



Correction
CERTIFICATE AND ORDER
FOR FILING
PERMANENT

RECEIVED

ADMINISTRATIVE RULES WITH THE SECRETARY OF STATE **FEB 10 1 11 PM '92**

I HEREBY CERTIFY that the attached copy is a true, full and correct copy of PERMANENT rule(s) adopted on December 20, 1991
by the Water Resources Commission
(Department) (Division) SECRETARY OF STATE

to become effective upon filing
(Date)

The within matter having come before the Water Resources Commission
(Department) (Division) after

If procedures having been in the required form and conducted in accordance with applicable statutes and rules and being fully advised in the premises:

Notice of Intended Action published in Secretary of State's Bulletin: NO YES Date Published: March 1, 1991

NOW THEREFORE, IT IS HEREBY ORDERED THAT the following action be taken: (List Rule Number(s) or Rule Title(s) on Appropriate Lines Below)

Adopted:
(New Total Rules)

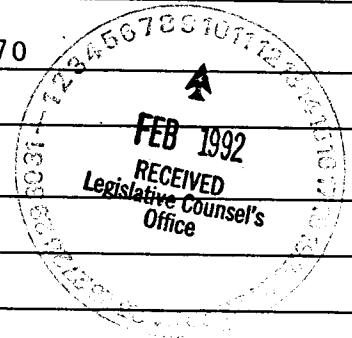
Repealed:
(Existing Rules)

Repealed:
(Total Rules Only)

Administrative Rules of the Water Resources Commission
(Department) (Division)

DATED this 10th day of February, 19 92

By: William H. Young
(Authorized Signer)
Title: Director



Statutory Authority: ORS 537.515, 537.525, 537.545, 537.730, to 537.745 or

Chapter(s) _____, Oregon Laws 19 _____ or

House Bill(s) _____, 19 _____ Legislature; or Senate Bill(s) _____, 19 _____ Legislature

Subject Matter: Creation of the Fourmile Canyon Subarea and set sustainable annual yields for the Fourmile Canyon and Echo Junction subareas.

For Further Information Contact: Marc Norton Phone: 378-8455 ext. 209
(Rule Coordinator)

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

Purpose

690-507-610

- (1) The Director issued an order on August 18, 1986 declaring the Butter Creek Critical Groundwater Area. The order described the exterior boundaries and divided the area into six subareas for the purpose of managing the groundwater resource. The response of groundwater levels to pumpage from each subarea is largely independent of pumpage within other subareas.
- (2) To promote optimum use of the limited groundwater supply in the Butter Creek Critical Groundwater 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 groundwater resource in the Butter Creek Critical Groundwater Area. If, by 1995, reasonably stable water levels have not been achieved, the Department shall determine whether or not to require prior authorization under these rules for groundwater uses that are exempt under ORS 537.545.
- (4) The purpose of these rules is to stabilize water levels in the basalt groundwater reservoir in the Butter Creek Critical Groundwater 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.

[adopted 6-25-90]

Definitions

690-507-620 The following definitions apply to OAR Chapter 690-507-610 to 690-507-700.

- (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, installed pump, 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 groundwater reservoir.

[adopted 6-25-90]

General Requirements

690-507-630

(1) Except as specified in 690-507-650 (3) and 690-507-670 (7) [or (9)], the use of water from the basalt groundwater reservoir within the Butter Creek Critical Groundwater 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 groundwater reservoir in the Butter Creek Critical Groundwater 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 groundwater reservoir within the Butter Creek Critical Area.

[adopted 6-25-90; amended: 2-10-92]

Water Users Exempt From Division Requirements

690-507-635

(1) Any school located in the Butter Creek Critical Groundwater Area using water from the basalt reservoir for watering lawns, grounds and fields not exceeding 10 acres in area shall meet the requirements of 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.

[adopted 6-25-90]

Duties of Water Users

690-507-640

(1) Appropriation of groundwater from the Butter Creek Critical Groundwater Area is prohibited unless the water user meets the requirements of sections (2) to (5) of this rule.

