigation, it appears likely that the user will pump more than the volume requested.

(5) The method of requesting and distributing water in section (1) of this rule may not apply if a voluntary agreement among Ground water users in any subarea is reached. The Director may approve the agreement if it is consistent with ORS 537.730 to 537.740 and the requirements of these rules (Division 507). The Department shall be a party to any agreement reached.

(6) Any agreement approved by the Director may be terminated by the lapse of time as provided in the agreement, by consent to the parties to the agreement or by the Director if the Director finds, after investigation and a public hearing upon adequate notice, that:

(a) The agreement is not being substantially complied with by the parties thereto;

(b) Changed conditions have made the continuance of the agreement a detriment to the public welfare, safety and health or contrary in any particular to the intent, purposes and requirements of ORS 537.505 to 537.795 or OAR Division 690, Chapter 507; or

(c) That the agreement is ineffective in achieving reasonably stable water levels.

(7) A gradual reduction of pumpage in excess of the sustainable annual yield shall be implemented beginning in 1992:

(a) Those users who would not be allocated any water in 1992 shall be allowed to pump seventy-five percent of their average pumpage for the period 1986 to 1990;

(b) Those users who would not be allocated any water in 1993 shall be allowed to pump fifty percent of their average pumpage for the period 1986 to 1990;

(c) Those users who would not be allocated any water in 1994 shall be allowed to pump twenty-five percent of their average pumpage for the period 1986 to 1990.

(8) Those users who would be allocated only a portion of their request because it exceeds the sustainable annual yield shall be allowed to pump that volume of water requested that is within the sustainable annual yield. The volume of water allocated under the sustainable annual yield shall be subtracted from the user's average pumpage for the period 1986 to 1990. A percentage of the difference shall be allocated as described in section (7) of this rule in addition to the volume allocated below the sustainable annual yield.

Stat. Auth.: ORS 536.900 - 536.935 & 537.505 - 537.745

Hist.: WRD 6-1991, f. & cert. ef. 6-14-91

Process of Periodic Review of Sustainable Annual Yield

690-507-0820 (1) The Department shall determine whether a reasonably stable water level was achieved in the basalt Ground water reservoir in each subarea in 1995 and every five years thereafter.

(2) For any subarea in which a reasonably stable water level was achieved, the Department may

increase the sustainable annual yield if the evaluation under section (1) of this rule indicates that more water is available than the existing sustainable annual yield.

(3) For any subarea in which a reasonably stable water level was not achieved, the Department may decrease the sustainable annual yield or modify subarea boundaries, or both, if the evaluation under section (1) of this rule indicates that less water is available than the existing sustainable annual yield.

(4) For any subarea in which a reasonably stable water level was achieved but for which individual wells, in the Director's judgment, show significant water level declines, the Department may propose modification of subarea boundaries.

(5) If the Department proposes to modify sustainable annual yields or subarea boundaries, it shall conduct a rulemaking hearing as part of the basin program.

(6) The Department may propose modification of subarea boundaries or sustainable annual yields at times other than the five year review required in section (1) of this rule.

(7) Individuals with a Ground water right in the Stage Gulch Critical Ground water Area may petition the Department to modify subarea boundaries or sustainable annual yields under the following conditions:

(a) The petition shall be in writing;

(b) The petition shall contain evidence in support of the proposed modification; and

(c) The petition shall specify the proposed location of the boundary or sustainable annual yield.

Stat. Auth.: ORS 536.900 - 536.935 & 537.505 - 537.745

Hist.: WRD 6-1991, f. & cert. ef. 6-14-91

Annual Reporting

690-507-0830 The Department shall publish a report for the Stage Gulch Critical Ground water Area by May 31 of each year. The report shall include the water user's name, well locations, permit numbers, priority dates, authorized diversions, actual diversion, and water levels.

Stat. Auth.: ORS 536.900 - 536.935 & 537.505 - 537.745

Hist.: WRD 6-1991, f. & cert. ef. 6-14-91

Violation Policy

690-507-0840 Whenever the Department has reason to believe a violation of a rule in OAR 690, Division 507 has occurred, it shall investigate. If a violation has occurred, the Director may take enforcement action.

Stat. Auth.: ORS 536.900 - 536.935 & 537.505 - 537.745

Hist.: WRD 6-1991, f. & cert. ef. 6-14-91