OFFICE OF THE SECRETARY OF STATE
TOBIAS READ
SECRETARY OF STATE

MICHAEL KAPLAN
DEPUTY SECRETARY OF STATE

ARCHIVES DIVISION
STEPHANIE CLARK
DIRECTOR

800 SUMMER STREET NE
SALEM, OR 97310
503-373-0701

NOTICE OF PROPOSED RULEMAKING
INCLUDING STATEMENT OF NEED & FISCAL IMPACT

CHAPTER 690
WATER RESOURCES DEPARTMENT

FILED
05/27/2025 8:57 AM
ARCHIVES DIVISION
SECRETARY OF STATE

FILING CAPTION: Amending and adopting Division 512 rules concerning groundwater management in the Malheur Lake administrative basin.

LAST DAY AND TIME TO OFFER COMMENT TO AGENCY: 08/07/2025 5:00 PM

The Agency requests public comment on whether other options should be considered for achieving the rule's substantive goals while reducing negative economic impact of the rule on business.

CONTACT: Kelly Meinz
971-718-7087
WRD_DL_rule-coordinator@water.oregon.gov

725 Summer St. NE, Suite A
Salem,OR 97301

Filed By:
kelly meinz
Rules Coordinator

HEARING(S)

Auxiliary aids for persons with disabilities are available upon advance request. Notify the contact listed above.

DATE: 06/23/2025
TIME: 7:00 PM - 8:00 PM
OFFICER: Kelly Meinz/OWRD Staff

IN-PERSON HEARING DETAILS
ADDRESS: The Pine Room, 543 W Monroe Street, Burns, OR 97720
SPECIAL INSTRUCTIONS:
This hearing will be conducted in-person. Each person attending the hearing who wishes to comment will be asked to sign in on a sign-up sheet upon arrival. During the hearing, the hearing officer will call on members of the public to provide oral comment in the order in which attendees have registered to comment. The hearing will begin no earlier than 7:00 p.m. and close no later than 8:00 p.m. Based on the number of people who have signed up to provide oral comments, the hearing officer may set reasonable time limits for each commenter.

Prior to the hearing, Department staff will offer an information presentation, during which time members of the public may ask questions. The informational session will be held from 5:30 p.m. to 6:30 p.m. The Department will not be accepting public comments on the proposed rulemaking during the informational presentation. Attendees are encouraged to attend the subsequent public hearing beginning at 7:00 p.m. to provide comments.

The informational and hearing sessions will be recorded and available for viewing within 48 hours of the close of the hearing on the rulemaking website:
https://www.oregon.gov/owrd/programs/policylawandrules/OARS/Pages/Division-512-Rulemaking.aspx.

The informational and hearing sessions will be recorded and available for viewing within 48 hours of the close of the hearing on the rulemaking website:
https://www.oregon.gov/owrd/programs/policylawandrules/OARS/Pages/Division-512-

Rulemaking.aspxwrd.info/Division512.

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In addition to presenting oral comments at the hearings, anyone may submit written comments until 5 p.m. on August 7, 2025, which is the close of the public comment period. Written comments should be sent to "Kelly Meinz " at Oregon Water Resources Department, 725 Summer Street NE, Suite A, Salem, OR 97301 or by email to WRD_DL_rule-coordinator@water.oregon.gov.

Comments received after 5 p.m. on August 7, 2025, will not be reviewed or considered by the agency unless the agency decides to extend the public comment period for everyone.

DATE: 06/24/2025
TIME: 11:15 AM - 12:15 PM
OFFICER: Kelly Meinz/OWRD staff

IN-PERSON HEARING DETAILS
ADDRESS: Crane Store and Cafe, Gas and RV Camping, 57466 OR-78, Crane, OR 97732
SPECIAL INSTRUCTIONS:
This hearing will be conducted in-person. Each person attending the hearing who wishes to comment will be asked to sign in on a sign-up sheet upon arrival. During the hearing, the hearing officer will call on members of the public to provide oral comment in the order in which attendees have registered to comment. The hearing will begin no earlier than 11:15 a.m. and close no later than 12:15 p.m. Based on the number of people who have signed up to provide oral comments, the hearing officer may set reasonable time limits for each commenter.

Prior to the hearing, Department staff will offer an information presentation, during which time members of the public may ask questions. The informational session will be held from 10:00 a.m. to 11:00 a.m. The Department will not be accepting public comments on the proposed rulemaking during the informational presentation. Attendees are encouraged to attend the subsequent public hearing beginning at 11:15 a.m. to provide comments.

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Comments received after 5 p.m. on August 7, 2025, will not be reviewed or considered by the agency unless the agency

decides to extend the public comment period for everyone.

DATE: 06/24/2025
TIME: 7:00 PM - 8:00 PM
OFFICER: Kelly Meinz/ OWRD Staff

IN-PERSON HEARING DETAILS
ADDRESS: Hotel Diamond, 49130 Main Street, Diamond, OR 97722
SPECIAL INSTRUCTIONS:
This hearing will be conducted in-person. Each person attending the hearing who wishes to comment will be asked to sign in on a sign-up sheet upon arrival. During the hearing, the hearing officer will call on members of the public to provide oral comment in the order in which attendees have registered to comment. The hearing will begin no earlier than 7:00 p.m. and close no later than 8:00 p.m. Based on the number of people who have signed up to provide oral comments, the hearing officer may set reasonable time limits for each commenter.

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DATE: 06/25/2025
TIME: 11:15 AM - 12:15 PM
OFFICER: Kelly Meinz/ OWRD Staff

IN-PERSON HEARING DETAILS
ADDRESS: Suntex Elementary School, 68178 Silver Creek Road, Riley, OR 97758
SPECIAL INSTRUCTIONS:
This hearing will be conducted in-person. Each person attending the hearing who wishes to comment will be asked to sign in on a sign-up sheet upon arrival. During the hearing, the hearing officer will call on members of the public to provide oral comment in the order in which attendees have registered to comment. The hearing will begin no earlier than 11:15 a.m. and close no later than 12:15 p.m. Based on the number of people who have signed up to provide oral

comments, the hearing officer may set reasonable time limits for each commenter.

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DATE: 06/25/2025
TIME: 7:00 PM - 8:00 PM
OFFICER: Kelly Meinz/OWRD Staff

IN-PERSON HEARING DETAILS
ADDRESS: Double O School, 66077 Double O Road , Hines, OR 97738
SPECIAL INSTRUCTIONS:
This hearing will be conducted in-person. Each person attending the hearing who wishes to comment will be asked to sign in on a sign-up sheet upon arrival. During the hearing, the hearing officer will call on members of the public to provide oral comment in the order in which attendees have registered to comment. The hearing will begin no earlier than 7:00 p.m. and close no later than 8:00 p.m. Based on the number of people who have signed up to provide oral comments, the hearing officer may set reasonable time limits for each commenter.

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hearing for which an aid is needed.

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Comments received after 5 p.m. on August 7, 2025, will not be reviewed or considered by the agency unless the agency decides to extend the public comment period for everyone.

DATE: 06/26/2025
TIME: 7:00 PM - 8:00 PM
OFFICER: Kelly Meinz/OWRD Staff

IN-PERSON HEARING DETAILS
ADDRESS: Seneca Elementary School, 101 Park Avenue, Seneca, OR 97873
SPECIAL INSTRUCTIONS:
This hearing will be conducted in-person. Each person attending the hearing who wishes to comment will be asked to sign in on a sign-up sheet upon arrival. During the hearing, the hearing officer will call on members of the public to provide oral comment in the order in which attendees have registered to comment. The hearing will begin no earlier than 7:00 p.m. and close no later than 8:00 p.m. Based on the number of people who have signed up to provide oral comments, the hearing officer may set reasonable time limits for each commenter.

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https://www.oregon.gov/owrd/programs/policylawandrules/OARS/Pages/Division-512-Rulemaking.aspx.

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Comments received after 5 p.m. on August 7, 2025, will not be reviewed or considered by the agency unless the agency decides to extend the public comment period for everyone.

DATE: 08/04/2025
TIME: 5:00 PM - 6:30 PM
OFFICER: Kelly Meinz/OWRD Staff

IN-PERSON HEARING DETAILS
ADDRESS: Seneca Elementary School, 101 Park Avenue, Seneca, OR 97873
SPECIAL INSTRUCTIONS:
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DATE: 08/05/2025
TIME: 10:00 AM - 12:00 PM
OFFICER: Kelly Meinz/OWRD Staff

IN-PERSON HEARING DETAILS
ADDRESS: Harney County Community Center, 478 N. Broadway Avenue, Burns, OR 97720
SPECIAL INSTRUCTIONS:
This hearing will be conducted as a hybrid meeting, providing an opportunity to give testimony either in person, virtually, or by phone. Each person attending the hearing in person who wishes to comment will be asked to sign in on a sign-up sheet upon arrival. During the hearing, the hearing officer will alternate between those commenting in person, virtually, and by phone, proceeding in the order in which attendees have registered to comment. The hearing will begin no earlier than 10:00 a.m. and close no later than 12:00 p.m. Based on the number of people who have signed up to provide oral comments, the hearing officer may set reasonable time limits for each commenter.

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Comments received after 5 p.m. on August 7, 2025, will not be reviewed or considered by the agency unless the agency decides to extend the public comment period for everyone.

REMOTE HEARING DETAILS
MEETING URL: Click here to join the meeting
PHONE NUMBER: 1-719-359-4580
CONFERENCE ID: 99291255260
SPECIAL INSTRUCTIONS:
To attend virtually, please click on the URL link provided above and complete the registration steps. Alternatively, you may email WRD_DL_rule-coordinator@water.oregon.gov no later than noon (12:00 p.m.) on August 4, 2025, to receive the registration link.

To attend by phone, please email WRD_DL_rule-coordinator@water.oregon.gov no later than noon (12:00 p.m.) on August 4, 2025, to receive the conference ID and passcode for the phone number provided above.

Each person attending the hearing virtually or by phone who wishes to comment will be asked to identify themselves so their names may be added to the virtual sign-up sheet. During the hearing, the hearing officer will alternate between those commenting in person, virtually, and by phone, proceeding in the order in which attendees have registered to comment. The hearing will close no later than 12:00 p.m.

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Automated captioning will be enabled for virtual participants.

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DATE: 08/05/2025
TIME: 5:00 PM - 7:00 PM
OFFICER: Kelly Meinz/OWRD Staff

IN-PERSON HEARING DETAILS
ADDRESS: Harney County Community Center, 478 N. Broadway Avenue, Burns, OR 97720
SPECIAL INSTRUCTIONS:

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REMOTE HEARING DETAILS
MEETING URL: Click here to join the meeting
PHONE NUMBER: 1-719-359-4580
CONFERENCE ID: 99980891371
SPECIAL INSTRUCTIONS:
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Close captioning will be enabled for virtual participants.

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2025, which is the close of the public comment period. Written comments should be sent to "Kelly Meinz " at Oregon Water Resources Department, 725 Summer Street NE, Suite A, Salem, OR 97301 or by email to WRD_DL_rule-coordinator@water.oregon.gov.

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NEED FOR THE RULE(S)

The groundwater in the Harney Basin supports both consumptive and nonconsumptive groundwater uses throughout the region. Examples of consumptive uses in the Basin include agricultural irrigation, livestock watering, domestic wells (i.e., water used for household drinking, cleaning, bathing, and gardening), municipal water supply, industrial use, and power generation. Because groundwater feeds springs and streams, groundwater also has non-consumptive benefits; springs and streams help support fish and wildlife, recreation, cultural resources, water quality, wetlands, and floodplains. These benefits support ecosystem services, including fishing, hunting, recreation, and cultural preservation as well as wastewater assimilation, drought mitigation, and flood control.

Since the 1990s, groundwater development in the Harney Basin has increased significantly, primarily for agricultural irrigation, leading to declines in groundwater levels, with some areas seeing declines of over 100 feet. The Harney Basin Groundwater Study (Gingerich et al., 2022; Garcia et al., 2022) identified that the groundwater budget in the basin's lowlands is out of balance, with discharge exceeding recharge by 110,000 acre-feet per year. This imbalance has caused widespread groundwater level declines, especially in areas with intensive groundwater pumping. The study also found that much of the pumped groundwater is ancient and not replenished on human timescales. Ongoing groundwater level data collection confirms that groundwater levels continue to decline in many areas.

The groundwater level declines have had significant impacts on domestic well users. Today, there are approximately 2,000 domestic wells in Harney County. Since 2022, the Oregon Water Resources Department has received 18 new dry well reports in the County; dry wells occur when groundwater levels drop. Because reporting a dry well is voluntary, it is likely more than 18 wells have gone dry since 2022. Using the Harney Basin Groundwater Model (Gingerich et al., 2024), the Department projects that an additional 200 domestic wells will go dry by the end of the century if groundwater pumping continues at current rates. Under the new rules, the Department projects fewer than half as many wells going dry (i.e., 98 domestic wells). The Department also assessed the economic costs of inaction compared with the economic benefits of the new rules with respect to domestic wells in the Fiscal & Economic Impact Section of this Notice of Proposed Rulemaking.

The springs, streams, and Malheur Lake ecosystem services within the Harney Basin greatly depend on groundwater. If pumping levels continue at their current rate, groundwater levels will continue to decline, resulting in less discharge to springs and streams. These springs and streams are relied upon by roughly six million birds that fly through the Pacific Flyway each year as well as sage grouse and other resident fauna in the Harney Basin. Drying springs and streams would likely impact the number of migratory birds visiting the Harney Basin yearly. Recreational bird watching could be impacted by reducing the migratory bird population. Additionally, dried springs will impact the fisheries of the basin, which could reduce the number of people coming to the basin to fish. Reduced spring and streamflow will also impact the populations of wildlife that are hunted for recreational purposes. Finally, reduced spring and streamflow will also decrease the availability of water and vegetation for domestic livestock grazing in the basin. Reductions in springs and stream flows will substantially impact water-dependent ecosystems and human populations that rely on these systems for recreational use and livestock grazing.

To address the ongoing impacts of groundwater level declines the Department proposes new rules to implement three groundwater management tools authorized by statute:

-- Critical Groundwater Area (ORS 537.730 – 537.742) – this tool applies to current and future groundwater use within the Greater Harney Valley Groundwater Area of Concern (GHVGAC) portion of the Harney Basin Groundwater Reservoir.

-- Serious Water Management Problem Areas (ORS 540.435) – this tool applies to current and future groundwater use throughout the Harney Basin Groundwater Reservoir.

-- Classification (ORS 536.340) – this tool applies to future groundwater by restricting what new uses will be authorized in the Harney Basin Groundwater Reservoir.

The new rules will not impact exempt uses as outlined in statute (ORS 537.545).

HARNEY BASIN CRITICAL GROUNDWATER AREA (CGWA) (690-512-0010, -0020, -0041,-0050, -0060, -0070, -0080): The groundwater conditions in the Harney Basin have resulted in the need to designate the basin a critical groundwater area (CGWA), which enables the Department to restrict further groundwater appropriation within the basin, establish a limit on the volume of water that can be pumped, and determine the handling of any water right permits issued during the rulemaking process. If any portion of a groundwater reservoir meets the criteria defined in ORS 573.730(1) then all or part of that groundwater reservoir may be designated a Critical Groundwater Area. In the Harney Basin the following requirements from ORS 537.730(1)(a), (e) have been met:

(a) Groundwater levels in the area in question are declining or have declined excessively

(e) The available ground water supply in the area in question is being or is about to be overdrawn

Groundwater levels are considered to have declined excessively when they decline more than 50 feet below the highest known water level and are considered excessively declining at a rate of 3 feet per year over 10 years (OAR 690-008-0001(5), (7)). In the Harney Basin, some wells have experienced a decline of 50 feet or more and/or a decline rate of 3 feet per year for 10 years. For a more detailed explanation, refer to “Groundwater Report for the Harney Basin Critical Groundwater Area Rulemaking” (Boschmann, 2024).

A groundwater reservoir is overdrawn when the amount of groundwater pumped annually exceeds the average annual recharge (OAR 690-008-0001(8)). In some areas of the Harney Basin, groundwater pumping exceeds recharge. For a more detailed explanation, refer to Boschmann (2024).

The Department proposes defining the CGWA boundary as the established administrative boundary of the Greater Harney Valley Groundwater Area of Concern (GHVGAC). Within this boundary, the CGWA will be divided into seven subareas. Exhibits depicting the critical groundwater area and subarea boundaries are attached to draft rule OAR 690-512-0020.

HARNEY BASIN SERIOUS WATER MANAGEMENT PROBLEM AREA (SWMPA) (690-512-0010, -0020, -0110): Widespread year-to-year groundwater level declines occur across many parts of the Harney Basin. Complaints from domestic well owners have also been received due to groundwater declines. A SWMPA designation helps the Department track actual use and provides accountability among groundwater users in Harney Basin.

The proposed Serious Water Management Problem Area (SWMPA) in the Harney Basin requires totalizing flowmeters to be installed, water use measurements to be collected monthly and annual water use to be reported for all wells authorized under a groundwater right. The Department proposes establishing the SWMPA boundary to cover areas of Grant and Harney counties located in the Harney Basin and within the Malheur Lake Administrative Basin. An exhibit depicting the SWMPA boundary is available in the draft rules OAR 690-512-0020. The criteria for designating a SWMPA are outlined in ORS 540.435 and OAR 690-085-0020. In the Harney Basin the following requirements from OAR 690-085-0020(1) have been met:

(1) OAR 690-085-0020(1)(a) - Ground water decline in the area is of such magnitude that the aquifer does not recover annually.

(2) OAR 690-085-0020(1)(f) - There are frequent occurrences of surface or ground water shortages caused by use of water from streams or wells. Shortages may be evidenced by complaints from water right holders, requests to regulate water use, degraded water quality, or failure to meet administrative restrictions or minimum streamflows.

HARNEY BASIN CLASSIFICATION (690-512-0010, -0020, -0030): In 2016, the Greater Harney Valley Groundwater Area of Concern (GHVGAC) boundary was established in the Harney Basin to classify future groundwater use within the boundary for exempt uses only (ORS 536.340) (ORS 537.545).

The Harney Basin Groundwater Study found that lowland groundwater discharge exceeds groundwater recharge, resulting in declining groundwater levels (Gingerich et al. 2022; Garcia et al. 2022). Much of the Basin's recharge capacity lies in the upland areas; any further groundwater development in these upland areas will compound further the problem of declining groundwater levels.

The Department proposes to expand the 2016 classification boundary to include those areas of Grant and Harney counties in the Harney Basin within the Malheur Lake Administrative Basin. Expansion of the classification boundary will include some of the Basin's crucial upland recharge areas. Within the expanded classification boundary, future groundwater development will be limited to exempt uses (ORS 537.545) and non-consumptive geothermal use. By minimizing groundwater development in the upland areas of the Basin, the new rules will preserve recharge into the Basin's lowlands, where severe groundwater level declines are occurring.

DOCUMENTS RELIED UPON, AND WHERE THEY ARE AVAILABLE

This is an abbreviated list of the principal documents relied upon for the proposed rulemaking. Please contact the Oregon Water Resources Department for a complete list of documents relied upon and the location(s) of those documents.

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Oregon Administrative Rules (OAR) 690-010, available at https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3135.

OAR 690-008, available at https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3133.

OAR 690-085, available at https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3174.

Oregon Revise Statutes (ORS) 183, available at https://www.oregonlegislature.gov/bills_laws/ors/ors183.html.

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ORS 540, available at https://www.oregonlegislature.gov/bills_laws/ors/ors540.html.

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STATEMENT IDENTIFYING HOW ADOPTION OF RULE(S) WILL AFFECT RACIAL EQUITY IN THIS STATE

ORS 183.335(2)(b)(F) requires agencies to identify how proposed rules will affect racial equity in Oregon.

In response to declining groundwater levels, OWRD is proposing to amend the Division 512 rules to:
-- Designate a portion of the Harney Basin as a Critical Groundwater Area.

-- Designate a Serious Water Management Problem Area (SWMPA) to require reporting and measurement.

-- Classify groundwater for exempt and non-consumptive geothermal uses only.

The Racial Equity Impact Statement is a qualitative assessment of potential impacts associated with all three groundwater management tools unless otherwise specified below.

COMMUNITY OUTREACH & RULES ADVISORY COMMITTEE (RAC) FORMATION:
According to the 2023 Census data, Harney County's population is 7,440, located primarily in the communities of Burns and Hines, with the remainder living on individual ranches, farms, and unincorporated communities across the county. According to the U.S. Census Bureau (2023), 87% of the population identifies themselves as white only, with a 12% poverty rate; 13% of the population identifies with at least one other race, with an 18.7% poverty rate. (U.S. Census Bureau, 2023).

The Oregon Water Resources Department conducted extensive outreach to the community in Harney County to form a Rules Advisory Committee (RAC) to represent those likely to be impacted by the new rules. To initiate this process, Department staff met with local community members and attended local meetings in Burns March 7 - 9, 2023. The goals of these meetings were to (1) talk about engagement opportunities for the upcoming update to the Harney Basin-specific rules (Division 512), (2) collect nominations for the RAC, (3) seek input for future outreach efforts, and (4) answer questions about rulemaking. Community members suggested that the RAC should include Harney Basin Groundwater Study Advisory Committee members, Harney Community-Based Water Planning Collaborative members, Burns Paiute Tribal members, groundwater irrigators, City Planners and County Commissioners, and domestic well users.

In addition to the in-person engagement in early March 2023, the Department solicited RAC members with the help of local organizations using social media pages, a press release, a radio broadcast, and printed flyers hung up in frequented local businesses. The Department also mailed a postcard to every groundwater right holder within the Greater Harney Groundwater Area of Concern administrative boundary to invite them to volunteer to be on the RAC.

