

OREGON



WATER RESOURCES
DEPARTMENT

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**Division 512 Rules Advisory Committee
Virtual Check In Meeting 9 (October 29, from 10:00am-11:00am)**

This document summarizes the Division 512 Rules Advisory Committee (RAC) virtual meeting check-in held online on October 29, 2024, from 10:00 am-11:00 am. For more information, see the Meeting Agenda, Meeting Presentation, and other Meeting Materials, available on our rulemaking website under the Division 512 RAC Virtual Check in October 29 ribbon. This summary is intended to capture key questions and discussion items however it is not an official transcript or includes “minutes” of the meeting. The [recording of the meeting](#) is available online. This summary captures key takeaways as identified by the third-party facilitation support and should not be interpreted as the confirmed thoughts and opinions of the OWRD, the RAC, or members of the public. RAC Members in attendance:

Barbara Howard	Kristen Shelman
Lisa Brown	Breanna O'Connor
Brenda Smith	Mark Owens
Zach Freed	Karen Moon
Lorissa Singhose	

Oregon Water Resources Department (OWRD) staff in attendance were:

Kelly Meinz	Alexandria Scott
Jason Spriet	Laura Hartt
Ben Scandella	Dally Swindlehurst

Bobby Cochran with Oregon Consensus (OC) at the National Policy Consensus Center at Portland State University was there to provide third-party, neutral facilitation services.

Welcome and Introductions

Bobby Cochran opened the meeting, led the RAC members through introductions, and reviewed the agenda. The overall purpose of this meeting was to catch the RAC up on conversations and upcoming work relative to an economic analysis to be conducted by ECONorthwest and OWRD's draft of state-wide voluntary agreement guidance.

Update on Economic Impact Analysis & ECONorthwest Presentation

Kelly Mainz provided an update that OWRD, working through Oregon Consensus, has funded ECONorthwest to conduct an economic analysis in support of the fiscal impact analysis for the rulemaking and to more broadly understand the economic impacts of groundwater management for the basin. The additional economic analysis:

- Was requested by several RAC members during several RAC meetings;
- Supplements the Business Case for water's economic literature review conducted by AMP Insights in 2023¹; and
- Provides economic information at a finer resolution (i.e., by subareas) and across the economy (i.e., local tax revenue and other economic sector impacts) to better inform RAC discussions on groundwater curtailment scenarios.
- Will factor in that a quarter of all employees in Harney County are employed in agriculture and the impact to frontline communities is underrepresented in the data currently collected for the rulemaking.

ECONorthwest was chosen because of the prior work they had done in the basin in 2018, their ability to run the IMPLAN model to identify economy-wide impacts, and their overall experience with economic analysis.

Nate Trull and Mark Buckley with ECONorthwest gave a presentation of their planned scope of work.

After the presentation, Bobby Cochran opened the meeting up for questions from the RAC.

- Mark Owens asked that the economic analysis look at the value of an acre-foot of water (i.e., it is likely less water may be used over an acreage, and not only using the optimum amount of water or no water).
- Lisa Brown expressed concern that the scope of the analysis did not seem to include consideration of impacts to domestic and stockwater wells, and to groundwater dependent ecosystems or the Malheur Wildlife Refuge.

¹ See Chapter 12 at page 156. Accessible at https://www.oregon.gov/owrd/WRDPublications1/230721_FINAL_Business_Case_for_Water_in_OR.pdf.