(2) A water user authorized by 690-507-670 to pump water from the basalt groundwater 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 690-507-670. The meter shall meet the requirements of 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.

[adopted 6-25-90]

Flow Meter Specifications and Installation Guidelines

690-507-645

(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 manufacturer's 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.

[adopted 6-25-90]

New Subarea Boundaries

690-507-647

(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 subsections (a) and (b) of this rule.

(a) Echo Junction Subarea. Beginning at a point approximately 3290 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 3290 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 south west 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.

[adopted 6-25-90; amended: 2-10-92]

Sustainable Annual Yield

690-507-650

(1) Except as specified in 690-507-650 (3) and 690-507-670 (7) [and (9)], each of the seven subareas in the Butter Creek Critical Groundwater 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 groundwater levels.

(2) The initial sustainable annual yield for each of the seven subareas was calculated using data from the 1983 through the 1989 irrigation seasons and is listed below:

SUBAREA	SUSTAINABLE ANNUAL YIELD	
North	250	Acre Feet
Echo Junction	1260	
Fourmile Canyon	1300	
West	5670	
East	720	
Pine City	4150	
South	1000	

(3) The sustainable annual yield for the Echo Junction Subarea is 1260 acre feet. A gradual reduction in pumpage will be allowed at the following schedule: 2700 acre feet in 1992; 2340 acre feet in 1993; 1980 acre feet in 1994; 1620 acre feet in 1995, and 1260 acre feet in 1996. These values will be used as if they were the sustainable annual yields.

[adopted 6-25-90; amended: 2-10-92]

Method for Determining the Sustainable Annual Yield

690-507-660

(1) The Department shall determine the sustainable annual yield for each subarea by comparing the volume of groundwater pumped annually from each subarea for a given year to the average of the annual changes in groundwater 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 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 groundwater 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 groundwater pumped from each subarea for a given year shall be plotted against the average change in groundwater 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.

[adopted 6-25-90]

Distribution of Sustainable Annual Yield

690-507-670

(1) The method for distributing the sustainable annual yield from the basalt groundwater reservoir within each subarea in the Butter Creek Critical Groundwater Area is as follows:

(a) Except as provided in section 5 [7] 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 groundwater shall be based on the priority dates of the water rights within the individual subarea.

(c) In determining the amount of groundwater 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 groundwater 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 groundwater 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 distributing water in section (1) of this rule may not apply if a voluntary agreement among groundwater 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.

(7) A gradual reduction of pumpage in excess of the sustainable annual yield shall be implemented beginning in 1991.

- (a) Those users who would not be allocated any water in 1991 shall be allowed to pump eighty percent of their average pumpage from 1987, 1988, and 1989.
- (b) Those users who would not be allocated any water in 1992 shall be allowed to pump sixty percent of their average pumpage from 1987, 1988, and 1989.
- (c) Those users who would not be allocated any water in 1993 shall be allowed to pump forty percent of their average pumpage from 1987, 1988, and 1989.
- (d) Those users who would not be allocated any water in 1994 shall be allowed to pump twenty percent of their average pumpage from 1987, 1988, and 1989.

(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 from 1987, 1988, 1989. A percentage of the difference shall be allocated as described in section 7 [(9)] in addition to the volume allocated below the sustainable annual yield.

[adopted 6-25-90; amended: 2-10-92]

Process of Periodic Review of Sustainable Annual Yield

690-507-680

(1) The Department shall determine whether a reasonably stable water level was achieved in the basalt groundwater 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 the 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 hearing.

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

(7) Individuals with a groundwater right in the Butter Creek Critical Groundwater 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.

[adopted 6-25-90]

Annual Reporting

690-507-690 The Department shall publish a report for the Butter Creek Critical Groundwater 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.

[adopted 6-25-90]

Violation Policy

690-507-700 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.

[adopted 6-25-90]