Consistent with ORS 183.333(3), the Department invited representatives from interest groups likely to be economically impacted by the new rules to serve on the RAC. Groundwater availability is critical not only to support the agricultural community in the Harney Basin but to support the needs of residents, specifically those who rely on domestic wells. Equally important to supporting human needs is the need to support the Harney Basin's diverse aquatic systems, which provide critical habitats for fish and wildlife. Seeking to hear from the diverse groups who rely on groundwater in the Harney basin, OWRD included representatives from the local community, including the Burns Paiute Tribe, environmental organizations, local governments, irrigators, ranchers, domestic well owners, well drillers, consultants, and water rights experts to serve on the RAC.

TRIBAL COORDINATION & POTENTIAL IMPACTS: OAR 690-010-0150 requires that:
(1) Prior to convening a Rules Advisory Committee under ORS 183.333, the Department shall initiate engagement with any federally recognized Indian tribes with reservation lands within the proposed critical groundwater area boundary and with any federally recognized Indian tribes in Oregon who have expressed an interest in the proposed critical groundwater area.

(2) To aid with the engagement, the Department will provide a copy of the draft report that will be posted on the Department's website under OAR 690-010-0130(4)(c)(B).

Consistent with this requirement, on December 16, 2022, OWRD notified (in writing and by email) all nine federally recognized Tribes in Oregon of the rulemaking effort, inviting participation informally during the RAC process and formally through government-to-government consultation. Moreover, on June 21, 2024, OWRD notified (in writing and by email) all nine Tribes of the availability of the Groundwater Report for the Harney Basin Critical Groundwater Area

(CGWA) Rulemaking, also inviting participation informally during the RAC process as well as formally through government-to-government consultation. The Report was posted on OWRD's website (https://www.oregon.gov/owrd/programs/policylawandrules/OARS/Pages/Division-512-Rulemaking.aspx) on July 1, 2024.

In August 2024, the Burns Paiute Tribe notified the Department of interest in meeting with the Director and staff during a regularly scheduled Tribal Council work session to discuss Harney Basin groundwater management. Scheduling was difficult for both the Department and the Tribe going into the holiday season and legislative session. In early April, Harney County experienced historic flooding resulting from heavy rains and a failing levee; many residents were forced to evacuate, including Tribal members. The Burns Paiute Indian Reservation was heavily impacted, and rebuilding and recovery efforts remain an ongoing high priority for the Tribe. On April 7, 2025, the Director sent a follow up letter to the Burns Paiute Tribe, offering dates and times that might be convenient for the Tribal Council, once flood recovery is further along.

Also consistent with OAR 690-010-0150, the Department contacted the Burns Paiute Tribe to invite a representative to serve on the RAC. That invitation was accepted.

Throughout the rulemaking process, Department staff provided regular staff-to-staff updates during quarterly Legislative Commission on Indian Services (LCIS) meetings. Staff updates were provided to the LCIS Cultural Resources Cluster on January 19, Mary 14, June 12, and October 31, 2024; January 29, July 23, and October 28, 2024; and January 28 and April 15, 2025. Staff updates were provided to the LCIS Natural Resources Work Group on January 17, April 20, August 17, and December 7, 2023; February 2 and September 11, 2024; and January 15 and April 30, 2025.

The Burns Paiute Reservation is located in Harney County, with traditional homelands extending 5,250 square miles throughout central-southeastern Oregon, Northern Nevada, northwestern California, and western Idaho. The Tribe currently has 402 enrolled members, of which 142 people call the Reservation their home. Oregon's Harney Basin is culturally significant to the Tribe, which has management goals that include enhancing upland, wetland, floodplain meadow and riparian habitats; protecting springs and seeps; preserving cultural resources; and providing public hunting and recreation opportunities. Because the new rules should help alleviate the impacts of groundwater level declines on the County's natural aquatic resources, the new rules should align well with Tribal management goals. (Burns Paiute Tribe, 2025).

Approximately 670 permitted groundwater rights are used in various ways within the Harney Basin. In the Silvies subarea, the Burns Paiute Tribe has three groundwater rights, a quasi-municipal right with a priority date of 1940 and two irrigation rights with priority dates of 1947 and 1991, corresponding to 112.2, 14.3, and 21.1 acres, respectively (Oregon Water Resources Department, 2025b). Oregon water rights are allocated based on the prior appropriation doctrine; therefore, the 1991 Burns Piute Tribe's water right could potentially be regulated off. Regulating that 1991 water right may have an adverse economic impact on a community with a poverty rate of 36.7% (U.S. Census Bureau, 2023).

Also, because the Tribe relies on local governments for some services (e.g., City of Burns Fire Department, City of Burns Public Works sewer system) any impacts to the ability of local governments to continue to provide those services will affect the Tribe.

LOCAL GOVERNMENT COORDINATION & POTENTIAL IMPACTS: OAR Chapter 690 Division 10 requires coordination with affected local governments (e.g., city, county, metropolitan service district) to ensure the proposed rules are in accordance with their land use planning (OAR 690-010-0110(1), 690-010-0140).

Consistent with this requirement in the Division 10 rules on June 21, 2024, the Department notified by email all Affected Local Governments (City of Hines, City of Burns, and Harney County Court) to notify them of the availability of the Groundwater Report for the Harney Basin Critical Groundwater Area Rulemaking (Boschmann, 2024). Representatives from local governments also were invited to participate informally during the RAC process as well as formally through meetings between Department and the local government. The 2024 Report was posted on the Department's website (https://www.oregon.gov/owrd/programs/policylawandrules/OARS/Pages/Division-512-Rulemaking.aspx) by July 1, 2024.

Additionally, members from the Harney County Court and a Grant County commissioner were invited to serve on the RAC. Those invitations were accepted.

The local government collects revenue through land appraisals by the County Tax Assessors. The County shares revenue with school and hospital districts. Because the proposed rules will curtail junior water rights, lands associated with those rights will likely be assessed at a lower value, reducing tax revenue. With reduced revenue, the County and districts may need to reduce services from current levels. Based on the US Census data, the Harney County poverty rate is 12.8%; however, among those reporting as a race other than white, the poverty rate is higher at 18.7%, and they are more likely to be adversely impacted by the reduced services (U.S. Census Bureau, 2023).

WATER & ENERGY SUPPLY IMPACTS: The proposed draft rules would allocate water to municipal and quasi-municipal uses at 110% of their highest reported use over the preceding 6-year period (see draft rules OAR 690-512-0060(3)). Every six years, the water allocated for these uses will be adjusted to 110% of the highest reported use over the preceding six years (see draft rules OAR 690-512-0070(1)(d)). The main municipalities in Harney County are the City of Hines and the City of Burns, where 75% of the population lives. In the past six years, both municipalities reported using less than 20% of their total annual authorized quantities on their rights (Oregon Water Resources Department, 2025c). Water demand would have to grow by more than five times current demand before either municipality may have to increase rates to incentivize conservation and/or pursue alternative water supplies, potentially passing the costs along to the ratepayers.

The Harney Electric Cooperative is the main supplier of electricity in Harney County, serving over 20,000 square miles in southeast Oregon and northern Nevada. The cooperative relies primarily on irrigation customers to generate enough revenue to operate and maintain its infrastructure. The proposed draft rules would result in junior groundwater rights being regulated off resulting in less electricity being used and less revenue being generated. To compensate the cooperative will need to increase rates in the county, which would affect rate payers.

DOMESTIC WELL IMPACTS: Uses exempt from permitting as specified in ORS 537.545 include domestic wells and livestock watering. Using the Harney Basin Groundwater Model (Gingerich et al., 2024), the Department projects that an additional 200 domestic wells will go dry by the end of the century if groundwater pumping continues at current rates. A domestic well going dry presents a heavy burden for the well owner, who faces either time-intensive and expensive repairs or uncertainty in acquiring alternative drinking water sources. According to the Business Case for Investing in Water in Oregon "Self-supplied domestic well users are more likely than those supplied by public systems to be members of frontline communities (Dalgaard, 2022); in Harney County this could include Tribal members and other minority groups as well as low-income households." (Pilz et al., 2023). OWRD's plan to reduce groundwater declines will benefit Harney County's frontline communities. Under the new rules, the Department projects fewer than half as many wells going dry (i.e., 98 domestic wells, by the end of the century).

IMPACTS ON EXISTING WATER RIGHTS HOLDERS – SWMPA: The proposed Division 512 rules require all

groundwater users with wells that are listed as Points of Appropriation on valid water rights within the Serious Water Management Problem Area (SWMPA) to install a totalizing flowmeter by March 1, 2028, to measure groundwater use monthly and report annually. Requiring each groundwater user with a permit or certificate to measure and report their use would mean greater accountability and ensure equitable groundwater use.

IMPACTS ON FUTURE WATER RIGHT AVAILABILITY – CLASSIFICATION: New groundwater right applications will not be approved within the proposed classification boundary (see Exhibit 3, OAR 690-512-0020(4)). The proposed rules will not redress existing inequities attributed to the historical awarding of water rights through prior appropriation because the new rules would further restrict the availability of future groundwater rights. These inequities may become further amplified because future groundwater users may need to pursue costly alternatives such as transferring or purchasing existing water rights. However, the new rules may improve certainty regarding future access to groundwater by stabilizing groundwater levels. (Or. Sec. of State, 2023).

ENVIRONMENTAL IMPACTS: The Harney Basin consists primarily of public lands, where roughly 73% of the basin is administered by either federal or state agencies. The U.S. Fish and Wildlife Service manages the Malheur National Wildlife Refuge, consisting of 187,000 acres and is visited by as many as 60,000 people annually. The Basin also lies along the Pacific Flyway, which serves as a rest and refuel wetland stopover for 70% of migratory birds, or roughly 6 million, travelling between the Arctic and the Mexican coast. (See Harney County Watershed Council, 2025; High Desert Partnership, 2025).

By stabilizing groundwater levels, the new rules should reduce adverse impacts to springs and hydraulically connected streams within the Greater Harney Basin. Healthy springs and streams provide cultural value and ecosystem services, including fish and wildlife habitat, water purification, nutrient cycling, flood control, and drought mitigation. Preserving these services is not only of cultural importance but also important for providing equitable access to commercial and non-commercial opportunities on public lands and waters, including fishing, hunting, and outdoor recreation.

FURTHER INPUT: Further public comments on this rulemaking and its impact on racial equity in the state is encouraged through the close of the public comment period at 5:00 pm on August 7, 2025.

FISCAL AND ECONOMIC IMPACT:

CHARACTERIZING THE HARNEY COUNTY ECONOMY: Agriculture plays a key role in many sectors in Harney County, accounting for roughly 24 percent of the economy across all sectors (Pilz et al., 2023). Public lands account for at least 73 percent of Harney County acreage, while the other 30 percent is privately held land (Harney County Watershed Council, 2025). Approximately 8 percent (122,421 acres) of the farms land within the County is irrigated (USDA, 2022). By total sales, the main agricultural products in Harney County are livestock, which accounts for 63 percent of the total sales, with crops, which accounting for 37 percent of the total sales (USDA, 2022).

The Harney Basin's economy benefits significantly from its natural ecosystems, particularly the springs, streams, and wetlands that support recreational activities centered around the Malheur National Wildlife Refuge. This 187,000-acre refuge, located along the Pacific Flyway, attracts over 60,000 visitors annually and serves as a vital rest stop for approximately 6 million migratory birds annually (Harney County Watershed Council, 2025; High Desert Partnership, 2025). Recreational activities such as bird watching and fishing contribute around $3.4 million to the local economy yearly, supporting 85 jobs, $7.2M in economic output, $4.1M in value, and $2.8M in labor income (Harney Collaborative, 2025).

Below the Department has identified the fiscal and economic impacts of the new rules as they pertain to the proposed critical groundwater area designation (CGWA), proposed serious water management problem area (SWMPA)

boundary, and proposed classification boundary.

CRITICAL GROUNDWATER AREA - CGWA: The Department is proposing to establish a Critical Groundwater Area (CGWA) within the Greater Harney Valley Area of Concern (GHVGAC) administrative boundary. Within this boundary, the proposed CGWA will be divided into seven subareas. Exhibits depicting the critical groundwater area and seven subarea boundaries are attached to proposed rule OAR 690-512-0020. The Department's proposed rules are expected to reduce total groundwater use throughout the CGWA by reducing pumpage by 35 percent compared to the estimated 2018 pumpage amounts, with the goal of stabilizing groundwater levels within 30-years.

POTENTIAL ECONOMIC IMPACTS OF CONTINUED GROUNDWATER PUMPING – CGWA: The proposed rules are expected to adversely impact the Harney Basin's agricultural-dependent economy if adopted. However, without the new rules, groundwater levels will continue to decline at unsustainable rates, adversely impacting not only the agriculture sector but also domestic well users, irrigation well users, and the basin's ecosystem services. This section attempts to quantify and qualitatively assess those impacts.

In the Harney Economic Model (HEM) report published by USGS and OSU, a simulation is used to assess the impacts on farm profits due to continued pumping at 2018 rates (Jeager et al., 2024) The simulation was run over 30-years and assumed the following:

->Farmlands irrigated by surface water continue at 2018 irrigation rates with no operational changes.

->Surface water accounts for 54 percent of the total irrigated farmland.

->No changes to non-irrigation well pumpage occur; they operate at their 2018 annual rates.

->Average recharge is determined by the Harney Basin Groundwater Model (Gingerich et al., 2024).

The simulation results indicate that farms remain profitable over the next 30 years. However, the results show that over those 30 years, farm profit will drop 10 percent, of which 8 percent may be attributed to reduced irrigated acres. The changes to farm profit and irrigated acres result from increased pumping costs due to declining groundwater levels. Combined, the changes to pumping cost and declining groundwater levels assume lower well yields in some locations experiencing larger magnitudes of decline (Jeager et al., 2024). Additionally, over the first 10 years of the simulation, groundwater-irrigated acres decreased by 3 percent, and the profit per hectare decreased by 2 percent.

These modeling results suggest that farms will still see profits though margins are likely to decrease as groundwater levels continue to decline. Thus, there will still be incentive to continue pumping at 2018 volumes.

The economic impact on domestic well users of failing to act by adopting these new rules may be significant. In 2025, there are approximately 2,000 domestic wells in Harney County. Since 2022, continued groundwater declines in the Harney Basin have resulted in the Department receiving 16 new dry well reports from groundwater users in Harney County. Because dry well reporting is voluntary, more wells have likely gone dry without being reported. The Department's analysis using the Harney Basin Groundwater Model (Gingerich et al., 2024) projects that 200 more domestic wells will go dry by the end of the century if groundwater pumping continues at the current rate. The Department reviewed grants funded by the Well Abandonment, Repair, and Replacement Fund (WARRF) and applications submitted to the Harney Domestic Well Fund (HDWF) between 2022 and 2024 from 14 landowners in Harney County. Between 2022 and 2024, the costs either to abandon and replace or to repair a dry well in Harney County are as follows:

->Average cost of $25K
->Maximum cost of $40K
->Minimum cost of $8.7K

Given current economic conditions and potential inflation, these costs may rise in the near term.

If the projected 200 new dry wells need the same level of work as those that were previously awarded grants, the total average, maximum, and minimum costs to deepen and repair or replace the projected 200 dry wells are:

->Average total cost of $5M
->Maximum total cost of $8M
->Minimum total cost of $8.7K

The Harney Collaborative hired a consultant to assess alternatives for delivering domestic water to 1,086 households that rely on private wells (Anderson Perry & Associates, 2019). Two alternatives were considered based on the assessment (Pilz et al., 2023). The first alternative was building a cistern for the 1,086 households, which must be filled 26 times yearly. Water would be obtained by constructing two fire truck fill stations, which would be delivered using 12 or more trucks. Operation costs for this alternative would be $7.5M annually, and the estimated capital cost would be $12.3M. The average annual cost per household served was $9,600 (Pilz et al., 2023). The second proposed alternative was a mixed approach of building a cistern for 652 households that the two constructed fire truck fill stations would fill; developing community wells for 380 households; and connecting the remaining 40 households to the municipal water systems of Burns and Hines. The estimated operation cost for the second proposed alternative was $7.4M annually, with an estimated one-time capital cost of $25.1 M (Pilz et al., 2023). This assessment was for 1,086 wells, and the costs for all 2,000 domestic wells would be higher. Ultimately, the Harney Collaborative chose neither of the proposed alternatives.

Continued groundwater declines will also impact irrigation well users. As groundwater levels decline, irrigation wells may require deepening to maintain production levels. The cost of deepening an irrigation well in the Harney Basin is roughly $600 to $750 per foot, depending on seal depth, borehole, casing size, gravel packs, liners, and screens. For example, a well drilled to 250 feet with stainless steel screens and gravel packs is estimated to cost $150,000. However, deepening a well to those depths may not provide the water necessary for some parts of the region to sustain a crop, livestock, or other domestic use. Additionally, power costs for pumping will increase as water levels decline and water must be pumped from increased depths.

The springs, streams, and Malheur Lake ecosystem services within the Harney Basin greatly depend on groundwater. If pumping levels continue at their current rate, groundwater levels will continue to decline, resulting in reduced discharges to springs and streams. Additionally, springs and streams are further impacted by drought. These springs and streams are relied upon by roughly six million birds that fly through the Pacific Flyway as well sage grouse and other resident fauna in the Harney Basin each year. Drying springs and streams most likely would impact the number of migratory birds visiting the Harney Basin yearly. Bird watching, one of the basin's main economic recreation drivers, could be impacted by reducing the migratory bird population. Additionally, dried springs will impact the fisheries of the basin, which could reduce the number of people coming to the basin to fish. Reduced spring and streamflow will also impact the populations of wildlife that are hunted for recreational purposes. Finally, reduced spring and streamflow will also decrease the availability of water and vegetation for domestic livestock grazing in the basin. Although the economic implications may be challenging to quantify, reductions in springs and stream flows will substantially impact water-dependent ecosystems and human populations that rely on these systems for recreational use and livestock grazing.

POTENTIAL ECONOMIC IMPACTS OF IMPLEMENTATION OF THE HARNEY BASIN CGWA: Without the new rules, groundwater levels will continue to decline at unsustainable rates, adversely impacting the agriculture sector as well as domestic well users, irrigation well users, and the basin's ecosystem services. However, if adopted, the proposed rules will have some adverse economic impacts on Harney County. The Department's goal is to stabilize groundwater levels while limiting the economic impacts. The Department has made several public policy choices that limit economic impacts. For example, the Department set a goal of groundwater level stability rather than full water resource recovery. If recovery were the goal, the estimated economic impacts would be much higher because recovery would require regulating more groundwater users to return groundwater conditions to historic levels.

The Department optimized the Harney Groundwater Model (Gingerich et al., 2024) to find the smallest reductions in groundwater pumping necessary to achieve groundwater stability of zero feet of decline at the end of 30 years. The proposed rules allow for a 30-year adjustment period, gradually increasing curtailment of pumpage every six years over the 30-year period, i.e., five adjustment phases, rather than implementing full curtailment immediately. At the request of the RAC, the Department included an adaptive management strategy that would allow for adjustment in curtailment amounts during each adjustment phase if groundwater levels fall significantly above or below expected trends. Finally, after a contested case process (see OAR 690-010), the Department will allot the water based on the historic use, allowing more existing users to get water.

Stabilizing groundwater levels will benefit the number of domestic wells going dry. According to the department's analysis using the Harney Basin Groundwater Model (Gingerich et al., 2024), under these rules, the number of wells going dry is cut nearly in half compared to the number that would go dry in the absence of new rules. The total number of wells projected to go dry is 98 domestic wells.

The estimated costs either to replace and abandon or to repair a dry well in Harney Basin are as follows:

->Average cost of $25K

->Maximum cost of $40K

->Minimum cost of $8.7K

To deepen and repair the 98 domestic wells that would go dry under the new rules, the average, maximum, and minimum estimated costs could be

->Average total cost of $2.4M

->Maximum total cost of $4M

->Minimum total cost of $8.7K

To deepen and repair the 200 domestic wells that would go dry in the absence of the new rules, the average, maximum, and minimum estimated costs could be

->Average total cost of $5M

->Maximum Total cost of $8M

->Minimum total cost of $1.74M

The total cost savings for implementing the full curtailment under the new rules is $2.5M for the average cost, $4M for the maximum cost, and $887K for the minimum cost.

As the springs, streams, and Malheur Lake ecosystem services within the Harney Basin depend heavily on groundwater, the proposed rules expect to stabilize groundwater levels at a new level after 30 years. Groundwater declines will continue through the 30-year implementation; however, stabilizing the groundwater levels after 30 years may help stabilize baseflow needed to sustain springs and streams, thereby mitigating some of the potential long-term impacts to the ecosystem and the services it provides.

The RAC asked the Department to hire an independent economist to help evaluate the economic impacts of reducing groundwater use in the Harney Basin. The Department hired ECOnorthwest to conduct the analysis, focusing on the economic impacts of reducing groundwater pumpage of the proposed Harney Basin CGWA, but not the economic impacts associated with hydraulically connected surface water. The Department asked ECOnorthwest to assess economic impacts associated with crop and livestock production and impacts on the general local economy, local government revenue, and local ecosystem services.