- ECONorthwest's Mark Buckley responded that the analysis will include acknowledgement and identification of the range of economic impacts and outcomes, but may do that in a qualitative way and/or use some of the literature-based assumptions currently available.
- Lisa Brown replied that this was inadequate. That it will be very important that ECONorthwest, and OWRD, acknowledge A) the ECONorthwest scope did not come directly from the entire RAC, and B) that it represents detail on one slice of the economy, but not detail on all aspects of economic outcomes and impacts.
- Kirsten Shellman commented that the ECONorthwest scope is responsive to the need to look at impacts to small businesses. She also asked about how to get at potential impacts to local lending institutions?
 - ECONorthwest's Nate Trull responded that interviews can help get at some of those localized economic outcomes that may not show up well in the quantitative data.
- Bobby Cochran asked OWRD staff when the RAC would have a better idea on whether ECONorthwest would be able to use outputs from Bill Jaeger's Hydroeconomic model, or whether they will have to go with "Plan B" of using the best available published data and interviews to conduct their analysis.
 - Kelly Mainz responded that we may not know until after the Nov 13 RAC, but that there are a lot of moving parts, and that he would keep the RAC updated.
- Mark Owens asked how the ECONorthwest analysis would be used.
 - Kelly Mainz responded that the Nov 13 RAC would likely include a conversation on how best to incorporate the economic analysis into selecting scenarios to move forward with.
 - Mark Owens emphasized the need to give the RAC time to see and understand the groundwater model outputs, the economic analysis, and other information before draft rules are finalized.

Voluntary Agreement Guidance Document

Jason Spriet provided an update on OWRD's development of a state-wide guidance document on voluntary agreements. The guidance was discussed at the August 17 RAC information session, and there has also been a focus group that convened on July 8 and October 1, 2024 to provide feedback into forming the current draft of the guidance. OWRD is asking the RAC for some of their initial feedback (ideally by December 4, 2024), and OWRD will update from there. The guidance document can be living, this is not the only opportunity for feedback.

- Lisa Brown said she had a lot of questions, comments, and concerns about the guidance document and would appreciate a group discussion prior to Dec 4, and that the Dec 4 timeline is pretty tight.
 - Laura Hartt responded that OWRD was planning on discussing the document more at the Dec 18 RAC, so the Dec 4 date was to receive feedback to bring a draft to Dec 18 that the entire RAC will have an opportunity to engage with. Laura re-emphasized that even the Dec 18 RAC will not be the only opportunity to discuss.

- Bobby Cochran offered that one of the discussion group meetings could be focused on the Voluntary Agreements.
- Mark Owens affirmed what Jason Spriet had said that there had been a focus group providing feedback. He also shared that, as Rep. Owens, he has submitted questions to Legislative Counsel.

Public Comment

Bobby Cochran opened the meeting for public comment

Ken Bierly: Is there access to the hydro economic model developed by OSU's Bill Jaeger? The link to the published model was shared: INSERT LINK.

Christopher Hall: There is nothing in statute that restricts the fiscal impact statement only impacts to current generations. The extent of impact must include impacts and outcomes for future generations.

Next Steps/Wrap Up

Bobby Cochran closed the meeting. Action items include:

- Share the ECONorthwest scope (see Appendix A to this summary).
- Confirm with ECONorthwest how their scope can consider a broader range of economic outcomes (e.g., domestic and stockwater wells, groundwater dependent ecosystems, the refuge, lending institutions); the economic impact of using small increments (AF) of water on the same acreage; and the impacts on current and future generations.
- Share drafts and feedback and any Legislative Counsel responses to the state-wide voluntary agreement guidance, and for whatever the current scope does not include for budget or timing reasons, be clear on what the analysis "is" and "is not."
- Look to schedule a discussion group on the state-wide guidance prior to Dec 4.

Future RAC Schedule:

1. RAC Number 11: November 13, 2024 – 8:00 a.m. to 3:00 p.m.
2. RAC Number 12: December 18, 2024 - 8:00 a.m. to 3:00 p.m.
3. RAC Number 13: January 22, 2025 – 8:00 a.m. to 3:00 p.m.