ECOnorthwest used the Impact Analysis for Planning (IMPLAN) model to examine the economic impacts of reducing groundwater pumpage in Harney County. The IMPLAN model is a widely used regional input-output economic model to assess direct, indirect, and induced impacts of decision making. IMPLAN models consider linkages between different economic sectors. The model also evaluates how money moves through the economy. ECOnorthwest used a 33.6 percent curtailment in groundwater pumpage over 30 years, spanning 2023 to 2053. This 33.6 percent curtailment was the total reduction the Department proposed initially. This reduction was later adjusted to 35 percent following a sensitivity analysis run using the Harney Basin Groundwater Model (Gingerich et al., 2024). After consultation ECOnorthwest concurred that a difference of 1.6 percent in curtailment would not impact the final results. Therefore, the results of the modeling effort should provide a reasonable approximation of the potential economic impacts of implementing a 35 percent reduction in groundwater use as proposed in the rules.

The IMPLAN model provides a snapshot of economic impacts at the end of the 30-year period (ECOnorthwest, 2025). Below the Department has summarized the modeling assumptions and results. For more information about the model and the results, please see “The Economic Impacts of Groundwater Management in Harney County” Oregon (2025). ECOnorthwest’s key modeling assumptions are as follows:

->No adjustments are made by farmers, businesses, or the local government in response to adverse impacts.

->Alfalfa crop prices are held constant at $273 per ton, based on a five-year average (2019 – 2023).

->If a supplemental water right is not irrigated, the primary water right is not irrigated.

->Livestock sale reduction is a linear relationship to alfalfa reduction; for example, if alfalfa production is reduced by 10 percent, livestock production will be reduced by 10 percent.

->20% of the alfalfa purchased stays in the basin.

->No changes in alfalfa crop yields occur over the 30-year period.

->Irrigation rate is held constant over the 30-year period.

->Local governments will not raise taxes over the 30-year period.

The RAC and members of the public provided some input on the modeling assumptions:

->The assumed alfalfa price of $273 per ton is way above the state average. The modeling should have assumed a 30-year window, not a five-year window.

->The linear relationship between alfalfa and livestock does not hold in practice, because there are alternative affordable sources of alfalfa available outside the basin.

To determine the impacts of groundwater pumping reduction, ECOnorthwest used the groundwater pumping data from the Harney Economic Model (HEM) parcel data (Jeager et al., 2024). For the baseline year of 2023, before reductions occur, a total pumping volume of 133,000 acre-feet per year was applied on 48,000 acres (Jeager et al., 2024). Based on interviews with alfalfa growers in the Harney basin, ECOnorthwest estimated that between 5 percent and 35 percent of alfalfa produced stays in the basin. Based on the assumptions and the available data, the IMPLAN model set the baseline for 2023 for the Harney Basin as follows:

->$58M of total annual revenue is generated by alfalfa production

->$65M of total annual revenue is generated by livestock

->$123M is the total combined (alfalfa and livestock) annual revenue

At the end of ECOnorthwest's 30-year analysis, a reduction of groundwater pumpage by 33.6 percent results in Harney Basin pumping being reduced to a total pumping volume of 87,000 acre-feet per year, allowing at least 32,000 acres of land to be irrigated. Based on the assumptions and the available data, the IMPLAN model estimates the impacts of groundwater pumpage reductions as follows:

->$40M of total alfalfa annual revenue reduced by $18M from the baseline

->$43M of total livestock annual revenue reduced by $22M from the baseline

->$83M of total combined annual revenue (alfalfa and livestock), reduced by $40M from the baseline

ECOnorthwest evaluated impacts in addition to those associated with alfalfa and livestock production, including impacts on agriculture expenditures, supply-chain spending, and consumption-driven spending. The results are as follows for the 2023 baseline:

->670 jobs are supported by agriculture expenditures, generating $36M of labor income and economic output of $123M

->240 jobs are supported along the supply chain, generating $10.5M of labor income and economic output of $47M

->110 jobs are supported in consumption-driven spending, generating $4.4M of labor income and economic output of

$16M

->1020 total jobs are supported by annual agricultural economic output, generating $50.9M of labor income and total economic output of $186M

Additionally, for every acre-foot of groundwater pumped by agriculture, $1,400 of additional economic activity is generated—$926 in agriculture expenditures, $356 in supply chain expenditures, and $119 in consumption-driven expenditures output.

According to ECOnorthwest analysis, after 30 years and full curtailment of 33.6 percent the results are as follows:

->470 jobs remain supported by agricultural expenditures, generating $23M of labor income and $82M in economic output, a decrease of $13M and $41M, respectively.

->160 jobs remain supported along the supply chain, generating $7.5M of labor income and $33M in economic output, a decrease of $3M and $14M, respectively.

->70 jobs remain supported in consumptive-driven spending, generating $3M of labor income and $10M in economic output, a decrease of $1.4M and $6M respectively.

->700 total jobs remain supported by annual agricultural economic output, generating $33M of labor income and total economic output of $125M.

->In total, 320 jobs lost, $18M in labor income lost, and $61M in annual economic output lost.

ECOnorthwest presented their findings to the RAC during three meetings (November 2024, January 2025, and April 2025); during each meeting some RAC members and members of the public provided feedback on ECOnorthwest's results. Below are the general themes of the comments:

->Characterizing impacts on livestock as a linear relationship overestimates the economic impacts of the proposed rules, because ranchers would find a new source of more affordable alfalfa rather than spend more on alfalfa or reduce their herd size.

-> The analysis should not just consider the agricultural economy, it should assess impacts to stock wells, domestic wells, evapotranspiration, springs and streams.

->The analysis should account for the costs that are avoided by stabilizing groundwater levels and would be incurred if groundwater levels were allowed to continue to decline.

->The model either overestimates or underestimates alfalfa and livestock economic output.

In response to comments regarding the relationship between reduced alfalfa sales and reduced livestock sales, ECOnorthwest ran a sensitivity analysis holding the livestock production constant over the 30 years. The results for the 2023 baseline remain the same (see above).

Based on the revised assumption holding livestock production constant, the IMPLAN model estimates the impacts of groundwater pumpage reductions as follows:

->$40M of total annual revenue generated by alfalfa production, a reduction of $18M annually

->$65M of total annual revenue generated by livestock production

->$105M of total combined alfalfa and livestock revenue, a reduction of $18M annually

After 30 years, IMPLAN revised estimates result in:

-> $164M of total economic output (compared with the $125M total economic output as originally estimated)

-> 160 total job losses over 30 years (compared with 320 total jobs lost as originally estimated)

->$8M loss in total labor income (compared with $18M total lost labor income as originally estimated)

->$22M total economic output loss (compared with $61M total lost economic output as originally estimated)

These results suggest that assuming livestock production does not depend on the availability of local alfalfa will cut the rulemaking's estimated economic impacts by at least half. These results do not account for the cost of securing alternative alfalfa supplies, which may be available but at higher cost to the consumer.

ECOnorthwest results provide a qualitative assessment of the potential economic impacts of reduced groundwater pumping over a 30-year period based on the best available information. However, considering the 30-year timeframe, outcomes remain highly uncertain as many factors could have either a positive or negative effect. For example, RAC members have noted that adaptive management may help offset adverse economic impacts because the new rules allow the Department to check if groundwater levels are either behind or ahead of schedule every six years starting in 2028. If groundwater levels are improving ahead of schedule, the Department may reduce the scheduled quantity of curtailment by 50% or 100%. Conceivably the reductions in 2028 could be sufficient for achieving the Department's goal; if so, no more reductions would be needed through 2058. Therefore, if the Department only needs to implement the 40% of the scheduled reductions in 2028 and the remaining 60% of the scheduled reductions are not needed, then the economic impacts of the later reductions will be avoided.

The Department also considered the economic impacts of the proposed rules on power production. The Harney Electric Cooperative serves over 20,000 square miles in southeast Oregon and northern Nevada, which includes 4,000 power meters with 401 miles of transmission line and 2,616 miles of distribution lines spanning Harney, Malheur, Deschutes, Crook, Humboldt, and Lake counties (Harney Electric Cooperative, 2025). To maintain its power delivery infrastructure, the Cooperative relies on profits generated from power used by irrigation pumps. The current rate for irrigation services is $0.085 per kilowatt-hour (kWh), May through September, and $0.095 per kWh, October through April (Harney Electric Cooperative, 2025). Because the new rules will reduce groundwater pumpage by 35 percent basin wide, fewer irrigation pivots will operate, potentially reducing profits for Harney Electric Cooperative. The Cooperative may have to raise rates to maintain its infrastructure, resulting in higher electricity costs for ratepayers. According to the Harney Electric Cooperative, once the reductions in 2028 occur, power costs will increase by 18% with similar increases at each six-year adaptive management checkpoint. Consequently, rate payers may see higher electric bills.

Serious Water Management Problem Area (SWMPA): If adopted, the new rules would require all groundwater right holders, well owners, and well operators to install a totalizing flowmeter by March 1, 2028, on each well listed as the Point of Appropriation (POA) within the Serious Water Management Problem Area (SWMPA). There are approximately

1,410 POAs within the proposed SWMPA; groundwater users for 1,074 of these POAs already are required to have a totalizing flowmeter installed as a condition of their water right. Under the new rules, groundwater users for the remaining unmetered 336 POAs will be required to install totalizing flow meters. Based on recent installations of flowmeters in the Harney Basin that were paid for by the Department's Water Use Cost Share Program, the cost of purchasing and installing a totalizing flowmeter in the Harney Basin ranges between $2,900 and $3,400 per well. However, total costs could be higher if the system requires substantial upgrades or modifications to allow flowmeter installation. The Department estimates that the total cost of purchasing and installing totalizing flowmeters for the 336 POAs affected by these rules will likely range between $974K and $1.14M.

The new rules also would require anyone using water from wells listed as POAs to measure and record use monthly and report annually to the Department. Of the 1,074 POAs within the proposed SWMPA, 662 POAs already are required to report or may be required to report water use as a condition of the associated water right. Under the new rules, the remaining 412 metered POAs will be required to measure and report water use in addition to those 336 yet to be metered POAs, for a total of 748 POAs. The cost of reporting annually includes reading each meter monthly, recording data, and submitting that data to the Department through the agency's web portal or by mail. Because this is primarily a labor cost and many small farms are owner operated, the Department is unable estimate cost for compliance with the reporting requirement.

CLASSIFICATION: If adopted, the new rules would expand the established 2016 classification boundary to include upland areas of the Basin. The new rules would limit future groundwater development within the classification boundary to new exempt uses (ORS 537.545) and non-consumptive geothermal uses

Although expanding the boundary will limit future opportunities for groundwater use in the upland areas, existing groundwater users in the lowland areas should benefit from sustained recharge from the upland areas, contributing to more stable groundwater levels in lowland areas. The proposed expanded boundary also will benefit springs and streams dependent on upland groundwater discharge, as well as any users reliant on those water resources (e.g., fishers, hunters, recreationists).

Failing to adopt the new rules would result in reduction in recharge to lowland areas, lower groundwater levels, more junior users cut off, reduced spring and stream flow, and more dry domestic wells in the lowland areas of the Basin.

COST OF COMPLIANCE:

(1) Identify any state agencies, units of local government, and members of the public likely to be economically affected by the rule(s). (2) Effect on Small Businesses: (a) Estimate the number and type of small businesses subject to the rule(s); (b) Describe the expected reporting, recordkeeping and administrative activities and cost required to comply with the rule(s); (c) Estimate the cost of professional services, equipment supplies, labor and increased administration required to comply with the rule(s).

(1) Identify any state agencies, units of local government, and members of the public likely to be economically affected by the rule(s).

Most of the cost of compliance stems from implementation of the new rules pertaining to designation of the Harney Basin Critical Groundwater Area. For the CGWA, we have identified the following costs.

CRITICAL GROUNDWATER AREA (CGWA) - AGENCY: If adopted, the new rules would curtail groundwater use in the Harney Basin by 35%. Prior to curtailment, the Department will need to initiate a formal legal process called a "contested case" (OAR 690-010-170 through 690-010-240). This process requires inviting holders of 670 permitted water rights in the CGWA area to participate. Under current and new rules, exempt uses are not regulated or subject to the contested case process.

The Department currently has a backlog of contested cases, so adding a case of this size (i.e., 670 rights holders) would strain the backlog further and slow progress on pending cases. Between 2023 and 2025, the Department faced a $1.6 million shortfall in its legal budget, which led to delays in processing some active cases. The Department estimates that handling a contested case involving 670 water rights holders may cost anywhere between $750,000 and $1 million, contributing further to the Department's budget shortfall.

In addition, the Department would need to dedicate substantial staff time from various divisions to manage the contested case process. After the process concludes, additional staff time would be needed to monitor and enforce regulations that apply within the critical groundwater area.

Under the adaptive management approach outlined in the new rules, the Department is required to review groundwater levels in each of the seven subareas every six years, starting after the contested case process concludes. Each review will evaluate how groundwater levels compare to the expected trajectories for achieving stable groundwater levels. To support this objective, the groundwater section will continue measuring groundwater levels every quarter, a task that takes three staff members each about one week per quarter to complete. After collecting the data, staff will analyze groundwater level changes across all seven subareas. Once the analysis is done, the Department identifies which groundwater users remain subject to the new rules. The results of each six-year review must be shared at a public meeting, which will require additional Department staff time and resources to organize and present.

The Department administers programs that assist with well remediation and repair, requiring staff time and funding. One program, the Well Abandonment Repair and Replacement Fund (WARRF), provides grants to qualifying landowners covering 100 percent of the cost to repair, replace, or abandon a domestic well. Since 2021, the Department has awarded $6.4M in grants for 247 wells. All current funds have been exhausted, so the Department is not currently awarding any new grants. The Department will need to secure more funding before new grants may be awarded. Funding amounts and sources have varied since the program was implemented in 2021, and new funding is not guaranteed. The Department is currently seeking $1M as part of the 2025-27 biennium Governor's Request Budget, and an additional $5M was proposed for funding through House Bill 2168 (2025). Given the fluctuation in funding levels of the WARRF funds and the high demand across the state, the estimated 98 domestic wells that will go dry under the proposed rules may not have access to these funds when a well goes dry.

Another program administered by the Department, the Harney Domestic Well Fund (HDWF), provides grants to landowners in the Greater Harney Valley Area of Groundwater Concern. The fund currently provides qualifying landowners 75 percent of the cost, up to $10,000, to repair or replace their well and 100 percent of the cost, up to $3,500, to abandon the dry well. The fund was established in 2021 with $500,000. The Department held one funding cycle in 2024 and awarded seven grants for a total of $73,149. Six landowners accepted the grants for a total award of $61,650. The Department will offer a funding cycle in fall 2025. If no changes are made to the fund, and future applicants seek the maximum funding available, funding is currently available to assist approximately 33 well owners.

CGWA - LOCAL GOVERNMENT: Harney County assesses land value to collect property taxes. A loss of irrigated land is expected to reduce collected property tax revenue. The County uses three different land class values to assess property taxes. Land Class 2 is fully irrigated, Land Class 3 is land with some irrigation, and Land Class 5 is land without irrigation. For comparison, Land Class 2 generates $1,185 per acre in property tax revenue, while Land Class 5 generates $93 per acre.

ECOnorthwest analyzed the potential impacts of the new rules on property tax revenue, assuming tax rates and property assessment values do not change over a 30-year period. The analysis uses 2023 values and assumes all

irrigated lands are Land Class 2, generating an annual taxable assessed property value of $57M, resulting in $674K of property tax revenue. For 2023, the County levied an average tax of $11.84 per $1,000 of assessed property value. The collected tax revenue is directed to the County's general fund, hospital fund, and local school districts. For every $1,000 assessed:

-> $4.50 goes to the general fund

-> $1.93 goes to the hospital fund

-> $5.41 goes to the local school districts

ECOnorthwest's analysis also assumes that approximately 25 percent of Land Class 2 will move to Land Class 5 after 30 years, and the 33.6 percent curtailment in groundwater use will be fully implemented. The total taxable assessed value is estimated to decrease by $12M to $45M. This change is estimated to decrease tax revenue $146K.These reductions equate to a decrease of $55,000 in the general fund, $24,000 for hospitals, and $66,000 for local schools. In fiscal year 2024-25, the property tax revenue for Harney County was $11M, a reduction of $146,000, is an estimated 1.3 percent decrease in annual property tax revenue collections. This reduction in revenue would likely impact local services provided by Harney County.

CGWA - MEMBERS OF THE PUBLIC: After the contested case process is complete and depending on the outcome, a groundwater user may be subject to a regulatory order curtailing groundwater use. Irrigators in the basin will be impacted to different degrees, because curtailment severity depends on the size of the farming operation and seniority of the irrigation water rights within the respective subarea. Users with larger farming operations and multiple groundwater rights may have some of their most junior water right pivots regulated off. However, these users may be able to operate at a smaller scale of production.

According to the U.S. Census of Agriculture (USDA, 2022), there are 477 farms in Harney County, 22 percent of which are under 50 acres in size. Depending on the seniority of the water right held, an order regulating off the use may completely shut down a small 50-acre farm.

Analysis of the proposed rules by the Harney Groundwater Model estimates that 98 domestic wells will go dry by the century's end (Gingerich et al., 2024). The Department reviewed grants funded by the Well Abandonment, Repair, and Replacement Fund (WARRF) and applications submitted to the Harney Domestic Well Fund (HDWF) between 2022 and 2024 from 14 landowners in Harney County and determined that for a well repair or for a well abandonment and replacement project:

->The average cost is $25K

->The maximum cost is $40K

->The minimum cost is $8.7K

The cost either to repair or to abandon and replace each well varies depending on a variety of factors: for example, the depth of the well and the type of pump. Landowners who experience a dry well also have other increased costs not included in these estimates, which may include the cost for a storage tank and water delivery until their well is repaired or replaced, laundry service, and increased caregiving or cleaning costs if an elderly or ill individual lives in the home. Without factoring in the cost of inflation or other cost increases, based on the numbers above, the cost either to repair

or to abandon and replace the projected 98 wells projected to go dry are as follows:

->Average total cost is $5M

->Maximum total cost is $8M

->Minimum total cost is $1.74M

The HDWF currently provides qualifying landowners with 75 percent of the cost, up to $10,000, to repair or replace their well and 100 percent of the cost, up to $3,500, to abandon the dry well for a maximum award of $13,500. The Department held one funding cycle in 2024 and awarded seven grants for a total of $73,149, and the expected costs to occurred by these recipients is $55,698. HDWF currently has $426,851 in funds available, which would assist with approximately 33 additional dry wells.

Homeowner's insurance and home warranty programs do not typically cover the cost of well repair or replacement, and grants or other funding for wells are limited. Given the limited availability of funds, domestic well users will most likely shoulder much of the financial burden of well repair and replacement.

Harney County is a remote area, and a limited number of well drillers, pump installers, electricians, and plumbers are available to restore water to homes. Even if a landowner has funds available from a grant or another source, there is often a significant wait to complete the work. While waiting to complete the work, these families experience additional costs including water delivery (typically used for minimal culinary, drinking, flushing toilets, and basic hygiene), laundry service, and access to facilities for bathing or showering.

According to the Harney Electric Cooperative once the reductions in 2028 occur, power costs will increase by 18% with similar increases at each six-year adaptive management checkpoint. Consequently, rate payers may see higher electric bills.

SERIOUS WATER MANAGEMENT PROBLEM AREA (SWMPA): By March 1, 2028, all groundwater rights holders, well owners, and well operators must install and maintain a totalizing flow meter (i.e., a meter that measures both the flow rate and volume of groundwater produced by a well) on each well listed as a point of appropriation (POA) on a valid water right within the SWMPA. Once installed, all flow meters must be maintained in good working order and be accessible to Department staff as required by statute (ORS 537.780). By September 1, 2028, all groundwater rights holders, well owners, and well operators must be set up to record the volume of water pumped each month and be able to submit an annual report of water use measurements to the Department by December 31 each year.

Regarding flowmeter installations, the Department administers a statewide cost-share program for parts and installation, reimbursing groundwater users up to 75% of the total cost. The approximately 336 POAs requiring flowmeters under the new rules may qualify for a cost-share agreement which would substantially reduce the well owner's cost of compliance. For each groundwater user, the Department estimates that the cost of purchasing and installing a totalizing flowmeter in the Harney Basin ranges between $2,900 and $3,400 per well, acknowledging that total costs could be higher if the system requires substantial upgrades or modifications to allow flowmeter installation. The proposed rule exempts any well from the requirement if the water right that authorizes that well as a POA is regulated off and not allowed to pump. This prevents water right holders who are impacted by regulatory curtailment from being required to incur a cost of compliance. Exempt users are not subject to the measuring device requirement.

From the Department's financial perspective, there is currently $1M in the cost-share program for the current

biennium, and unspent funds will carry over to the next biennium. Proposed appropriations for this fund for the 2025-2027 biennium are $50K. Because the cost-share program is a statewide program, there is no guarantee that all water users affected by these rules will be able to participate in the cost-share program.

Adding recording and reporting requirements for 748 POAs to those already required to record water use monthly and report it annually will increase the amount of data received by the Department, requiring more staff time for data processing, which may reduce staff time for other projects.

The Department's existing water use reporting system does not allow for timely comparison to ancillary data to validate reported numbers, nor can the system easily identify whether the reported use is allowed within the limits of the water right or a combination of water rights associated with each well. Improvements to connect three existing databases, the Water User Reporting System (WURS), Water Rights Information System (WRIS), and the Groundwater Information System (GWIS), will allow the Department to monitor water use at all wells and for each water right. New resources are needed to implement these improvements. In lieu of improvements, minimal quality control will be done to reported data.

Currently, the Department's water use reporting system cannot track meter installation, and staff are not available to support meter installations, meter registration, and water use reporting. Without system improvements or new staff, paper forms can be mailed to all affected water users to verify meter installs.

Under the new rules, the Department will need to ensure compliance of meter installation by March 1, 2028, capability of monthly recording and annual reporting of water use data by September 1, 2028, and actual reporting of water use by December 31 each year. In the instance of a violation, the Department will need to pursue enforcement as appropriate.

The Department has adequate staffing to support enforcement actions. However, the current data system would not provide a timely comparison of water use and water right information to support broad in-season enforcement. Without investments in database improvements, staff will pursue enforcement as they are able to manually identify discrepancies between reported use and water rights using existing systems.

Without investments, the Department will be able to validate that meters are installed, verify that water use data is being reported, and check on compliance as issues are identified on a case-by-case basis. To support implementation as described above, an increased budget of approximately $430K per year is needed to add one permanent NRS 2 Water Use Reporting staff (located in the Baker City or City of Burns field office), one permanent ISS 7 System Analyst (Salem headquarters office), and one permanent ISS 6 Developer (located in the Baker City or City of Burns field office).

CLASSIFICATION: The new rules do not require any action by water users in the basin and, therefore, have no cost of compliance. However, the rules would prevent approval of new applications for groundwater rights. This restriction will require entities trying to gain access to water for uses not exempt by ORS 537.545 to acquire water through the purchase of a water right and subsequent transfer. There is no way to predict the need for future water rights, nor the costs associated with the purchase and transfer of a water right in the future.

The new classification rules do not allow the Department to reject a water right application outright; the rules still require processing, which consumes staff time. OWRD funds 19.93 full-time employees through water rights fees. Limiting classifications to exempt and geothermal uses could reduce fee collection, potentially impacting funding for staffing.

(2)(a) Estimate the number and type of small businesses subject to the rule(s).

ORS 183.336 requires agencies to use available information to estimate the number and type of small businesses likely to be subject to the proposed rules. A small business is “a corporation, partnership, sole proprietorship or other legal entity formed to make a profit, which is independently owned and operated from all other businesses, and which has 50 or fewer employees” (ORS 183.310).

The new rules regarding expansion of the classification boundary do not require any action by water users in the basin and, therefore, have no cost of compliance. However, the rules would prevent approval of new applications for groundwater rights. This restriction will require entities trying to gain access to water for uses not exempt by ORS 537.545 to acquire water through the purchase of a water right and subsequent transfer. There is no way to predict the need for future water rights, nor the costs associated with the purchase and transfer of a water right in the future.

With respect to the proposed rules concerning designation of the Harney Basin Critical Groundwater Area and the recording and reporting requirements within the Harney Basin Serious Water Management Problem Area, several small businesses relying on reliable and affordable access to groundwater in the Basin may be subject to the new rules. Examples of small businesses that the new rules may positively or negatively impact include well drillers, private water systems, irrigators, small farms, ranches, builders, outfitters, tour guides, shops, hotels, and restaurants. According to the State of Oregon Employment Department (2024), there are 230 small businesses in Harney County (as defined by ORS 183.310) that pay unemployment insurance (UI) taxes. The sector breakdown is as follows: □□□

Sectors of small businesses in Harney County:

->Natural Resources and Mining, 40□
->Construction, 23□
->Manufacturing, 4□
->Wholesale trade, 7□
->Retail trade, 19□□
->Transportation, warehousing, and utilities, 7□
->Information, 4□
->Financial activities, 16□□
->Professional and business services, 21□
->Private education and health services, 20□□
->Leisure and hospitality, 31□
->Other services, 18□□

->All Sectors, 230□
□
Notably, this accounting does not include many businesses within the agricultural sector that are not required to pay UI taxes. OWRD does not have information on the number of small farm businesses as defined by ORS 183.310. According to the U.S. Census of Agriculture (USDA 2022), there are 477 farms in Harney County, 22% of which are under 50 acres in size; of the 477 farms, 95% are family farms. A family farm is one where most of the business is owned by the operator and individuals related to them by blood, marriage, or adoption, including relatives who don’t live in the operator’s household (USDA).

(2)(b) Describe the expected reporting, recordkeeping and administrative activities and cost required to comply with the rule(s).

CRITICAL GROUNDWATER AREA (CGWA): In order to curtail groundwater use in Harney Basin by 35 percent, as proposed by the new rules, the Division 10 Critical Groundwater Area rules require initiating a contested case. The process entails the Department inviting the holders of the 670 water rights in the designated CGWA to be parties in the contested case. The contested case process provides an opportunity for landowners to contest the groundwater curtailment orders issued by the Department. A water right holder does not need to participate in the contested case, but should the holder choose to do so, he or she is likely to incur significant legal fees to participate. These cases can take years to complete, requiring significant time, resources, and expertise to navigate the legal process.

Serious Water Management Problem Area (SWMPA): Any business that uses a groundwater right in the SWMPA boundary defined in the proposed rules will need to take and record monthly measurements and report water use annually.

CLASSIFICATION: The Department does not anticipate any direct costs for reporting, recording, and administrative activities as a result of the proposed expansion of the classification boundary. A new application for a groundwater right may still be submitted to the Department but would likely result in a denial. The new rules make it clear to the public that denial would be the likely outcome of a new application, thereby preventing unnecessary expense preparing an application and paying application fees. Nonetheless, the Department has included the following information regarding fees associated with applying for a new groundwater right:

Groundwater Right Application Base Fee: $1,570.00

Additional costs based on the content of application include:

For the 1st cubic foot per second (CFS) or fraction thereof: $410.00
For each additional CFS or fraction thereof: $410.00
For each additional use, point of diversion, or well after the 1st: $410.00

(2)(c) Estimate the cost of professional services, equipment supplies, labor and increased administration required to comply with the rule(s).

CRITICAL GROUNDWATER AREA (CGWA): After the contested case process is complete, depending on the outcome, a groundwater user may be subject to a regulatory order curtailing groundwater use. Irrigators in the basin will be impacted to different degrees, because curtailment severity depends on the size of the farming operation and seniority of the irrigation water rights within the respective subarea. Users with larger farming operations and multiple groundwater rights may have some of their most junior water right pivots regulated off. However, these users may be able to operate at a smaller scale of production.

According to the U.S. Census of Agriculture (USDA, 2022), there are 477 farms in Harney County, 22 percent of which are under 50 acres in size. Depending on the seniority of the water right held, an order regulating off-use may completely shut down a small 50-acre farm. Permitted groundwater rights holders who wish to participate in the contested case may choose to hire legal counsel, further adding an economic burden. This cost can vary based on the legal fees and how long the contested case lasts.

Serious Water Management Problem Area (SWMPA): The average cost range for purchasing and installing a totalizing flowmeter in the Harney Basin is $2,900 to $3,400. If the groundwater user chooses to apply for the cost share program, they will need to cover a minimum of 25% of the cost. The proposed rules require a totalizing flowmeter to be

installed at each POA. The costs for a groundwater user will vary based on how many POAs are authorized by their groundwater rights.

CLASSIFICATION: There are no costs to comply with the rules. Additionally, the new rules provide notice of probable application denial for individuals seeking to apply for new groundwater rights within the classification boundaries.

DESCRIBE HOW SMALL BUSINESSES WERE INVOLVED IN THE DEVELOPMENT OF THESE RULE(S):

The Rules Advisory Committee included members representing small businesses most likely to be affected by this rulemaking, including farmers, ranchers, local governments, well drillers, and consultants.

WAS AN ADMINISTRATIVE RULE ADVISORY COMMITTEE CONSULTED? YES

RULES PROPOSED:
690-512-0010, 690-512-0020, 690-512-0030, 690-512-0041, 690-512-0050, 690-512-0060, 690-512-0070, 690-512-0080, 690-512-0110

AMEND: 690-512-0010

RULE SUMMARY: This rule replaces OAR 690-512-0010 (Classification), readopted as 690-512-0030; the rule defines terms used in OAR Chapter 690, Division 512, ORS 536.300, ORS 536.027, ORS 537.545, and ORS 537.735, including "Adaptive Management Checkpoint," "Exempt Groundwater Uses," "Groundwater Level Change Envelope," "Initial Allotment," "Permissible Total Withdrawal," "Public Uses," "Subarea," "Target Groundwater Level Trend," and "Totalizing Flow Meter."

CHANGES TO RULE:

690-512-0010
~~Classifica~~Definitions~~-~~
~~(1) Except as provided~~Unless specified in these rules the definitions in OAR 690-~~512-0020, the groundwater and surface water of the Malheur Lake Basin are classified for direct appropriation of, or storage and use of, water for domestic,~~300-0010 apply to the below rules:¶
(1) "Adaptive Management Checkpoint" means the scheduled interval at which the Department evaluates changes in groundwater levels and determines if adjustments to scheduled reductions in groundwater use are required as described in OAR 690-512-0080.¶
(2) "Exempt Groundwater Uses" are those defined in ORS 537.545.¶
(3) "Groundwater Level Change Envelope" means the modeled trajectory for groundwater l~~i~~eve~~stock, irrigation, municipal, quasi-municipal, industrial, mining, agricultural water use, commercial, power development, forest~~ls to achieve the target water level trend by 2058. A groundwater level change envelope is modeled for each subarea including the median, 10th, 25th, 75th, and 90th percentiles relative to the modeled groundwater levels in 2028. The envelope describes the range of values that will be used to inform the adaptive management~~, public uses, road water~~rocess in OAR 690-512-0080. The trajectories are modeled using "Groundwater model of the Harney Basing, ~~dust abatement and wildlife refuge management~~southeastern Oregon" by S.B. Gingerich, D.E. Boschmann, G.H. Grondin, and H.J. Schibel, 2024, U.S. Geological Survey Scientific Investigations Report 2024-5017.¶
(~~2~~4) ~~Definitions of classified uses. Except as specified~~"Initial Allotment" means the maximum annual volume of water that may be used by each groundwater right upon completion of the contested case.¶
(5) "Permissible Total Withdrawal" i~~n~~s th~~ese rules, and unless the context requires otherwise, the definitions~~ annual volume of groundwater the Department has determined can achieve the target groundwater level trend by 2058 when following the schedule of reductions defined in OAR 690-~~300-0010 apply except that "public uses" are defined in OAR 690-077-0010(2~~512-0070. The Department may not reduce groundwater pumping through regulatory orders to a value less than the permissible total withdrawal. The unit of measurement for the permissible total withdrawal is acre-feet.¶
(6) "Public Uses" are those uses defined in ORS 537.332.¶
(7)~~.~~ "~~Exempt~~Subarea" means an administratively defined portion of the critical groundwater ~~uses"~~ are~~a~~ t~~hose uses~~

~~defined in ORS 537.545.¶~~
~~NOTE: The Malheur Lake Basin is delineated on the agency Map 12.6, dated January 1, 1966~~o which corrective control provisions under ORS 537.735(3)(a)-(f) may be applied.¶
(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, and the total volume of groundwater produced from a well.
Statutory/Other Authority: ~~536.300, 536.340, 537~~ORS 537.545, ORS 537.735, OAR 690-300-0010
Statutes/Other Implemented: ORS 536.300, ORS 536.027, ORS 537.332, ORS 537.780

AMEND: 690-512-0020

RULE SUMMARY: This rule replaces OAR 690-512-0020 (Groundwater use in the Greater Harney Valley Groundwater Area of Concern); the rule defines the administrative boundaries used in OAR, Chapter 690, Division 512, including those for the Greater Harney Valley Groundwater Area of Concern (GHVGAC), Malheur Lake Basin, Serious Water Management Problem Area (SWMPA), Groundwater Classification, Harney Basin, Harney Basin Groundwater Reservoir, and Harney Basin Critical Groundwater Area (CGWA); the rule includes boundary maps as Exhibits 1- 5.

CHANGES TO RULE:

690-512-0020

~~Groundwater use in the Greater Harney Valley Groundwater Area of Concern~~ Administrative Boundaries

(1) The Greater Harney Valley Groundwater Area of Concern (GHVGAC) ~~is established to ensure that groundwater in the GHVGAC is appropriated within the capacity of the resource and that new appropriations of groundwater assure the maintenance of reasonably stable groundwater levels and prevent depletion of the groundwater resource. Current data, comprising substantial evidence, indicate that groundwater levels are declining in areas of the GHVGAC. Additional allocation of groundwater within the GHVGAC may exacerbate these declines. A comparison between estimated annual recharge and previously allocated groundwater volumes indicates that groundwater is fully allocated in some areas of the basin. Subject to further study, the Department will not allocate additional groundwater permits unless the permit is issued consistent with OAR 690-512 rules. For the purpose of this rule, the GHVGAC is as described and shown in Exhibit 1.¶~~

~~(2) Except as provided in subsections (4), (5), (6), and (7) of this section, groundwater in the GHVGAC is classified only for exempt groundwater uses as specified in ORS 537.545.¶~~

~~(3) In processing applications to appropriate and use groundwater within the GHVGAC, the Department may not find that the proposed use will ensure the preservation of the public welfare, safety and health unless the use is classified, and unless water is available for the proposed new use as described in subsections (4), (5), (6), and (7) of this section.¶~~

~~(4) Voluntary Cancellations for Groundwater Availability. Notwithstanding OAR 690-300-0010(57) and except for exempt groundwater uses, for the purposes of processing applications pursuant to ORS 537.621 and OAR 690-310-0130, an applicant who agrees to application of these rules to a completed pending application may request the Department find that groundwater is available for the proposed use(s) in the GHVGAC consistent with this subsection. In reviewing an application for a permit to appropriate groundwater, the Department may find that groundwater is available if:¶~~

~~(a) The proposed use does not have the potential for substantial interference as determined pursuant to OAR 690-009; and,¶~~

~~(b) The total rate and duty of the proposed groundwater use is offset by the contemporaneous and voluntary cancellation or partial cancellation of an existing primary groundwater certificate or primary permit within the GHVGAC as provided in subsection (c) of this section; and,~~Boundary 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, and shown in Exhibit 2.¶

(~~c~~3) The ~~primary groundwater certificate or primary groundwater permit that is voluntarily cancelled or partially cancelled is not subject to forfeiture or cancellation for non-use and is equal or greater in rate, duty and acreage as compared to the rate, duty and acreage of the new appropriation sought; and,¶~~

~~(d) The application was pending and the groundwater right being cancelled was subject to transfer, permit amendment, or has a pending application for an extension of time that is subsequently approved, as of April 15, 2016; and the applicant has provided confirmed offset water to the Department by April 15, 2019.¶~~

~~(e) Notwithstanding subsection (2) of this section, if groundwater is available for a proposed new use consistent with this subsection and if the use is the type of use described in OAR 690-512-0010(1), the proposed use will be considered a classi~~Serious Water Management Problem Area (SWMPA) Boundary is defined ~~use.¶~~

~~(5) Any primary permits or primary certificates that are voluntarily cancelled or partially cancelled within the GHVGAC that have not been specifically identified as offset for an application pending before the Department under section (4) will be made available for offset for pending applications under section (4) on the basis of priority determined by the tentative priority date.¶~~

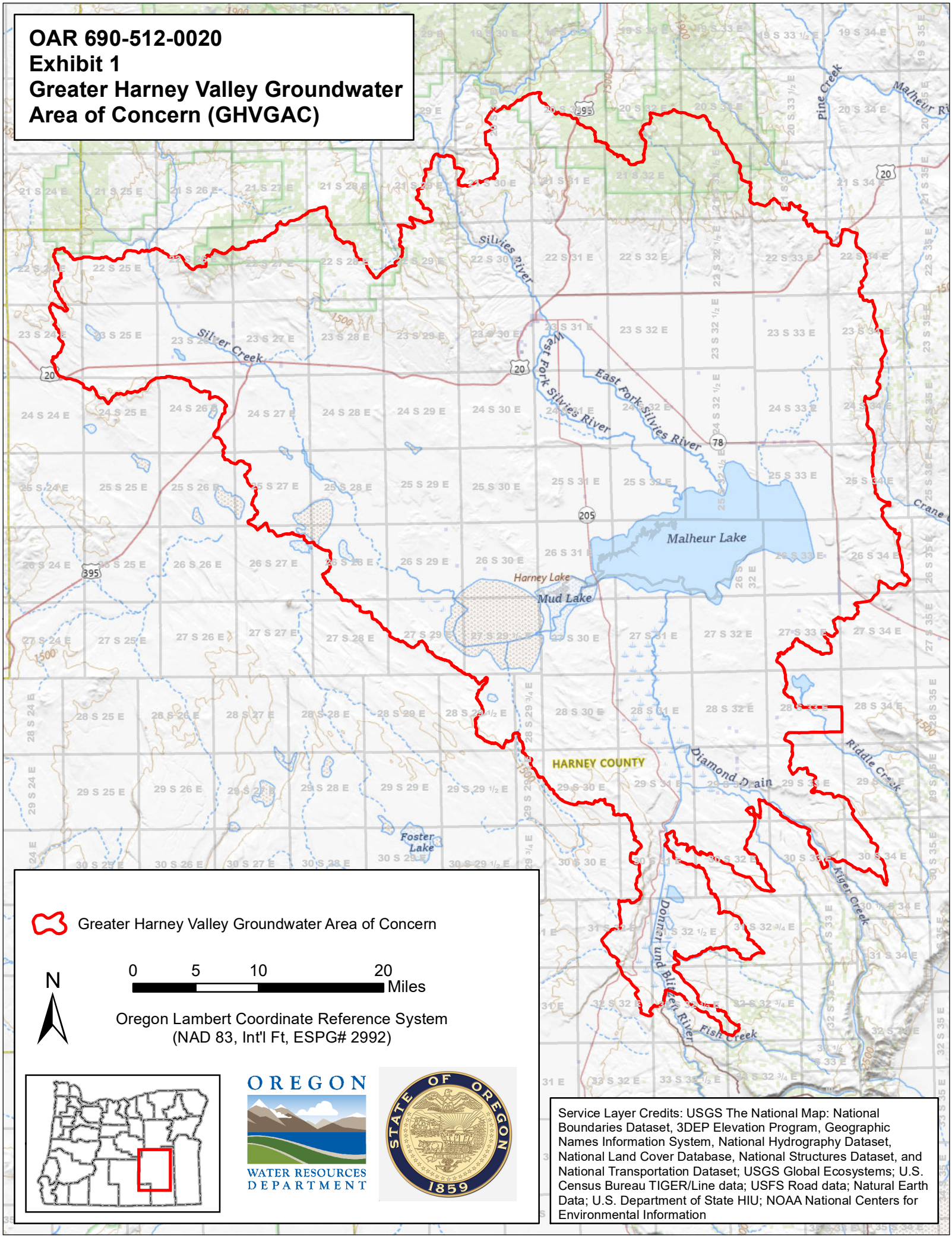
~~(6) Groundwater Availability Where Voluntary Cancellation is not Sought. If an applicant does not elect to pursue processing of a pending groundwater application under subsection (4) of this section, and the well or wells associated with the pending application are located in the Northwest or South sub-areas of the GHVGAC, the applicant may request the Department to process a pending application pursuant to this subsection. These two sub-area locations are~~as the Harney Basin within the Malheur Lake Basin and within portions of Grant and Harney

Counties as shown oin Exhibit 1, and are designated based on limited groundwater level trend information. For the purposes of this subsection and processing applications pursuant to ORS 537.621 and OAR 690-310-0130, and notwithstanding OAR 690-300-0010(57), groundwater is available for appropriation to new proposed uses on pending applications in these sub-areas in the GHVGAC, if:3.¶
(a4) The pGroposed use does not have the potential for substantial interference pursuant to OAR 690-009;¶
(b) Since April 15, 2016, there has not been a total of 7,600 acre feet of irrigation permits issued in the Northwest sub-area, and 1,660 acre feet of irrigation permits in the South sub-area. For the purposes of allocating water under this subsection, applications will be processed in the order they are received by the Department.¶
(c) Permits issued according to this subsection shall be conditioned to prohibit use of water if, based on the Department's Harney Basin groundwater study, the Department cannot make a finding that the groundwater use is within the capacity of the resource, is not over appropriated, or will not cause injury to senior water users. The permit holder may provide offset water in the manner described in subsection (4) within three years of the final report being issued. The Department shall make the findings described in this subsection for each permit issued under Section 6 within one year of completing the Harney Basin groundwater study. The Department's findings described in this subsection shall include site-specific substantial evidenceundwater 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.¶
(d5) The application was pending as of April 15, 2016, and the applicant confirms to the Department in writing, within 6 months of April 15, 2016, that they wish for their permit to be issued under section (6) of these rules.¶
(e) If groundwater is available for a proposed new use consistent with this subsection and if the use is the type of use described in OAR 690-512-0010(1), the proposed use will be considered a classified use.¶
(7) Each permit issued according to subsections (4) and (6) must be conditioned as follows:¶
(a) Include a requirement for construction of a dedicated observation well at a location determined by the Department, to the same depth as the production well, within 6 months of permit issuance, or the permit may be cancelled. This 6 month deadline shall not be extended. Failure to construct a dedicated observation well within 6 months of permit issuance shall cause the watermaster to regulate off any future use under the permit.¶
(b) All groundwater pumping authorized by this permit is prohibited if March groundwater levels indicate 18 feet or more of decline has occurred, as measured Harney Basin is defined as the closed surface-water basin that drains into Malheur and Harney Lakes including the observation well or any authorized irrigation well, when compared to the first March measurement. Subsequent groundwater pumping may occur with Department approval during the year(s) a subsequent March groundwater level measurement indicates the groundwater level at the observation well has recovered to less than 18 feet of decline when compared to the first March measurement.¶
(c) Notwithstanding OAR 690-008-0001(8b and 8c), all permits issued in the GHVGAC must include the following condition: Any well authorized under this permit shall be located more than 1,320 feet from any existing senior exempt, permitted or certificated well(s) not owned by the permit holder. Any well authorized on this permit, when located between 1,320 feet and 2,640 feet of any senior exempt, permitted or certificated well not owned by the permit holder, shall immediately cease pumping groundwater if Department staff, during investigation of a complaint, determine 10 feet or more of measured groundwater level interference related to the authorized well use has occurred in the complainant's senior exempt, permitted or certificated wellfour National Watershed Boundary Dataset 8-digit hydrologic units Donner und Blitzen 17120003, Silver 17120004, Harney-Malheur Lakes 17120001, and Silvies 17120002 as shown in Exhibit 5.¶
(86) The Department shall keep an accounting, and track the status of, existing groundwater permits, certificates and groundwater applications pending within the GHVGAC as of April 15, 2016. This information shall be provided to any person upon request. Updated information shall also be kept and made available at the Watermaster's office in Burns.¶
(9) The Department shall report annually on the implementation of these rules to the Water Resources Commission early each calendar year beginning in 2017. The CommisHarney Basin Groundwater Reservoir Boundary is defined as the area coincident with the Harney Basion may amend these rules to adjust the boundaries of the GHVGAC, or amend or repeal these rules. The Department's report to the Commission shall include at least the following information:¶
(a) New groundwater permits issued within the GHVGAC after April 15, 2016;Boundary, as shown in Exhibit 5. ¶
(b7) An update on groundwater level data, and the groundwater study to assist the Department and Commission in understanding the aquifer system in the study area, and;¶
(c) Staff recommeThe Harney Basin Critical Groundwations, if any, regarding whether this section of rules should be amended or repealed.¶
(10) The Department study referenced in 690-512-0020(1) shall be designed to collect substantial data on the groundwater flow system in the GHVGAC. The final report containing study findings shall be ser Area Boundary is defined as the area coincidentifically peer-reviewed. The study is planned to be completed by the end of the year