Appendix A: EConorthwest - Scope of Work

The following is the Scope of Work portion of the contract between Oregon Consensus and EConorthwest for the Harney Groundwater economic analysis

Background

In response to a request from Oregon Water Resources Department (OWRD), Oregon Consensus (OC) will facilitate development of Voluntary Agreements in the Harney groundwater basin. Oregon Consensus will provide overall project management and provide consultation and advisory input to the processes developing OWRD Voluntary Agreement guidance, local negotiation of draft Voluntary Agreements, and selection of qualified entities to support development of Voluntary Agreements. Contractor (EConorthwest or Consultant) will coordinate with, and report regularly to, Bobby Cochran. Consultant, will conduct economic analysis to estimate the economic impacts related to groundwater curtailments within Harney Basin on small businesses (i.e., small farms) and government revenues (as required by ORS Chapter 183). As part of this work, the Consultant will provide the following services:

Services to be provided:

See attached budget for estimated project hours and scope [not attached in the Appendix]. As part of the project hours and scope, Consultant shall complete the following tasks:

Task 1: Data Reconnaissance and Landowner Interviews

This task proposes collection of the data necessary to understand the impacts a reduction in water will have on local agricultural producers and includes interviews with local landowners and agricultural producers, secondary data collection, and a literature review. Associated work includes:

- ECO will work with the OWRD and local stakeholders to inform overall project specifics, data availability, and farmer interviews.
- Develop farmer interview protocols and sample questions.
- Review technical inputs to Bill Jaeger's hydro-economic model (HEM).
- Review available OWRD data and other relevant data sources.
- Review relevant literature, crop budgets, USDA-NASS data, and other sources to develop geographically appropriate estimates of agricultural yields, crop rotation, applied water rates, crop prices, production expenditures, etc.
- Conduct interviews with local farmers, county commissioners, County assessor, and other stakeholders to ground truth information from the literature, crop

budget review, and other technical inputs as developed in this Task and develop information for economic impact and fiscal modelling

- ECO will work with OWRD to understand and define the five future groundwater curtailment scenarios for use in the economic analyses. These will be based on the five curtailment scenarios identified for groundwater modeling.

Task 2: Estimate Baseline Direct Impacts to Small Businesses

- Conduct a geospatial analysis of Harney County to establish a baseline of agricultural production. This analysis is anticipated to rely on multiple years of production information to account for annual changes in production. It is our understanding that the Basin is a major producer of alfalfa for local and non-local cattle operations.
- Investigate potential impacts to non-crop agricultural production (i.e., livestock production).
- Relying on data collected in Task 1 and the geospatial analysis as defined in Task 2, ECO will estimate the direct impact (i.e., net farm earnings) of agricultural production within Harney County under a current water use scenario to serve as the baseline against which curtailment impacts will be measured.

Task 3: Estimate Baseline Secondary Impacts to Small Businesses

- Using an input-output model framework tailored to the local area, ECO will use IMPLAN software to model the indirect and induced impacts of agricultural production in the local economy. These impacts include purchases by agricultural producers from local business including on production inputs such as chemicals. In addition, the local household spending that is associated with agricultural production will be modeled as induced impacts as part of this work. This analysis will focus to the extent data allow on the impacts specific to small businesses. For this purpose we define a small business as 50 employees or fewer, consistent with the Administrative Procedures Act (ORS 183.310).[1]

IMPLAN MODEL

IMPLAN is a regional input-output model widely used to assess the economic impacts of different types of projects. The IMPLAN model divides the economy into 546 sectors including government, households, farms, and other industries, and models the linkages between the various sectors. The linkages are modeled through input-output tables that account for all dollar flows between different sectors of the economy.[2]

Impact Types

Economic multipliers derived from the model are used to estimate total economic impacts. Total economic impacts consist of three components: direct, indirect, and induced impacts.