~~2020.¶~~
~~(11) The Department shall plan and conduct the study in coordination with a local Groundwater Study Advisory Committee (SAC) to be jointly appointed by the Department and the Harney County Court. The committee may include, but not be limited to: local irrigators, well drillers, irrigation/pump contractors, members of the scientific community, a representative of the Harney County Court, conservation and instream interests, and interested members of the public. The Department will work with the SAC and individual water users to encourage the collection and use of hydrogeologic data. As part of the study process, the Department shall review and consider relevant data provided by or through the Groundwater SAC. The Department shall report quarterly to the Groundwater SAC to provide updates on the study status, data analyses and preliminary findings, and shall collaborate with the SAC with regard to actions and decisions that may result from the study. The Department shall provide the SAC a draft of the groundwater study report for review and comment prior to publishing the final report. The final groundwater study report shall be peer-reviewed.¶~~
~~(12) Within 1 year after the Groundwater Study discussed in subsection 11 has been published by the Department, the Department will convene a Rules Advisory Committee to explore whether there is a need for updates or changes to these rules. Members of the Groundwater Study Advisory Committee will be invited to participate on the Rules Advisory Committee.¶~~
~~[ED. NOTE: Exhibits referenced are available from the agency.]~~ with the Greater Harney Valley Groundwater Area of Concern Boundary as shown in Exhibit 1 and contains a portion of the Harney Basin Groundwater Reservoir. The boundary of the Harney Basin Groundwater Reservoir is shown in Exhibit 5.
Statutory/Other Authority: ORS 5~~36.340(1)(a), 537.525(3), (5), (7) and (8), 537.621(2), 537.777(1), 537.780(1) and (1)(h)~~40.435, ORS 536.340, ORS 537.735
Statutes/Other Implemented: ORS 537.027, ORS 537.525, ORS 536.300, ORS 540.435, ORS 536.340, ORS 537.735, ORS 537.780

RULE ATTACHMENTS MAY NOT SHOW CHANGES. PLEASE CONTACT AGENCY REGARDING CHANGES.

OAR 690-512-0020
Exhibit 1
Greater Harney Valley Groundwater Area of Concern (GHVGAC)



Greater Harney Valley Groundwater Area of Concern

N

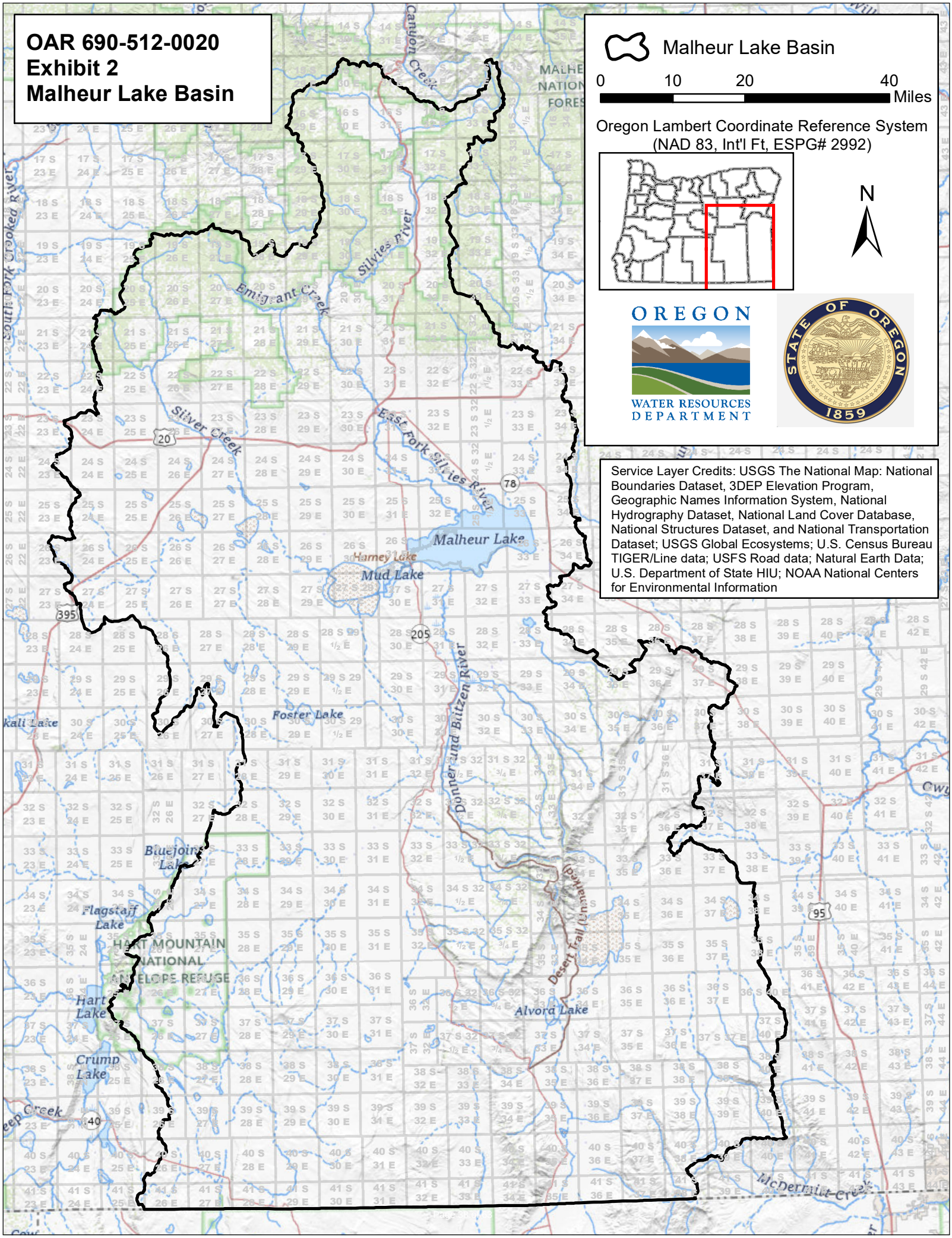
0 5 10 20 Miles

Oregon Lambert Coordinate Reference System
(NAD 83, Int'l Ft, ESPG# 2992)

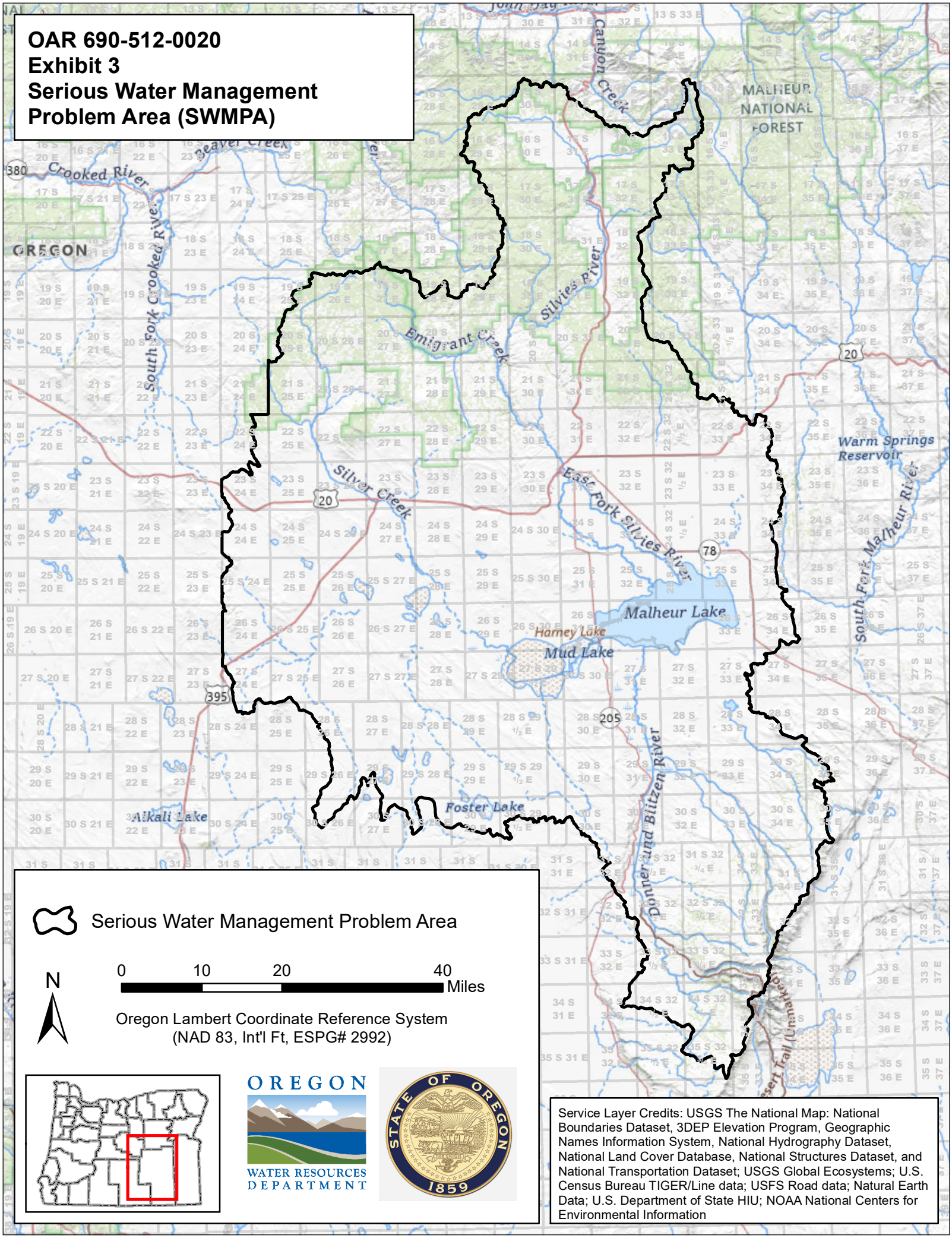
OREGON WATER RESOURCES DEPARTMENT

STATE OF OREGON 1859

Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data; Natural Earth Data; U.S. Department of State HIU; NOAA National Centers for Environmental Information

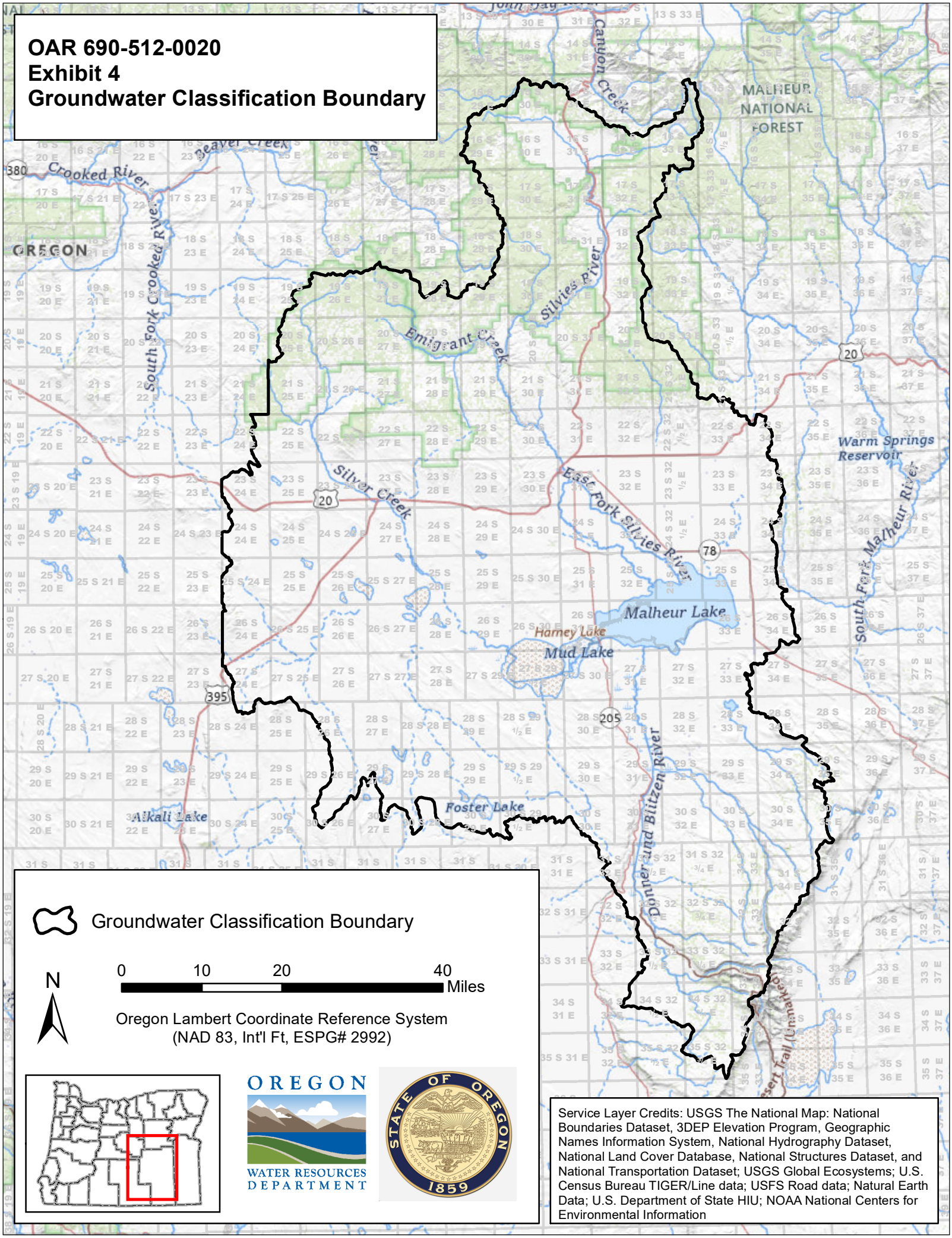

OAR 690-512-0020
Exhibit 2
Malheur Lake Basin
Malheur Lake Basin
0 10 20 40
Miles
Oregon Lambert Coordinate Reference System
(NAD 83, Int'l Ft, ESPG# 2992)
N
OREGON
WATER RESOURCES
DEPARTMENT
STATE OF OREGON
1859
Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data; Natural Earth Data; U.S. Department of State HIU; NOAA National Centers for Environmental Information
Canyon Creek
Silvies River
Emigrant Creek
South Fork Crooked River
Silver Creek
East Fork Silvies River
Malheur Lake
Harney Lake
Mud Lake
Foster Lake
Donner und Blitzen River
Bluejoint Lake
Flagstaff Lake
HART MOUNTAIN NATIONAL ANTELOPE REFUGE
Hart Lake
Crump Lake
Alvord Lake
Desert Trail (Unmarked)
McDermitt Creek
20
78
395
205
95
40

OAR 690-512-0020
Exhibit 3
Serious Water Management Problem Area (SWMPA)



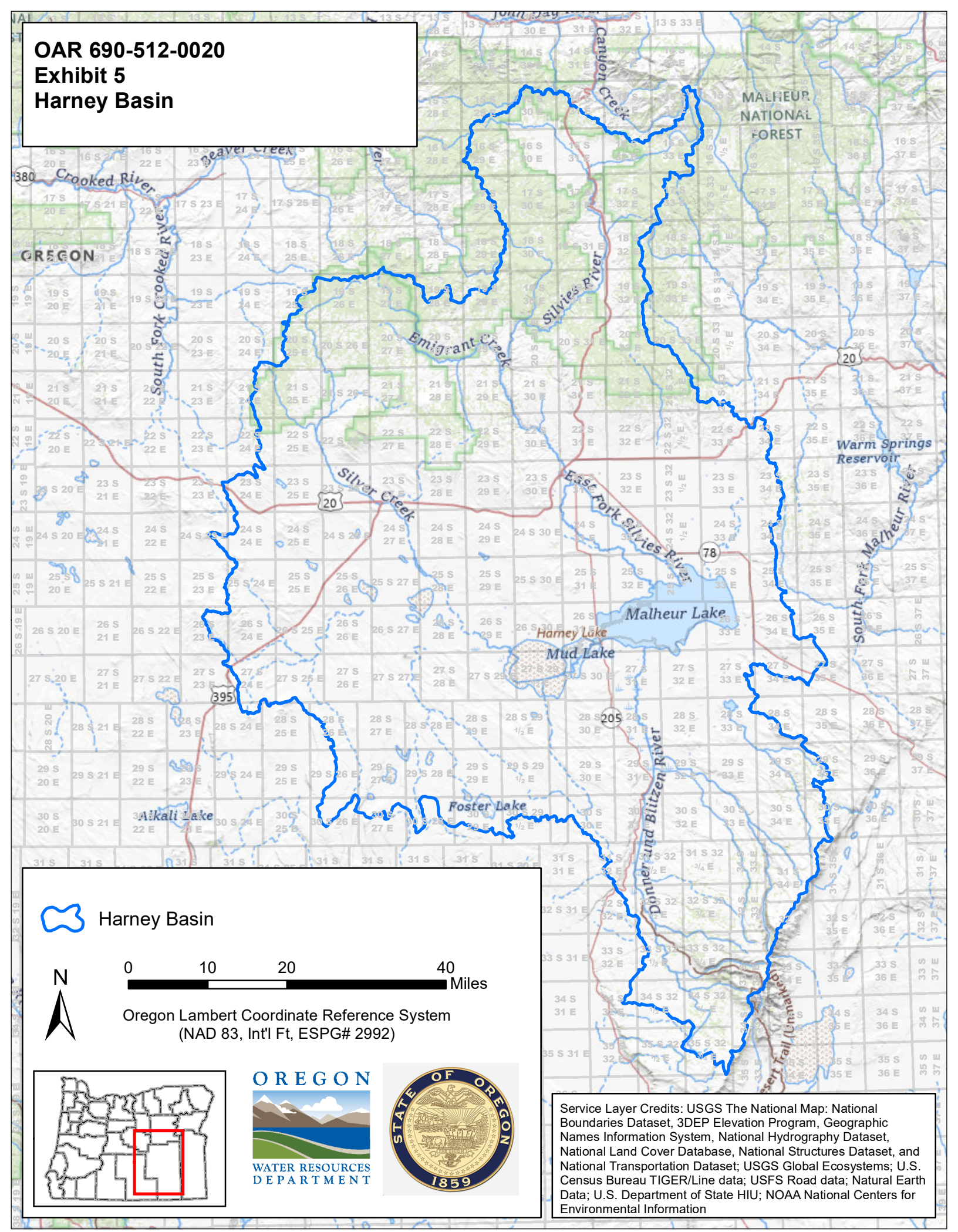
Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data; Natural Earth Data; U.S. Department of State HIU; NOAA National Centers for Environmental Information

OAR 690-512-0020
Exhibit 4
Groundwater Classification Boundary



Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data; Natural Earth Data; U.S. Department of State HIU; NOAA National Centers for Environmental Information

OAR 690-512-0020
Exhibit 5
Harney Basin



ADOPT: 690-512-0030

RULE SUMMARY: This new rule readopts the current rule 690-512-0010; the rule retains the existing surface water classification for the Malheur Lake Basin and reclassifies groundwater use to exempt uses and nonconsumptive geothermal uses only within the boundary defined in 690-512-0020(4).

CHANGES TO RULE:

690-512-0030
Classifications
(1) Except as provided in section 2 of this rule, 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.
Statutory/Other Authority: ORS 536.340, ORS 537.621(2), ORS 536.340
Statutes/Other Implemented: ORS 536.027, ORS 536.300, ORS 536.340, ORS 537.621(2), ORS 536.340, ORS 537.780, ORS 537.525

ADOPT: 690-512-0041

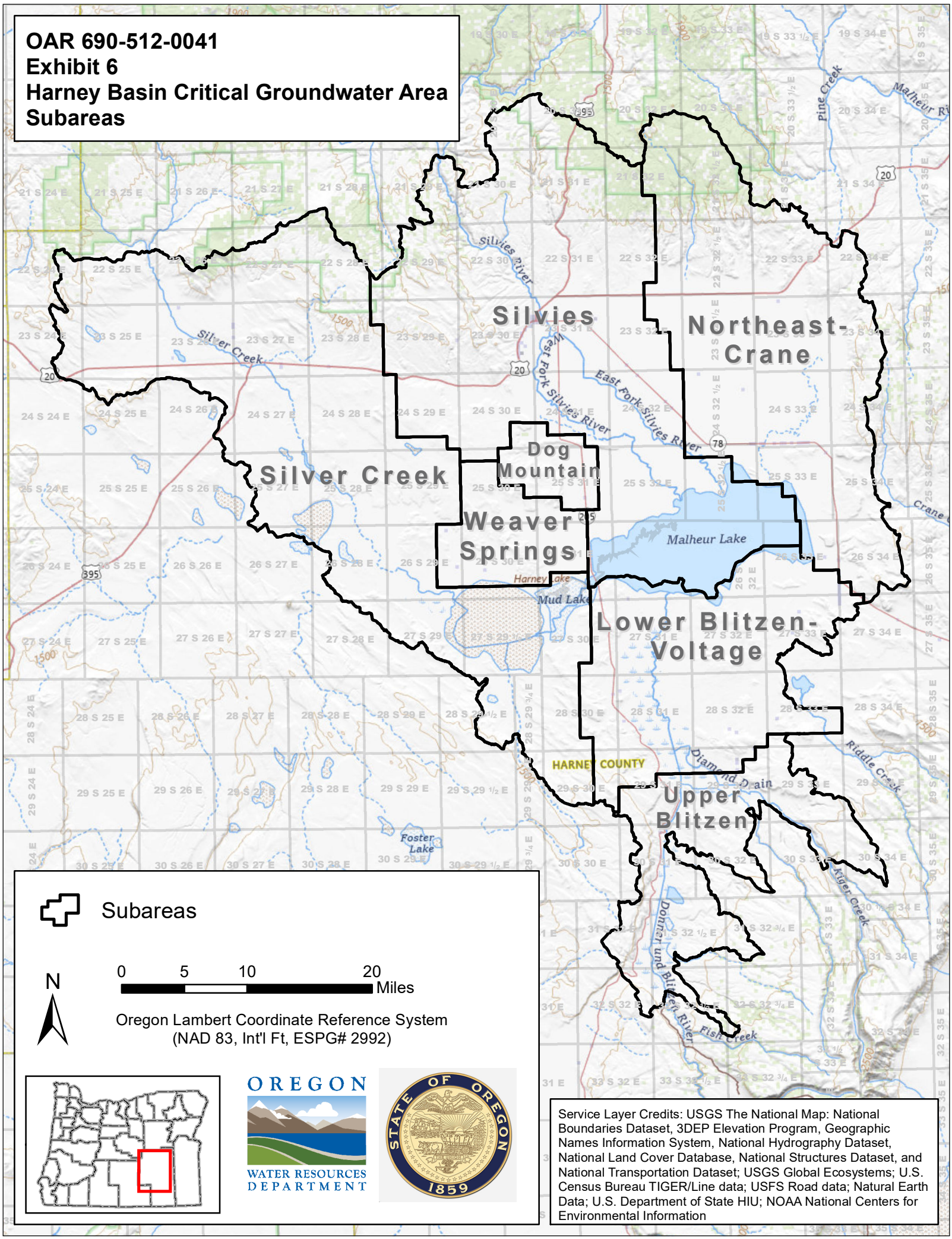
RULE SUMMARY: This new rule specifies the target water level trend for the Harney Basin Critical Groundwater Area; authorizes the Department to access wells for the purpose of implementing these rules; requires a Department review of the rules every three years, and a Departmental review of the groundwater conditions at least once every ten years; the new rule contains a provision closing the Harney Basin Critical Groundwater Area to any further nonexempt consumptive appropriation; the new rule defines the seven subareas within the Harney Basin Critical Groundwater Area; the new rule includes subarea maps as Exhibits 6-13.

CHANGES TO RULE:

690-512-0041
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 over a five-year period when calculated as described in OAR 690-512-0080(7). ¶
(2) The Department may access any well within the critical groundwater area that is authorized as a point of appropriation on a valid water right for the purpose of implementing these rules. The Department will provide notice to the groundwater right holder, well owner, or well operator prior to accessing the well. ¶
(3) A review of the Harney Basin Critical Groundwater Area rules shall be completed once every 3 years. The review shall be presented at a public meeting held within the basin at which written and oral public comment shall be accepted. The review and a summary of public comments received shall then be presented at a Commission meeting which has been publicly noticed and provides opportunity for public comment.¶
(4) A review of the conditions in the Harney Basin Critical Groundwater area shall be completed no less frequently than once every 10 years. The review shall be presented at a public meeting held within the basin at which written and oral public comment shall be accepted. The review and a summary of public comments received shall then be presented at a Commission meeting which has been publicly noticed and provides opportunity for public comment.¶
(5) Except as defined in OAR 690-512-0030(2) Classifications, the Department will not accept new applications for groundwater permits within the Harney Basin Critical Groundwater Area.¶
(6) The Harney Basin Critical Groundwater area defined in OAR 690-512-0020(7) 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 537.735, OAR 690-010-0130(3)(a) - (c)
Statutes/Other Implemented: ORS 537.027, ORS 537.525, ORS 537.780, ORS 537.735, OAR 690-010-0130(3)(a) - (c), ORS 536.300

RULE ATTACHMENTS MAY NOT SHOW CHANGES. PLEASE CONTACT AGENCY REGARDING CHANGES.

OAR 690-512-0041
Exhibit 6
Harney Basin Critical Groundwater Area Subareas



Subareas

N

0 5 10 20 Miles

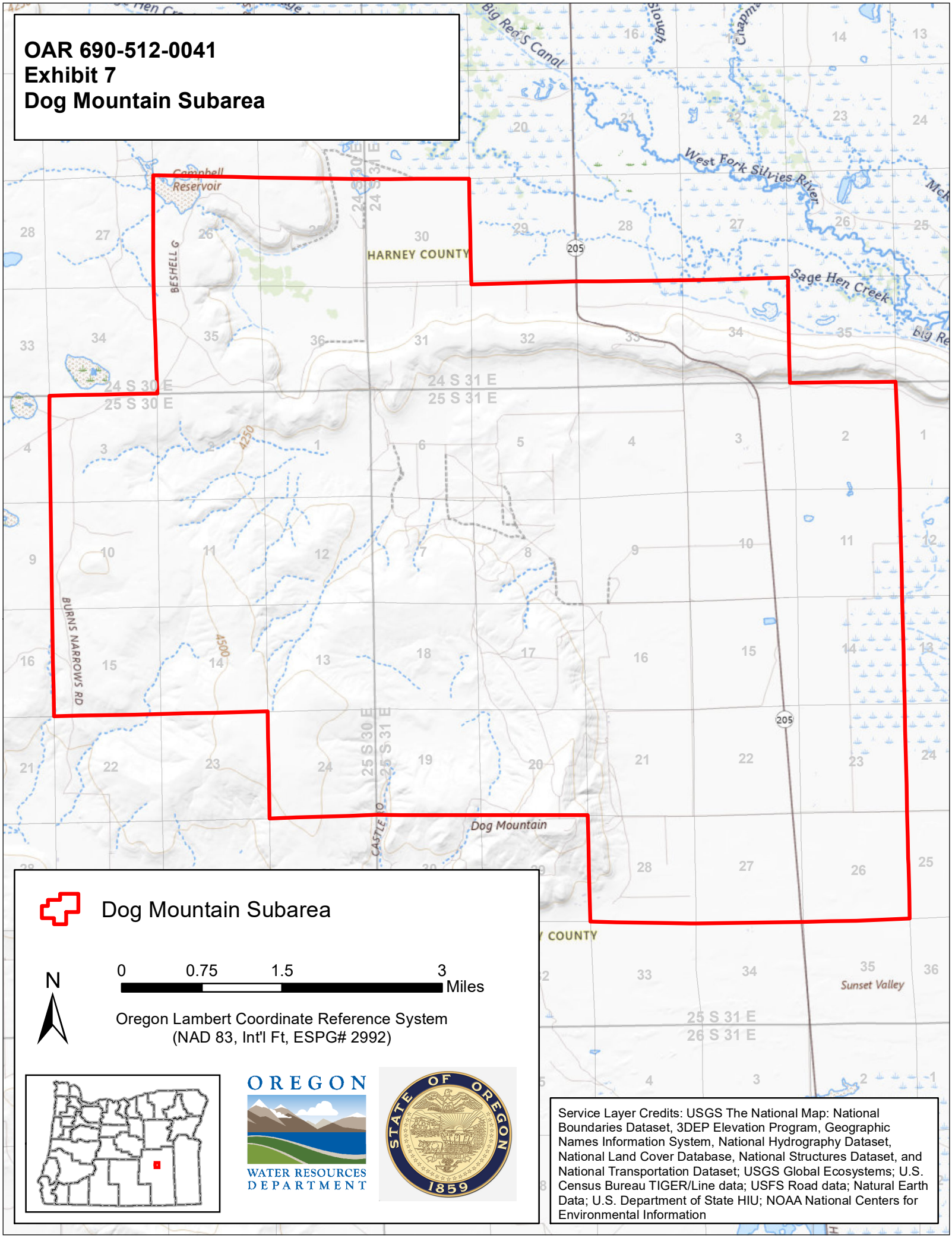
Oregon Lambert Coordinate Reference System
(NAD 83, Int'l Ft, ESPG# 2992)

OREGON WATER RESOURCES DEPARTMENT

STATE OF OREGON 1859

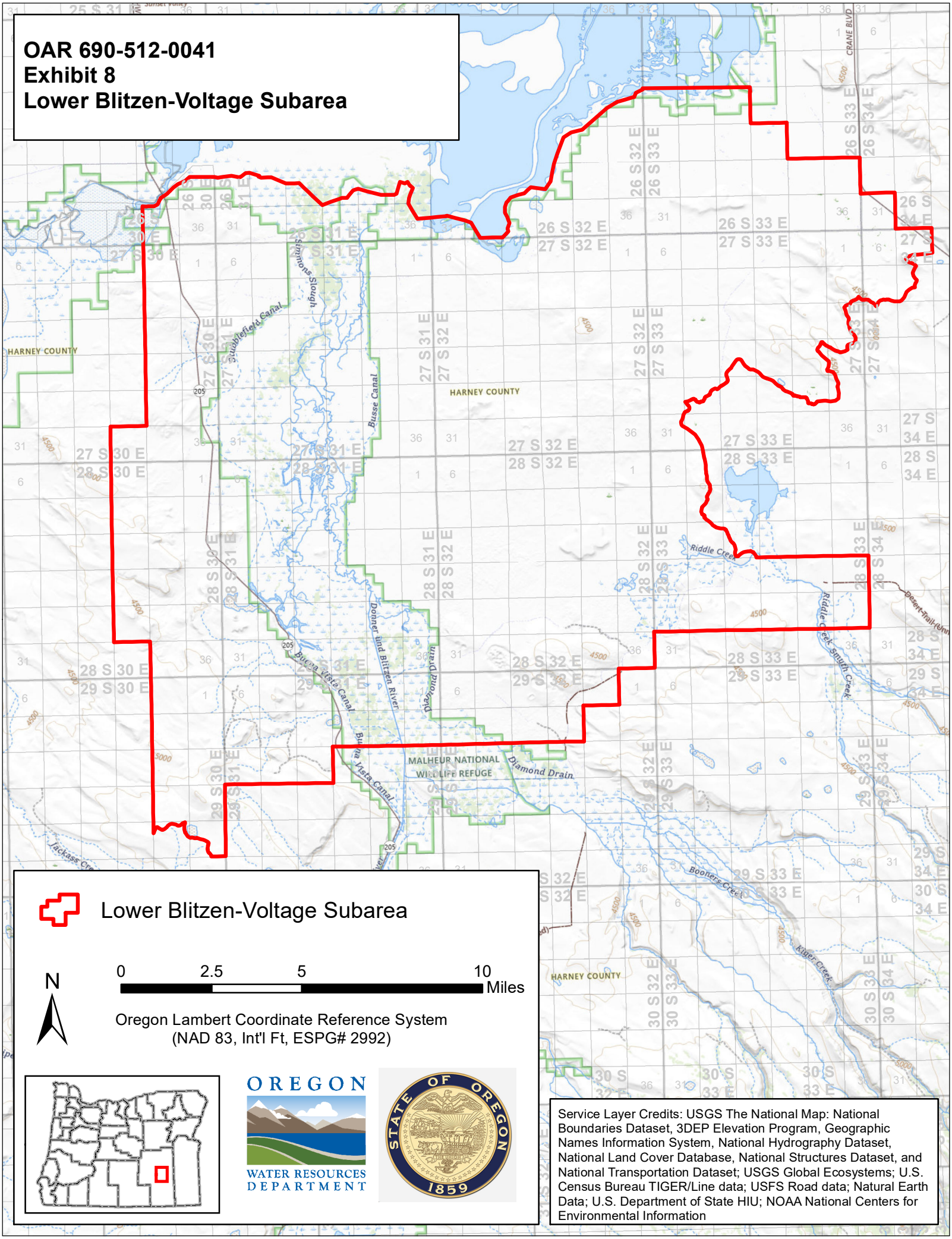
Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data; Natural Earth Data; U.S. Department of State HIU; NOAA National Centers for Environmental Information

OAR 690-512-0041
Exhibit 7
Dog Mountain Subarea



Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data; Natural Earth Data; U.S. Department of State HIU; NOAA National Centers for Environmental Information

OAR 690-512-0041
Exhibit 8
Lower Blitzen-Voltage Subarea



Lower Blitzen-Voltage Subarea

N

0 2.5 5 10 Miles

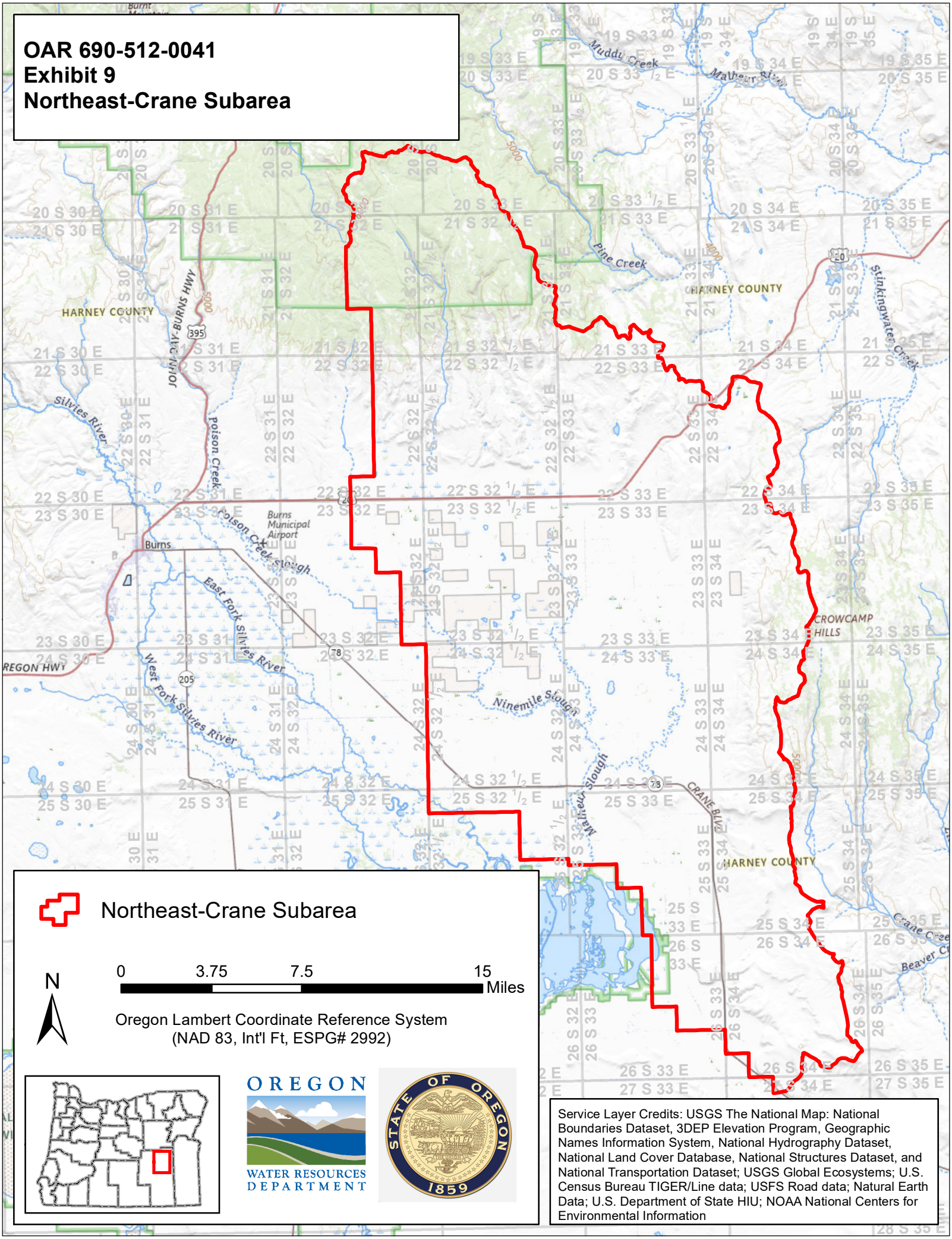
Oregon Lambert Coordinate Reference System
(NAD 83, Int'l Ft, ESPG# 2992)