- “ **Direct** impacts consist of expenditures made specifically by water users, such as labor, fuels, seed, tractors, fertilizer, etc. These direct impacts generate economic activity elsewhere in the local economy through the multiplier effect, as initial changes in demand “ripple” through the local economy and generate indirect and induced impacts.
- “ **Indirect** impacts are generated by expenditures on goods and services by suppliers who provide inputs and services to the water user. Indirect effects are often referred to as “supply-chain” impacts because they involve interactions among businesses.
- “ **Induced** impacts are generated by the spending of households associated either directly or indirectly with water users. Workers employed by a water user, for example, will use their income to purchase groceries and other household goods and services. Workers at businesses that supply the water user will do the same. Induced effects are also referred to as “consumption-driven” impacts.

Impact Measures

Impacts will be assessed using the following measures that are reported by the IMPLAN model:

- “ **Output** – the value of goods and services produced, which serves as a broad measure of economic activity.
- “ **Jobs** – measured as the average number of employees engaged in full- or part-time work. Model outputs will be adjusted to full-time equivalents (FTEs) using coefficients provided by IMPLAN.
- “ **Personal income** (or labor income) – expressed as the sum of employee compensation and proprietary income.
 - Employee compensation (wages) includes workers’ wages and salaries, as well as other benefits such as health, disability, and life insurance;

retirement payments; and non-cash compensation; expressed as total cost to the employer.

- Proprietary income (business income) represents the payments received by small-business owners or self-employed workers.

Task 4: Agricultural Production, Domestic Well, and Ecological Impacts of Curtailment Scenarios

- A reduction in irrigated agricultural production will likely occur because of groundwater curtailment. Using data and insights from Tasks 1 and 2, ECO will analyze the potential reductions in agricultural production and associated production value loss across the five curtailment scenarios in Harney County. This analysis will be used to inform Tasks 5–8.
- Using data from analysis conducted in 2018, the business case for water conducted for OWRD, other literature, and stakeholder interviews, ECO will analyze potential changes in economic value for domestic well users and ecological services across the five curtailment scenarios in Harney County.

Task 5: Small Business Impacts of Curtailment Scenarios

- ECO will use the IMPLAN model to estimate the indirect and secondary impacts to the local economy separately under the five future groundwater curtailment scenarios. Analysis conducted in Task 4 will inform the inputs for the IMPLAN analysis of the curtailment scenarios.

Task 6: Fiscal Impacts of Baseline Scenario

- Agricultural production value is anticipated to influence assessed values of impacted properties which affects local governments' property tax revenues. ECO will estimate the fiscal impacts (e.g., property taxes) to Harney County under the baseline scenario developed under Tasks 1-3. These fiscal impacts will be compared against the fiscal impacts of the five future groundwater curtailment strategies outlined in Task 7.
- ECO will qualitatively or quantitatively address other potential fiscal impacts related to income tax and/or business taxes as appropriate.

Task 7: Fiscal Impacts of Curtailment Scenarios

- A reduction in agricultural production value is anticipated to reduce associated assessed values of impacted properties, leading to a reduction in property tax revenue for local governments. ECO will estimate the fiscal impacts (e.g., changes in property taxes) to Harney County under the five future groundwater curtailment strategies.

- ECO will qualitatively or quantitatively address other potential fiscal impacts related to income tax and/or business taxes as appropriate.

Task 8: Identify Adaptation Strategies

- Economically viable strategies may exist for properties facing water curtailment. This task will qualitatively review potential adaptation strategies for impacted farmers that may include the following options: solar resource development, dryland agricultural production, and deficit irrigation. These strategies will be qualitatively and quantitatively reviewed as appropriate.

Estimated Timeline and Adjustments to Tasks

ECO anticipates work to begin in mid to late October 2024 with the expectation of completing Tasks 1-3 and delivering a technical memo by the end of December 2024. Timeline for future tasks, such as those outlined in Tasks 4-8 can be discussed after completion of Tasks 1-3. The scope of the tasks 4-8 above may need to be amended based on the condition of the technical input data discovered during Tasks 1-3.

[1] https://www.oregonlegislature.gov/bills_laws/ors/ors183.html

[2] For more information on the IMPLAN Group and model, please visit <https://support.implan.com/>.