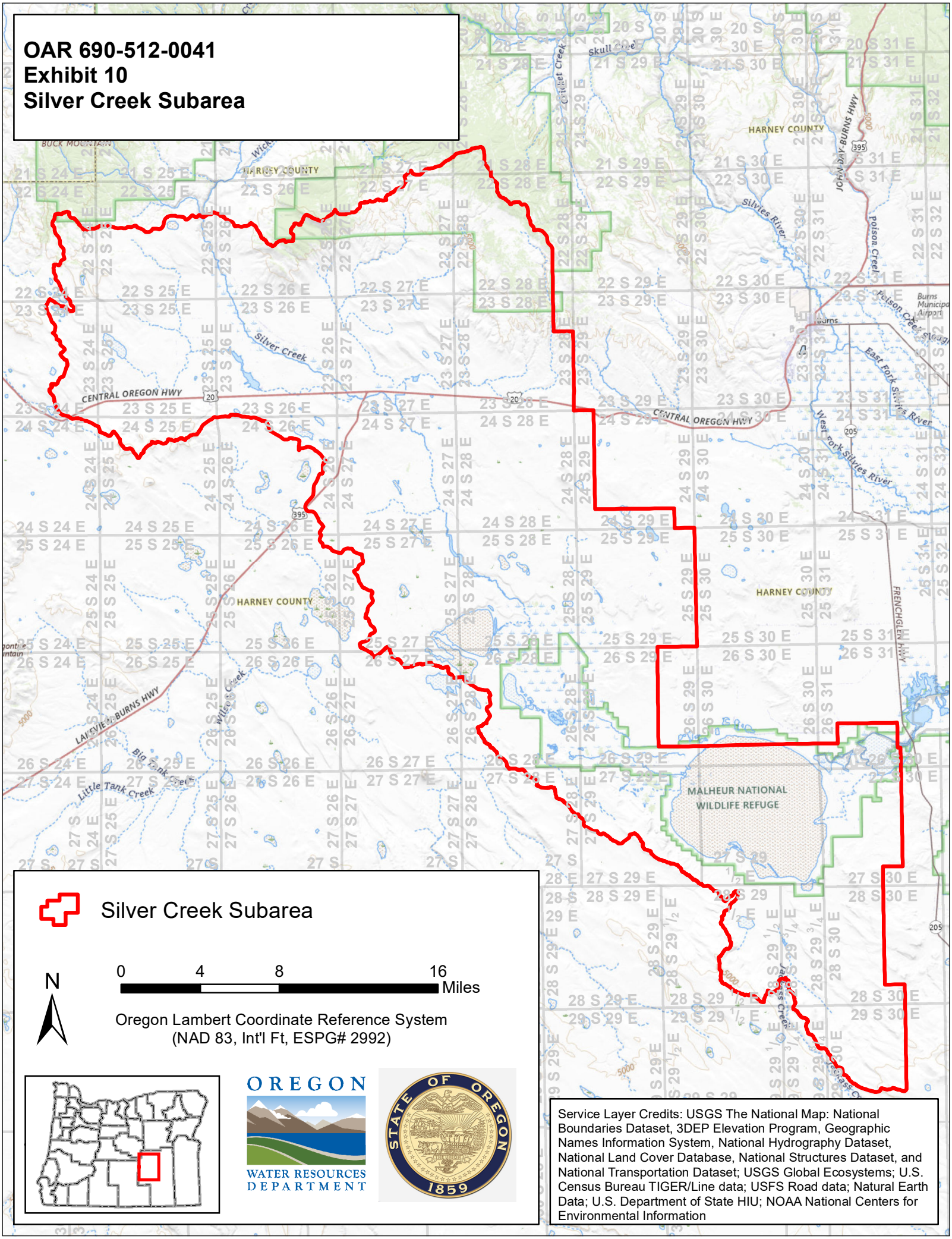
OREGON WATER RESOURCES DEPARTMENT

STATE OF OREGON 1859

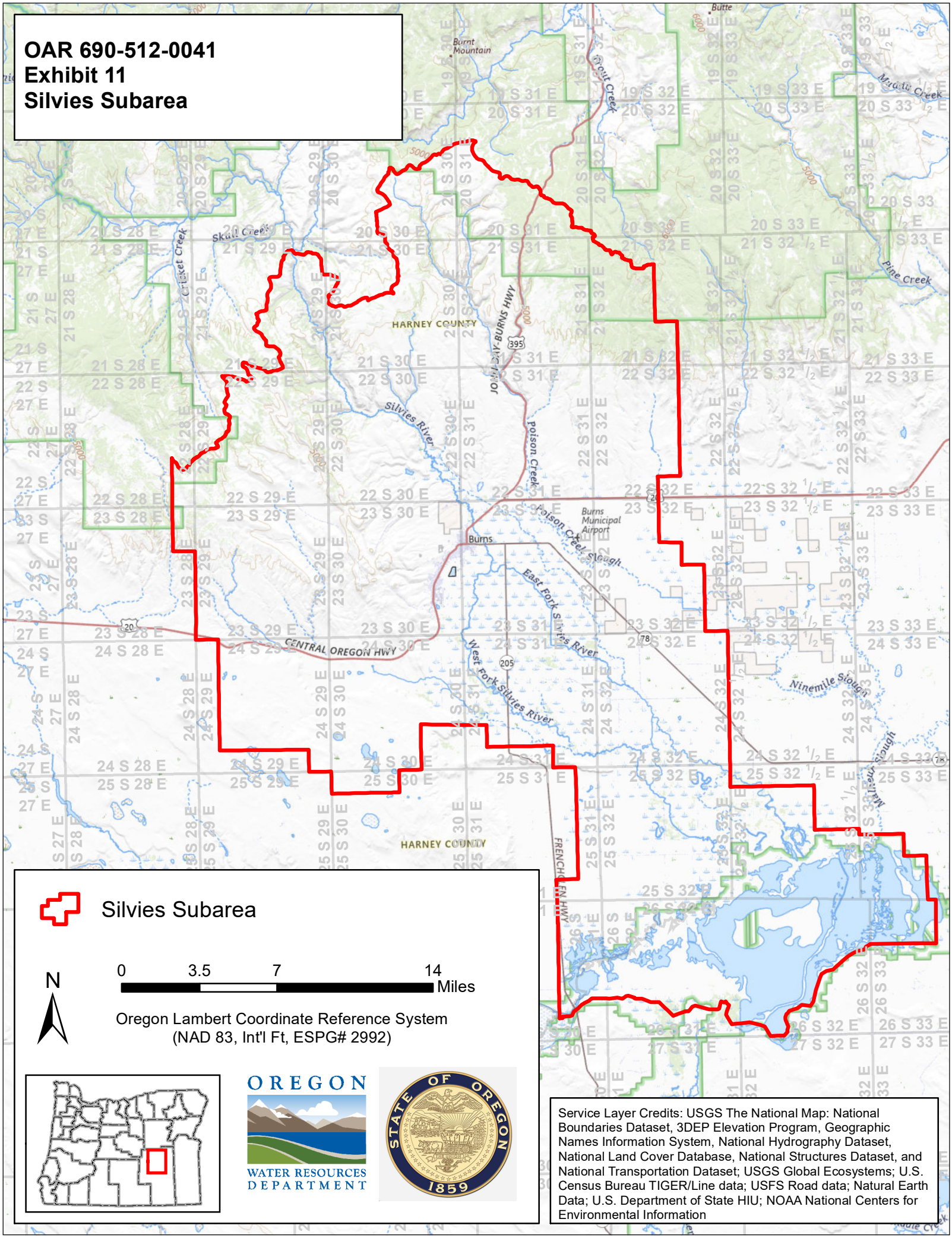
Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data; Natural Earth Data; U.S. Department of State HIU; NOAA National Centers for Environmental Information

OAR 690-512-0041
Exhibit 9
Northeast-Crane Subarea




OAR 690-512-0041
Exhibit 10
Silver Creek Subarea
HARNEY COUNTY
CENTRAL OREGON HWY
Silver Creek
Silvies River
Burns
JOHN DAY-BURNS HWY
LAWEVIEW-BURNS HWY
MALHEUR NATIONAL WILDLIFE REFUGE
Silver Creek Subarea
N
0 4 8 16
Miles
Oregon Lambert Coordinate Reference System
(NAD 83, Int'l Ft, ESPG# 2992)
OREGON
WATER RESOURCES DEPARTMENT
STATE OF OREGON 1859
Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data; Natural Earth Data; U.S. Department of State HIU; NOAA National Centers for Environmental Information

OAR 690-512-0041
Exhibit 11
Silvies Subarea



Silvies Subarea

N

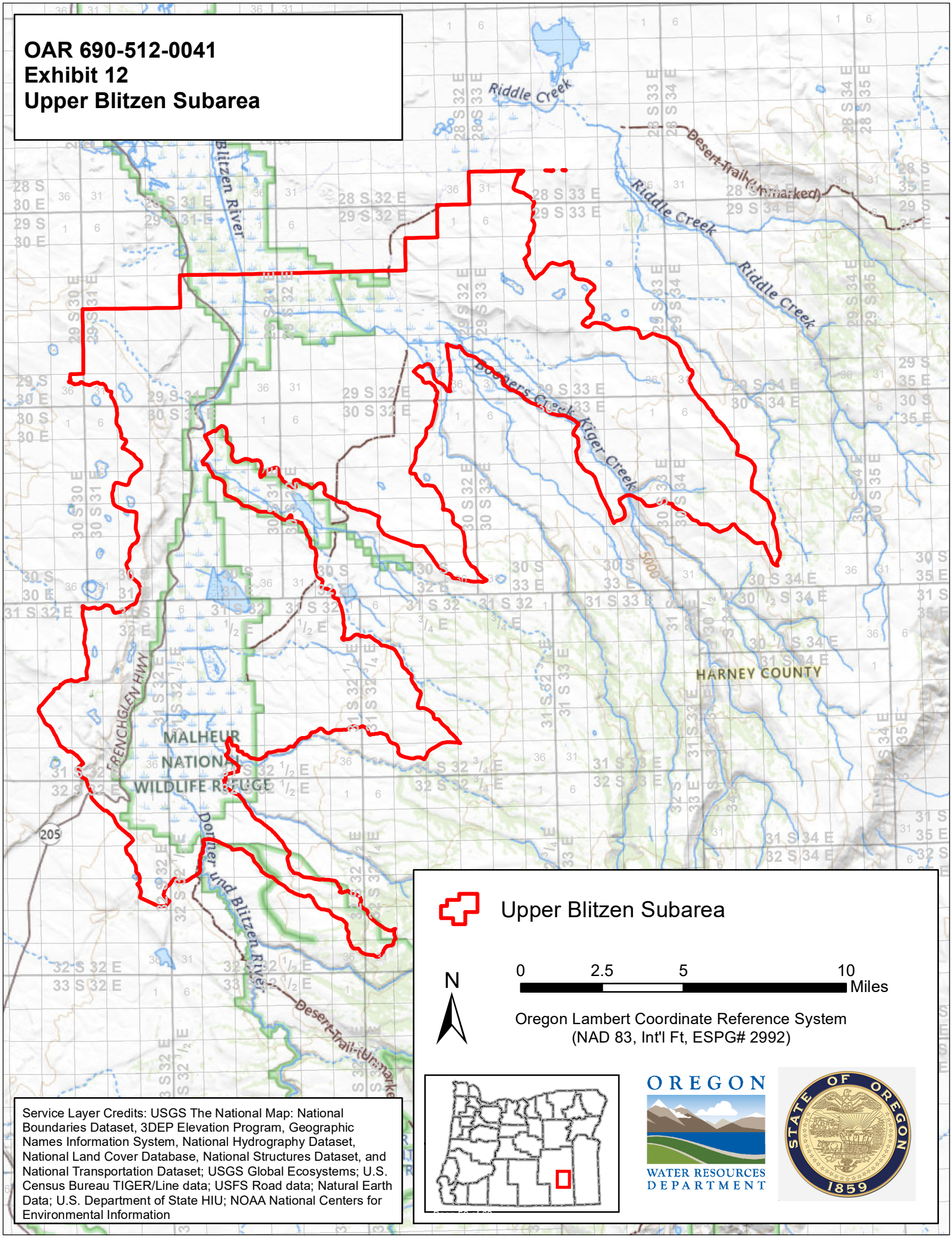
0 3.5 7 14 Miles

Oregon Lambert Coordinate Reference System
(NAD 83, Int'l Ft, ESPG# 2992)

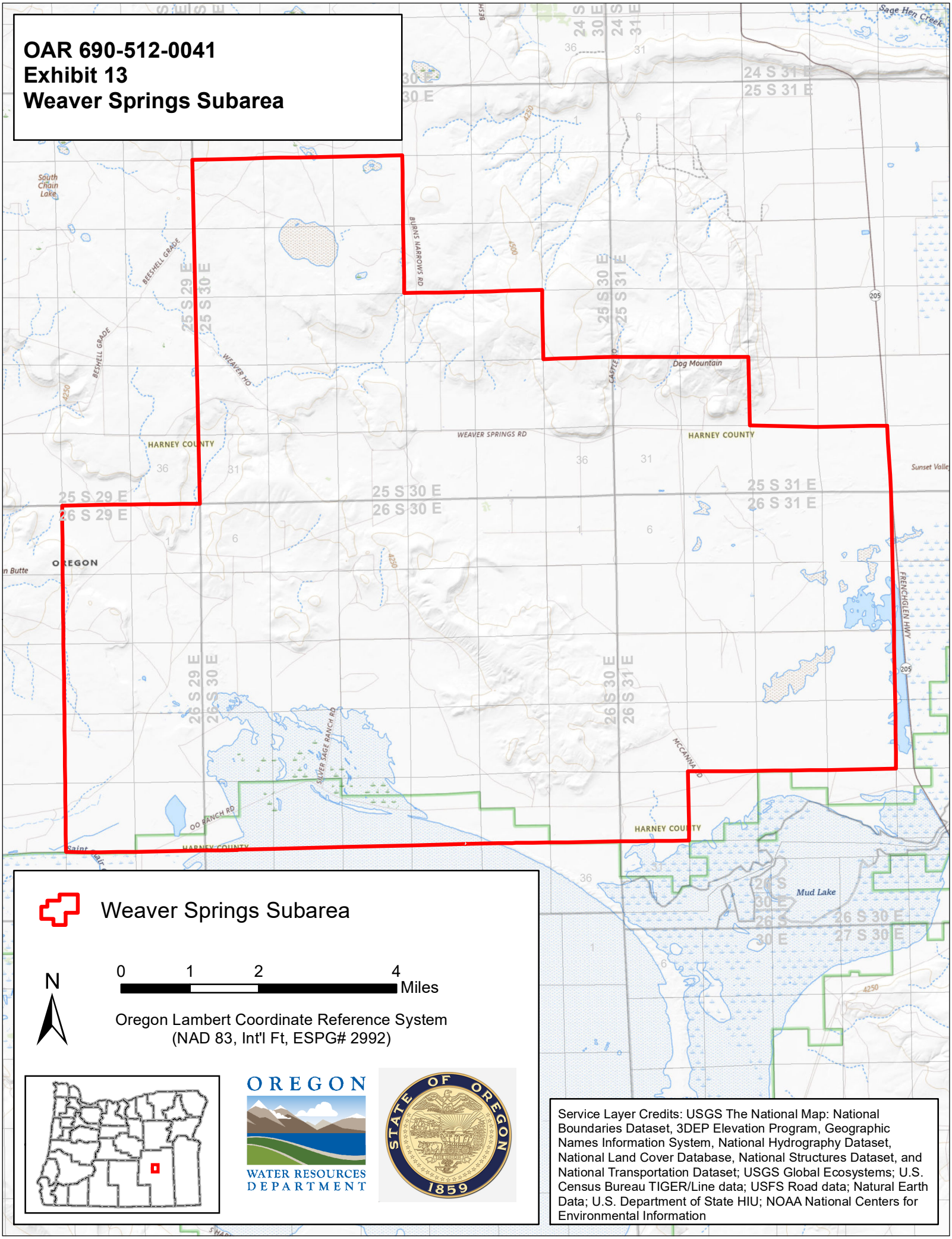
OREGON WATER RESOURCES DEPARTMENT

STATE OF OREGON 1859

Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data; Natural Earth Data; U.S. Department of State HIU; NOAA National Centers for Environmental Information


OAR 690-512-0041
Exhibit 12
Upper Blitzen Subarea
Riddle Creek
Blitzen River
Desert Trail (Unmarked)
Riddle Creek
Riddle Creek
Donners Creek
Kiger Creek
5000
HARNEY COUNTY
FRENCHGLEN HWY
MALHEUR
NATIONAL
WILDLIFE REFUGE
205
Donner und Blitzen River
Desert Trail (Unmarked)
Upper Blitzen Subarea
N
0
2.5
5
10
Miles
Oregon Lambert Coordinate Reference System
(NAD 83, Int'l Ft, ESPG# 2992)
OREGON
WATER RESOURCES
DEPARTMENT
STATE OF OREGON
1859
Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data; Natural Earth Data; U.S. Department of State HIU; NOAA National Centers for Environmental Information

OAR 690-512-0041
Exhibit 13
Weaver Springs Subarea



ADOPT: 690-512-0050

RULE SUMMARY: This new rule specifies the permissible total withdrawal for the seven subareas in the Harney Basin Critical Groundwater Area. The permissible total withdrawal for each of the seven subareas is the annual volume of water that the Department has determined can achieve the target groundwater level trend by 2058 after implementing the scheduled reductions in OAR 690-512-0070. The Department may not reduce groundwater pumping through regulatory orders to a value less than the permissible total withdrawal.

CHANGES TO RULE:

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 acre-feet per year.¶
(4) The permissible total withdrawal for the Silver Creek subarea shall be 15,200 acre-feet per year.¶
(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 537.735
Statutes/Other Implemented: ORS 536.027, ORS 537.780, ORS 537.735, ORS 537.525, ORS 536.300, ORS 537.027

ADOPT: 690-512-0060

RULE SUMMARY: This new rule describes how the Department will determine the initial allotment allowed for each irrigation, municipal, and quasi-municipal groundwater right and all other groundwater right uses within the Harney Basin Critical Groundwater Area; initial allotments will be determined for groundwater irrigation rights based on beneficial use, with a duty of 2.5 acre-feet for primary and supplemental rights; initial allotments for municipal and quasi-municipal groundwater rights will be set at 110% of the greatest single-year quantity reported to the Department between 2020 and 2024; all other groundwater use allotments will be determined by the Department as specified in this rule (OAR 690-512-0060(4)(a) – (d)).

CHANGES TO RULE:

690-512-0060
Determination of Initial Allotment for All Groundwater Rights
(1) To establish a schedule for reductions in groundwater use, the Department will determine an initial allotment 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 allotment shall not exceed the total rate or duty authorized on the water right. ¶
(2) In determining the initial allotment for each groundwater right with an irrigation use, the Department will:¶
(a) Use a duty of 2.5 acre-feet per acre for primary and supplemental groundwater rights; an¶
(b) Consider the historic, beneficial use in the five-year period from 2020 to 2024 when identifying the number of acres that will be allotted water.¶
(3) The initial allotment 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 five-year period from 2020 to 2024.¶
(4) In determining the initial allotment 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) Historic beneficial use in the five-year period from 2020 to 2024;¶
(c) Whether or not a water user is physically capable of pumping and putting the allotted water to a beneficial use; and¶
(d) Any other factors deemed appropriate by the Department to determine historic beneficial use.
Statutory/Other Authority: ORS 537.735, ORS 537.742
Statutes/Other Implemented: ORS 536.027, ORS 537.780, ORS 537.525, ORS 537.735, ORS 537.742, ORS 536.300

ADOPT: 690-512-0070

RULE SUMMARY: This new rule describes the schedule for groundwater use reductions for the seven subareas defined within the Harney Basin Critical Groundwater Area and the process for enforcement of corrective control orders. The Weaver Spring Subarea will be scheduled for water use reductions starting in 2028 and the final reduction to permissible total withdrawal in 2034. For the other six subareas reductions may begin in 2028 and continue through 2052 with reductions happening every six years. All reductions will be done by relative priority date and cannot be done until the contested case process is completed. Exempt uses will not be reduced. This rule also defines how municipal and quasi-municipal use will be adjusted.

CHANGES TO RULE:

690-512-0070
Scheduling Water Use Reductions to Meet the Permissible Total Withdrawal
Notwithstanding adjustments made by the adaptive management methodology defined in OAR 690-512-0080, upon consideration of all water rights and after determining the initial allotment for each:¶
(1) 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;¶
(2) 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;¶
(3) 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;¶
(4) 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 allotment 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 allotment shall not exceed the total quantity of water authorized on the water right;¶
(5) Uses exempt under ORS 537.545 are not subject to reduction;¶
(6) 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;¶
(7) If enforcement of corrective control orders reducing use does not occur as scheduled in 2028, then at such time as enforcement occurs, all reductions scheduled under OAR 690-512-0070(1)(a) and (b), including any adjustments that should have occurred at the adaptive management checkpoints defined in OAR 690-512-0080, will be included in the enforcement.
Statutory/Other Authority: ORS 537.742, ORS 537.735
Statutes/Other Implemented: ORS 536.027, ORS 537.780, ORS 537.742, ORS 537.735, ORS 537.525, ORS 536.300

ADOPT: 690-512-0080

RULE SUMMARY: This new rule describes how the Department will adjust scheduled reductions in groundwater use based on the median and tenth percentile of measured groundwater level data as compared to modeled trajectories, shown in exhibit 14, for each subarea. The Weaver Springs subarea is excluded from this process. For the other six subareas, adaptive management will occur every 6 years for the 30-year management period. In 2058 the Department will evaluate the groundwater level decline rate to identify if the target groundwater level trend has been achieved. This rule also contains a provision for evaluating groundwater levels and the Sens's slope rate of decline in 2027, if certain conditions are met then the 2028 reductions will be reduced to zero.

CHANGES TO RULE:

690-512-0080
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 which are the years immediately preceding the scheduled reductions in OAR 690-512-0070 of these rules. ¶
(1) Weaver Springs subarea is exempt from the adaptive management process as defined in section 2 through 5 of this rule.¶
(2) For each subarea, if the contested case process is complete and corrective control orders reducing use can be implemented in 2028, the Department will:¶
(a) Determine the 2027 median annual high groundwater level for each subarea and compare it with the median annual high groundwater level measured in 2022 using representative wells with sufficient data as determined by the Department; ¶
(b) Calculate the median groundwater level decline rate using the Sen's slope method using annual high measurements for representative wells with sufficient data as determined by the Department for years 2022 through 2027; and¶
(c) If the median annual high groundwater level in 2027 is found to be greater than or equal to than the median annual high groundwater level measured in 2022 and the groundwater level decline rate calculated for 2022 through 2027 is found to be zero or above, then the regulatory reductions scheduled for 2028 will be reduced to zero. ¶
(3) 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 annual high static water level measurement in calendar year 2028, if one exists. Otherwise, the Department may establish the reference groundwater level based on an analysis of water level data from that well or other water level data in nearby wells. ¶
(b) For each representative well, the groundwater level change will be calculated as the difference between the annual high static water level measured at the adaptive management checkpoint being evaluated and the reference groundwater level.¶
(4) 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. ¶
(5) At each adaptive management checkpoint, the Department will compare the median groundwater level change for each subarea defined in OAR 690-512-0041 with the groundwater level change envelope defined Exhibit 14. If the median groundwater level change for a subarea is:¶
(a) At or below the 10th percentile, the scheduled quantity of reduction will be doubled.¶
(b) Between the 10th and 25th percentiles, the scheduled quantity of reduction will be increased by one and a half times.¶
(c) From the 25th and through 75th percentiles, no adjustment will be made.¶
(d) Between the 75th and 90th percentiles, the scheduled quantity of reduction will be halved unless 10% or more of the measured wells fall below the 10th percentile. ¶
(e) At or above the 90th percentile, the scheduled quantity of reduction will be reduced to zero unless 10% or more of the measured wells fall below the 10th percentile. ¶
(6) At the end of each adaptive management checkpoint evaluation and after the Department has completed sections 3 through 5 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 for each subarea 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 leading up to the evaluation. After the evaluation in this section, if:¶
(a) 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;¶
(b) The target water level trend has not been achieved and all scheduled reduction have been implemented, the Department will initiate a rulemaking process to adjust the permissible total withdrawal as needed to achieve the target water level trend; or¶
(c) The target water level trend has been achieved and all scheduled reductions have not been implemented, the Department will initiate a rulemaking process to adjust the permissible total withdrawal to match the implemented reductions.
Statutory/Other Authority: ORS 537.742, ORS 537.735
Statutes/Other Implemented: ORS 537.027, ORS 537.780, ORS 537.742, ORS 537.735, ORS 537.525, ORS 536.300

RULE ATTACHMENTS MAY NOT SHOW CHANGES. PLEASE CONTACT AGENCY REGARDING CHANGES.

OAR 690-512-0080
Exhibit 14
Groundwater Level Change Envelope

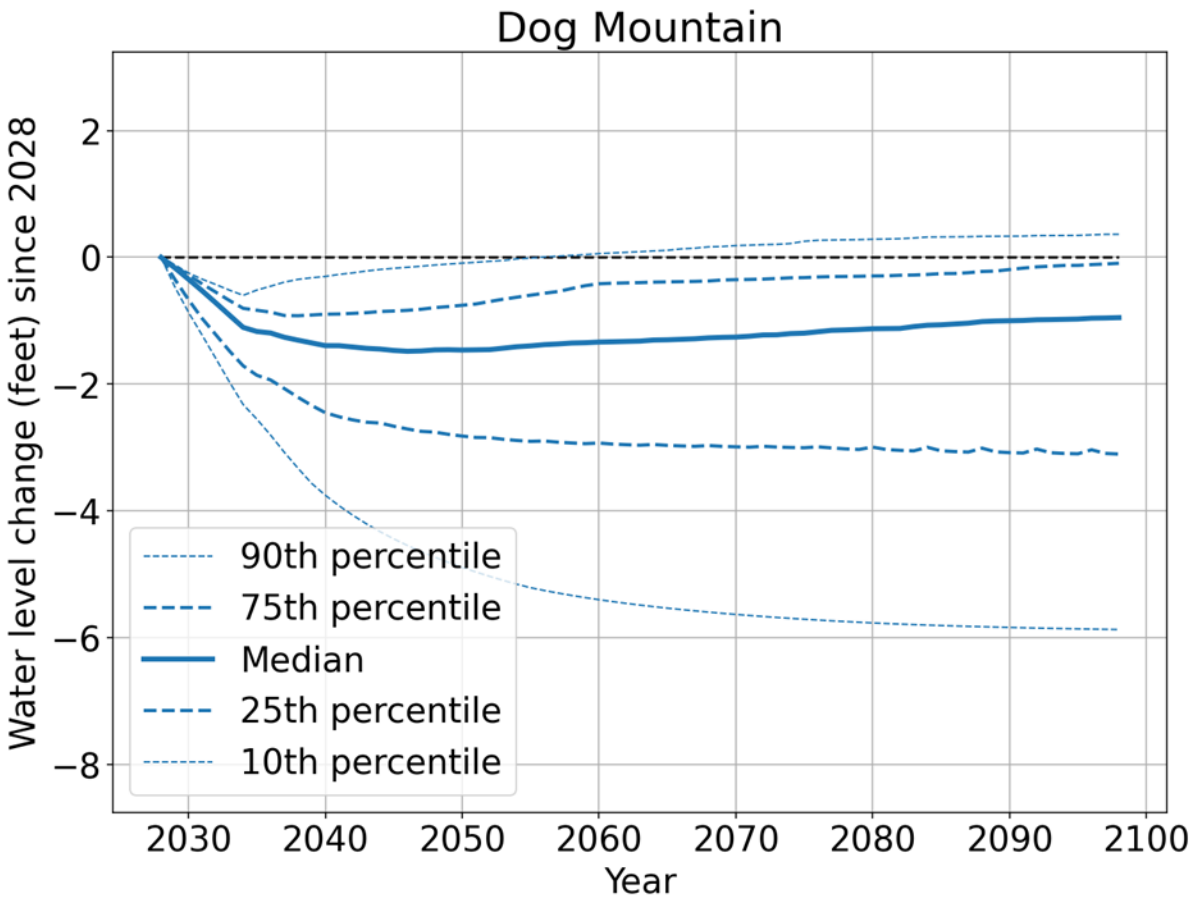


Table 1: Magnitudes of changes in annual high water levels (feet) compared with year 2028 in the Dog Mountain subarea. Each column represents a particular year when water level changes may be evaluated. Each row represents a percentile of water level changes within the subarea.

Percentile	2028	2033	2039	2045	2051	2057
90	0	-0.5	-0.3	-0.2	-0.1	0
75	0	-0.7	-0.9	-0.8	-0.7	-0.5
50	0	-0.9	-1.4	-1.5	-1.5	-1.4
25	0	-1.5	-2.3	-2.7	-2.8	-2.9
10	0	-2	-3.6	-4.4	-5	-5.3

OAR 690-512-0080
Exhibit 14
Groundwater Level Change Envelope

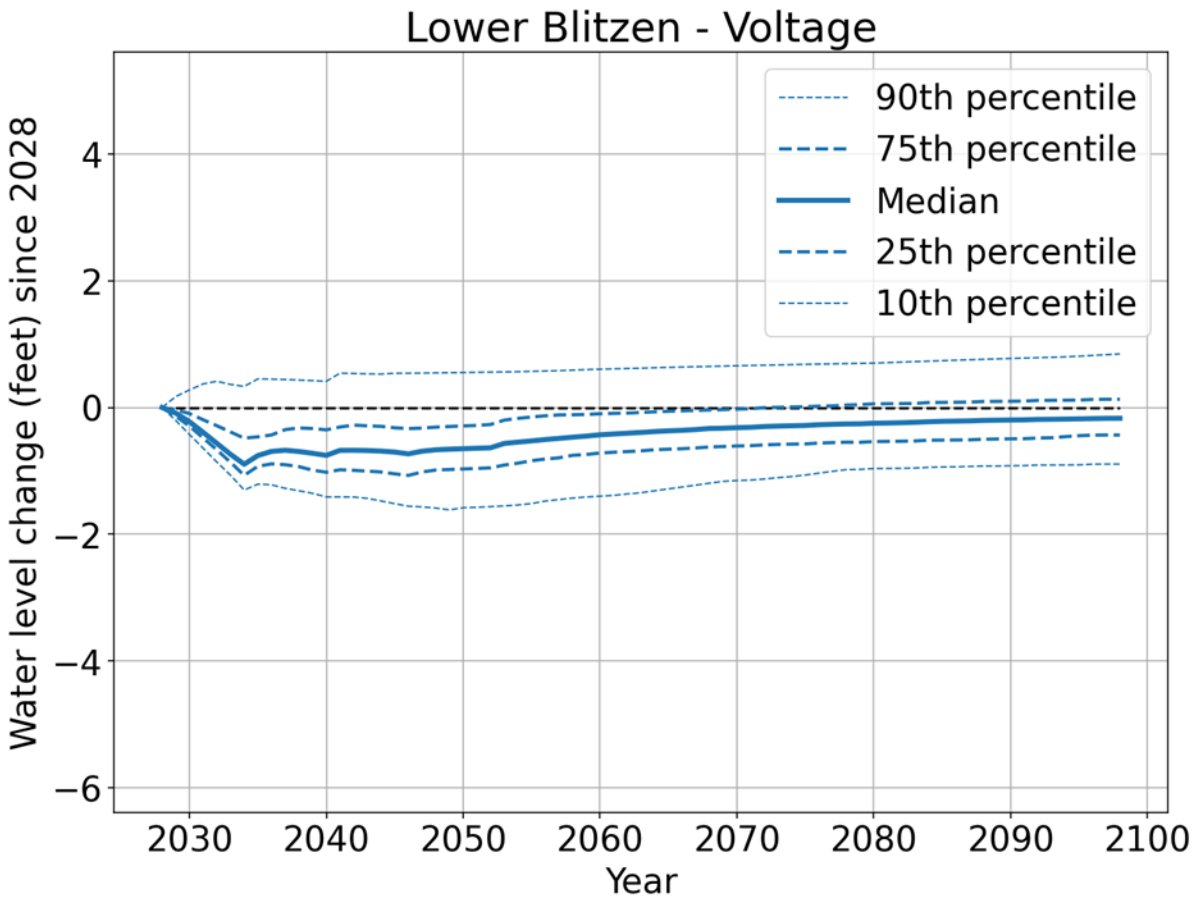


Table 2: Magnitudes of changes in annual high water levels (feet) compared with year 2028 in the Lower Blitzen - Voltage subarea. Each column represents a particular year when water level changes may be evaluated. Each row represents a percentile of water level changes within the subarea.

Percentile	2028	2033	2039	2045	2051	2057
90	0	0.4	0.4	0.5	0.6	0.6
75	0	-0.4	-0.3	-0.3	-0.3	-0.1
50	0	-0.7	-0.7	-0.7	-0.6	-0.5
25	0	-0.9	-1	-1	-1	-0.8
10	0	-1.1	-1.4	-1.5	-1.6	-1.5

OAR 690-512-0080
Exhibit 14
Groundwater Level Change Envelope

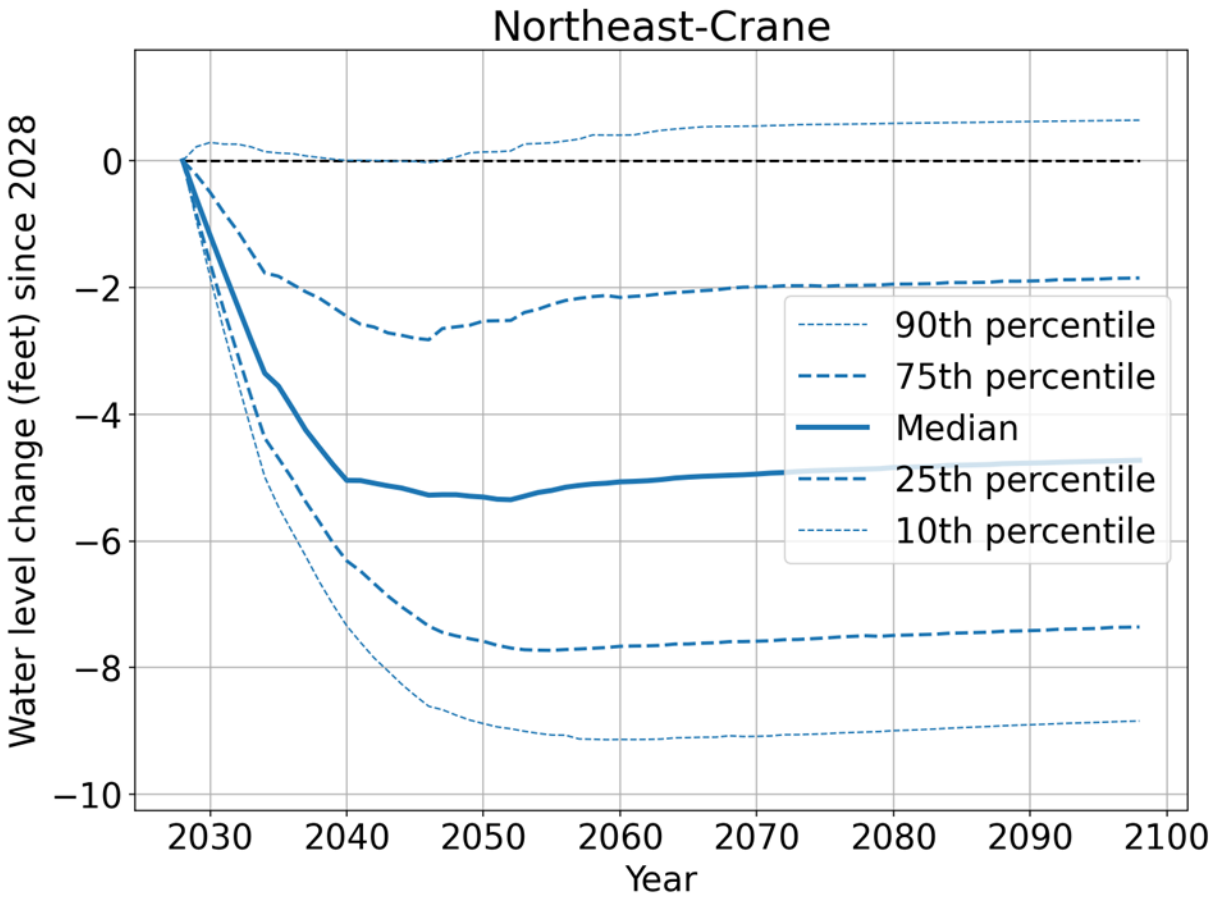


Table 3: Magnitudes of changes in annual high water levels (feet) compared with year 2028 in the Northeast - Crane subarea. Each column represents a particular year when water level changes may be evaluated. Each row represents a percentile of water level changes within the subarea.

Percentile	2028	2033	2039	2045	2051	2057
90	0	0.2	0	0	0.1	0.3
75	0	-1.4	-2.3	-2.8	-2.5	-2.2
50	0	-2.8	-4.8	-5.2	-5.3	-5.1
25	0	-3.7	-6	-7.2	-7.6	-7.7
10	0	-4.2	-7	-8.4	-8.9	-9.1

OAR 690-512-0080
Exhibit 14
Groundwater Level Change Envelope

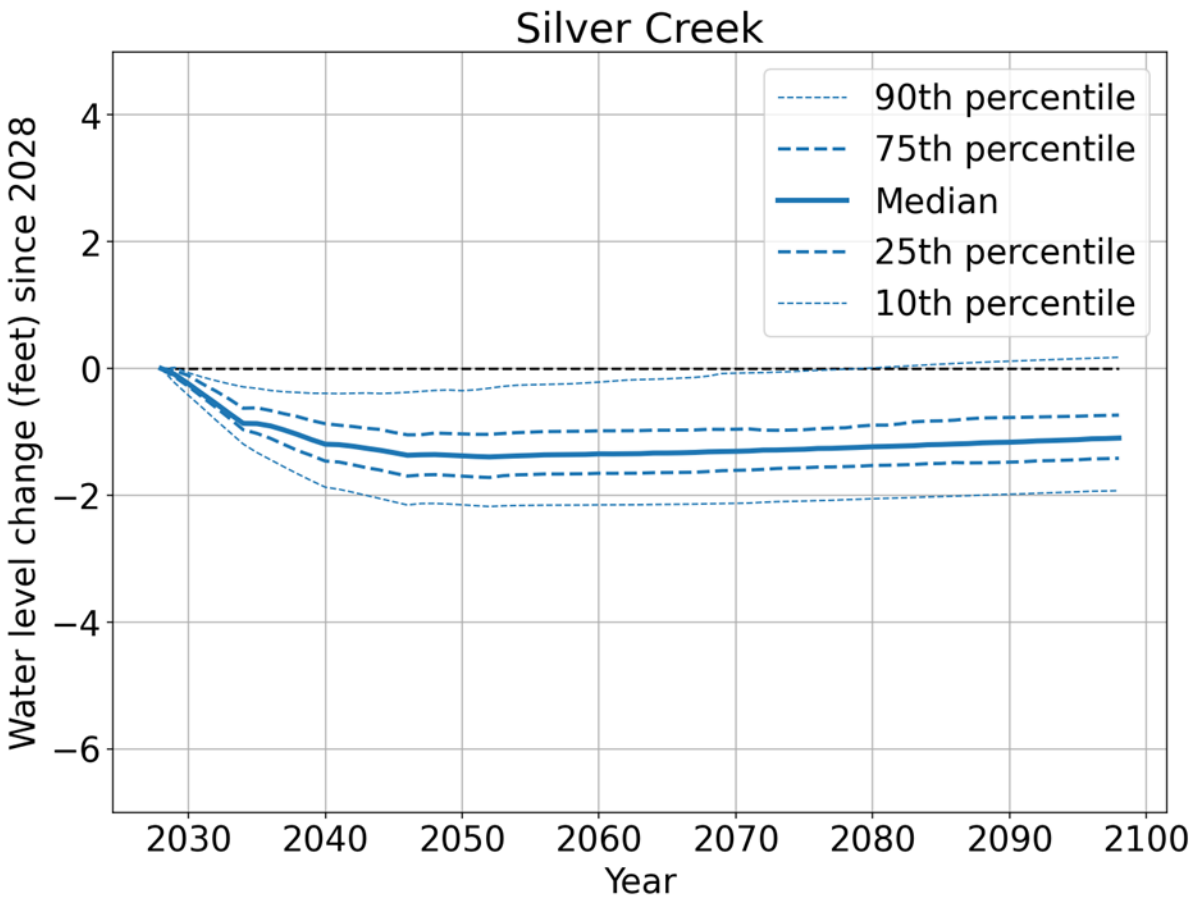


Table 4: Magnitudes of changes in annual high water levels (feet) compared with year 2028 in the Silver Creek subarea. Each column represents a particular year when water level changes may be evaluated. Each row represents a percentile of water level changes within the subarea.

Percentile	2028	2033	2039	2045	2051	2057
90	0	-0.2	-0.4	-0.4	-0.3	-0.2
75	0	-0.5	-0.8	-1	-1	-1
50	0	-0.7	-1.1	-1.3	-1.4	-1.4
25	0	-0.8	-1.4	-1.7	-1.7	-1.7
10	0	-1	-1.8	-2.1	-2.2	-2.2

OAR 690-512-0080
Exhibit 14
Groundwater Level Change Envelope

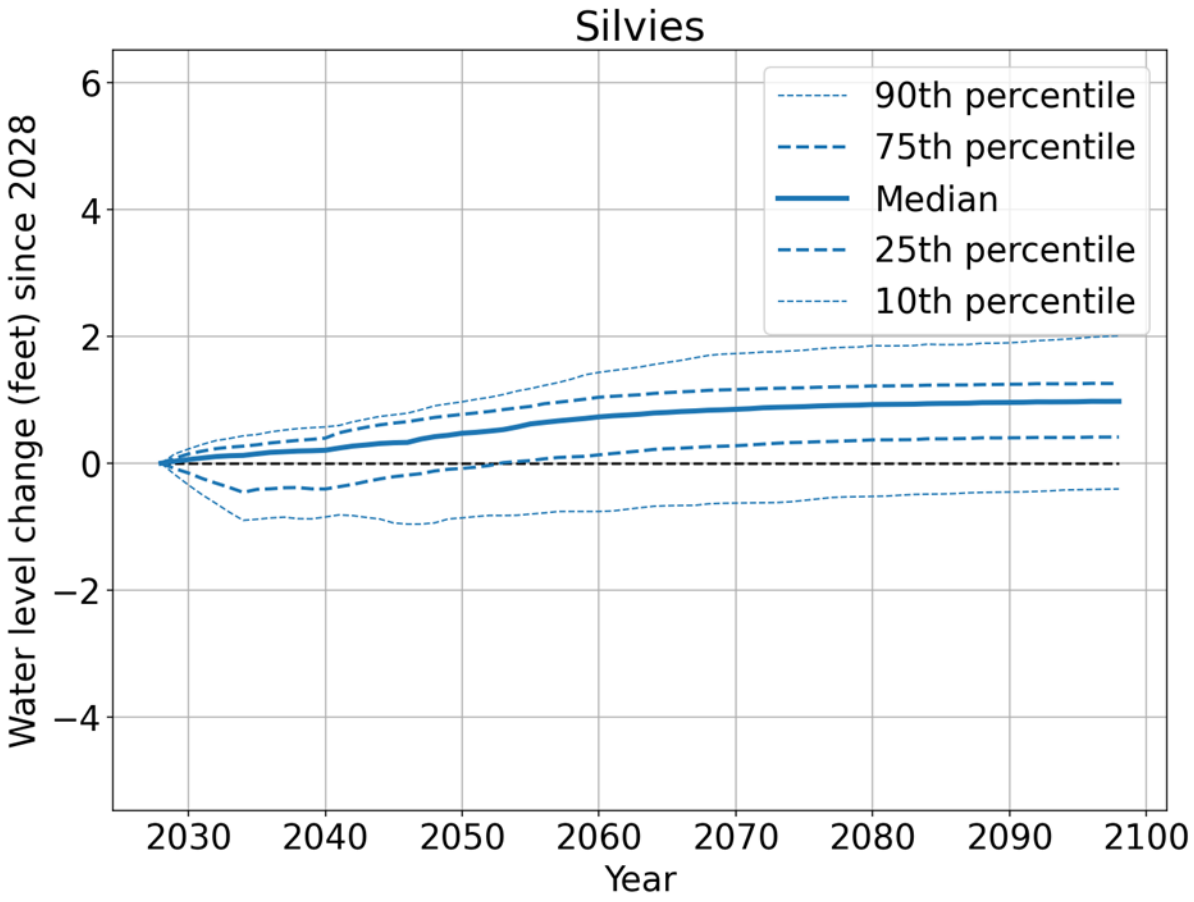


Table 5: Magnitudes of changes in annual high water levels (feet) compared with year 2028 in the Silvies subarea. Each column represents a particular year when water level changes may be evaluated. Each row represents a percentile of water level changes within the subarea.

Percentile	2028	2033	2039	2045	2051	2057
90	0	0.4	0.6	0.8	1	1.3
75	0	0.3	0.4	0.6	0.8	1
50	0	0.1	0.2	0.3	0.5	0.7
25	0	-0.4	-0.4	-0.2	-0.1	0.1
10	0	-0.8	-0.9	-0.9	-0.8	-0.8

ADOPT: 690-512-0110

RULE SUMMARY: This new rule establishes water use measurement and reporting requirements within the Serious Water Management Problem Area boundary defined in OAR 690-512-0020(3). Each groundwater right holder, well owner, or well operator shall install a totalizing flowmeter by March 1, 2028, according to the specifications in this rule. Water use between November 1st of the preceding year and October 31st of the current year is required to be reported to the Department by December 31st each year. Failure to install a flowmeter or report use will result in the local watermaster shutting off the well and potential assessment of civil penalties.

CHANGES TO RULE:

690-512-0110
Serious Water Management Problem Area (SWMPA)
(1) Groundwater conditions within the SWMPA boundary defined in OAR 690-512-0020(3) meet the criteria defined in OAR 690-085-0020(1)(a) and OAR 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 groundwater right within the Harney SWMPA boundary as defined in OAR 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. Groundwater wells that are regulated off and disconnected from all water use infrastructure do not require a totalizing flow meter to be installed unless or until use is permitted to resume.¶
(3) Totalizing flow meters shall be properly installed according to manufacturer specifications and must meet the specifications in section 6 of this rule. ¶
(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 1st of the preceding year and October 31st of the current year. Reports shall be submitted using a form developed and maintained by the Department.¶
(a) 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; and¶
(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 183.745, ORS 540.435, ORS 536.900, ORS 536.905, ORS 536.910, ORS 536.915, ORS 536.920, ORS 536.930, ORS 536.935, OAR 690-085-0020(1)(a), OAR 690-085-0020(1)(f), OAR 690-085-0015(5)
Statutes/Other Implemented: ORS 183.745, ORS 536.027, ORS 540.435, ORS 536.900, ORS 536.905, ORS 536.910, ORS 536.915, ORS 536.920, ORS 536.930, ORS 536.935, ORS 537.780, OAR 690-085-0020(1)(a), OAR 690-085-0020(1)(f), OAR 690-085-0015(5)