

2017 Integrated Water Resources Strategy Update Workspace for PAG Members

Note to PAG members: The 2017 IWRS Policy Advisory Group first met on March 30, 2016. During and after that meeting, members brainstormed potential issues that may require more attention over the next several meetings. Below is a list of issues that resulted. Beginning on page 3, you will find some space to document your thoughts around each issue, flesh out any questions you may have, and provide suggestions with regard to next steps and priorities. Please take time to read through this document and jot down any ideas, questions, or suggestions you may have before the group's second meeting on June 28, 2016. Thank you!

Some of the ideas offered included:

- Monitoring...we're not done
- Determine whether any more "available" water exists for development (e.g., winter water for storage, already-existing agricultural reservations, etc.)
- Conduct baseflow studies
- How can we quantify / monetize water left instream, used for ag, used for municipal, etc.
- Will instream needs change, with higher temperatures? Are there any available streamflow temperature forecasts with regard to climate change?
- Measurement (i.e., how much water is instream, how much groundwater is there, how much is being used, how big are the gaps between demand and supply?)
- Anticipate and prepare for effects of extreme events (flood, drought, fire, seismic)
- Drought: prioritization of water use
- Drought: economic incentives toolbox, such as instream leases, irrigation fees, mortgage subsidies
- Oregon Resiliency Plan – tie to its recommended actions regarding water supply (conduct seismic risk assessments, encourage seismic design requirements, post-earthquake compliance, develop mitigation)
- Land-use and water intersection. Needs more work
- Aging infrastructure, including storage
- Public education, perception, buy-in. Need partners for easements, storage, conservation, etc.
- Interaction with federal policies (wild and scenic rivers, endangered species act, etc.). How are we doing?
- Water conservation / efficiency. Driving down demand. Consider setting numeric goals. Look at water-user policies at irrigation districts. Be mindful of unintended consequences of water conservation. Related topics: water used for in-conduit hydro, do water users / sectors have disincentives in place, what's "waste."
- Why isn't water reuse more prevalent?
- Look into other sources? (e.g., mitigation, desalination, etc.)
- Burden of proof, or the "precautionary principle," in decision-making
- Balance instream protections & economic development; is there systemic bias toward one or the other?
- Water right transfers and reviews. How are we doing?
- Ensure adequate field staff, for distribution of water, enforcement, conflict resolution, water user education
- Ensure adequate permitting staff, for timely decision-making, response to requests
- Instream protections
- Groundwater protection (quantity and quality) — drinking water source, emergency / back-up supplies, drought resource, mined versus sustainable source.
- DEQ's toxics reduction strategy, pesticide management plans, status of pesticide use & reporting system
- Protect vulnerable populations
- Maintain public funding programs for core needs, not just inter-agency, integrated needs
- Agency funding: adequate for the job? How do we measure "enough"?

Sample workspace:

Proposed Topic Area: proposed topic name or description from previous PAG input

Recommended Action: Staff noted corresponding actions from 2012 IWRS; if there was no corresponding recommended action, we noted where this might fit.

Overview of Progress to Date: Summary of known progress to date. (Corresponds to IWRS recommended actions & sub-bullets). If no progress, so noted.

Your thoughts/suggestions: This space is for PAG members to make notes such as—

- *If the topic area reflects what you shared in the first meeting or if you want to refine the topic.*
- *Whether this is a request for additional information, or a request for action.*
- *Whether existing recommended actions address your concerns.*
- *Whether or not you want to prioritize tackling this topic.*

PAG members, please work through these questions for each issue and document your thoughts prior to the next meeting

Proposed Topic Area: Measurement (i.e., how much water is instream, in aquifers, is being used, and how big are gaps between demand & supply?)

Recommended Action: Existing 1a “Conduct Additional Groundwater Investigations,” 2A “Update Long-Term Water Demand Forecasts,”
2B “Improve Water-Use Measurement and Reporting”

Overview of Progress to Date:

- **(1A) Test water quality in private drinking water wells.** The Oregon Health Authority has expanded its efforts to support water quality testing for private drinking water wells, under the Domestic Well Safety Program. The program provided grants to Benton and Jackson Counties, totaling \$5,000 each, to support capacity building of domestic well safety outreach in 2015.
- **(1A) Maintain and install additional monitoring wells.** The 2013 Legislature added \$780,000, which included two groundwater scientists to provide additional capacity for collecting and analyzing groundwater data, and establishing new groundwater level monitoring wells. After identifying a pool of eligible drillers, securing landowner access agreements, and establishing protocols for the protection of cultural resources, the Department will soon begin to install these wells. Priority areas include the Umatilla Basin, near The Dalles, Harney Valley in the Malheur Basin, and the Deschutes/Metolius area.
- **(1A) Partner with USGS to conduct and cost-share additional groundwater investigations.** The 2013 Legislature added \$250,000 to the Department’s base budget to conduct these studies. Currently, OWRD is partnering with the USGS and DOGAMI to map and investigate groundwater conditions near The Dalles. OWRD is also working with the USGS to update the Deschutes Basin groundwater flow model. Next areas of focus will be the Harney Valley in the Malheur Basin and the Umatilla Basin.
- **(1A) Assess groundwater administrative areas.** The Department completed an analysis in 2010, and is updating these assessments during 2016.
- **(1A) Locate and document exempt use wells.** Although OWRD established its program to locate and record new exempt use wells in 2009, it was not until 2013-14 that the Department created more user-friendly tools to help customers and drillers create map locations on-line. The Department’s success rate collecting usable maps from customers rose from 20 percent of new exempt wells in 2013 to more than 70 percent by the end of 2014.
- **(1A) Locate and document UICs.** No progress.
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- **(2A) Update the state’s long-term water demand forecast.** In 2013, the Legislature authorized a position at the Department of Agriculture to help determine agricultural needs and water availability for farmers and ranchers. In 2014, ODA began an evaluation of agricultural reservations described in some of the state’s administrative basin programs. In addition, in February 2015, the Water Resources Department released a request for proposals (RFP) to update the state’s long-term water demand forecast 50 years into the future. Last conducted in 2008, the forecast needs to incorporate new census data, industrial and agricultural development trends, changes in land-use, and changes in climate. The forecast is scheduled to be completed by year’s end.
- **(2A) Quantify/model economic value of instream and out-of-stream water.** The U.S. Army Corps of Engineers completed a pilot study with OWRD to develop cost models for purchasing municipal or industrial water stored in Willamette Valley Project reservoirs. The final report, completed June 2014, has been posted to OWRD’s project website for Willamette Basin Reservoir Study.
- **(2A) Enhance the state’s water use reporting system.** During 2013-14, OWRD streamlined water use reporting tools for on-line reporting, and also developed new

query and analysis tools to provide all of OWRD's current and historic water-use data to the public.

- **(2A) Update crop water-use tables.** Evapotranspiration techniques used to develop the state's 2015 Long-Term Demand Forecast, updated crop water-use tables throughout the entire Columbia River Basin, Powder Basin, and Klamath Basin. Areas still needing updated values are coastal basins and the great basin.
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- **(2B) Reinstate a water-use reporting coordinator at OWRD.** The 2013 Oregon Legislature funded one full-time water-use coordinator position, re-instating a position that collects data from and provides technical assistance to customers who are required to report their water use. After filling the position, the Department saw improvements in reporting rates, from receiving only 17 percent of required reports in 2012-13 to receiving 70 percent of required reports in 2013-14.
- **(2B) Fully implement the State's Water Measurement Strategy; offer cost-share dollars.** The 2013 Legislature re-capitalized the state's cost-share fund with \$100,000. Staff efforts, underway since 2000, have resulted in 819 measuring devices installed by end of calendar year 2013, which includes 112 devices installed or confirmed installed in 2013. This represents a significant improvement over 2012 (51 devices).
- **(2B) Employ remote-sensing.** During 2013-15, OWRD participated with the U.S. Army Corps of Engineers and University of Idaho in a pilot program using LandSat/Metric technology, which measures evapotranspiration and crop water use on the ground. The state's December 2015 long-term water demand forecast also makes use of this technology. See http://www.oregon.gov/owrd/LAW/docs/IWRS/OWRD_2015_Statewide_LongTerm_Water_Demand_Forecast.pdf.
- **(2B) Encourage businesses to conduct self-evaluations of water use.** [Consider changing from "businesses" to "water users"? No progress reported yet, so we still have time to change the wording.]

Your thoughts/suggestions:

Proposed Topic Area: Monitoring...we're not done!

Recommended Action: Existing 1B "Improve water resource data collection and monitoring"

Overview of Progress to Date:

- **Update Oregon's stream gage network.** The 2013 Legislature added \$730,000 for new stream gages & 3 staff to provide additional capacity for collecting and analyzing surface water data, as well as installing and upgrading stream gages. The Department has begun to install and upgrade monitoring equipment; Priority areas are located throughout the state, with emphasis in the Klamath Basin.
- **Implement an on-going state-wide groundwater quality monitoring program.** In 2013, Oregon DEQ received funding from the Legislature to initiate a groundwater monitoring program beginning in 2015. DEQ plans to evaluate two new areas of the state each year, with the goal of covering Oregon in 10 years. The objective is to identify areas of groundwater contamination and inform domestic well owners about potential risks, if present (in consultation with OHA), so that appropriate measures can be taken. Initial focus areas included the Rogue watershed and the North Clatsop Plain on the North Coast. DEQ will be sampling in the Walla Walla Basin and another basin to be determined in 2016.
- **Prioritize basins for data collection and monitoring.** OWRD has developed a [2016 Monitoring Strategy](#), using input from staff and partners. This strategy identifies the types of programs and decisions that require streamflow and groundwater data, and sets forth a framework that helps identify and prioritize locations in which to site monitoring stations. This work updates and builds upon the [2011 stream gage analysis](#) conducted by the Department. In Fall 2014, the Oregon Department of Forestry also initiated an update to its Monitoring Strategy, which was last updated in 2002. Several state agencies participate in an inter-agency monitoring team where recent discussions have focused on updating and coordinating monitoring plans and activities among agencies.
- **Evaluate habitat conditions and effectiveness of restoration efforts.** The 2013 Legislature provided two positions to DEQ to restart the collection of water quality and biological data to guide watershed restoration efforts under the Oregon Plan. Another three positions at ODFW were authorized to focus on monitoring for fish and fish habitat. Monitoring continues to be an important tool to evaluate water quality status and trends and also to determine if policy and permitting actions are achieving their desired outcomes.

Created in 1990, ODFW's Aquatic Inventories Project is a statewide freshwater and estuarine research program. The project assesses aquatic habitat, conducts fish presence/absence surveys, monitors fish populations, establishes salmonid watershed prioritization, monitors habitat restoration projects, and reconstructs historical salmonid life history.

- **Add remote and real-time capability to monitoring stations.** OWRD installs real-time telemetry equipment on new gaging stations, and updates equipment on existing stations, when resources allow.
- **Establish dedicated monitoring wells.** The 2013 Legislature authorized two groundwater scientists to provide additional capacity for collecting and analyzing groundwater data, and the establishment of about a dozen groundwater level monitoring wells each biennium. After identifying a pool of eligible drillers, securing landowner access agreements, and establishing protocols for the protection of cultural resources, the Department has begun to install wells; priority areas include the Umatilla Basin, the Dalles, Harney Valley in the Malheur Basin, and the Deschutes/Metolius area.

Your thoughts/suggestions:

Proposed Topic Area: Determine whether any more “available” water exists for development (e.g., winter water for storage, already-existing ag reservations, etc.)

Recommended Action: Would fit into a new 1D

Overview of Progress to Date:

Note: The Department already has a water availability tool, although water availability doesn’t necessarily equate to a guaranteed permit; Division 33 also plays a part. And, reservation extensions are underway in several basins, although that doesn’t necessarily equate to water being available at any future proposed site.

Your thoughts/suggestions:

Proposed Topic Area: Conduct baseflow studies

Recommended Action: Existing 3A: “Determine Flows Needed (quantity and quality) to Support Instream Needs”

Overview of Progress to Date:

- **Conduct base flow needs studies.** ODFW staff have been conducting limited instream flow studies (even prior to the IWRS adoption) as time and partnerships allow. The 2013 Legislature authorized three biologists at ODFW to identify and prioritize basic and elevated streamflow needs for fish, but the positions were not filled due to budgetary concerns. Existing staff collected field data for the Physical Habitat Simulation (PHABSIM) model on 4 coastal streams in 2013-14, and the data is being prepared for fish habitat calculations using the SEFA software. Staff funding was allocated for staff during the 2015-17 biennium, allowing three ODFW biologists to conduct instream flow studies. Studies are currently underway based on a prioritized selection of areas and/or stream reaches.
- **Develop elevated flow requirements.** ODFW and OWRD partnered with task force members during 2013-14 to establish methods for determining “seasonally varying flows,” when awarding funding to certain storage projects under SB 839 (2013). To date, no projects have triggered the development of a seasonally varying flow under SB 839. The resulting matrix and narrative from these task forces will inform rule-making activities scheduled for 2015 and grants awards scheduled for May 2016. For matrix and narrative, see: http://www.oregon.gov/owrd/docs/SB839/SVF_TF_Report_to_Gov_Leg_WRC.pdf. For grant proposals and staff recommendations, see: http://apps.wrd.state.or.us/apps/misc/wrd_notice_view/Default.aspx?notice_id=22 (click on 2016, May) for the Commission agenda.

Your thoughts/suggestions:

Proposed Topic Area: Determine if instream needs will change, with higher temperatures?

Are there any available streamflow temperature forecasts with regard to climate change?

Recommended Action: Existing 3A: “Determine Flows Needed (quantity and quality) to Support Instream Needs”

Overview of Progress to Date: See above. [Note: ODFW’s instream water rights are based on physical habitat, not temperature.] Though we generally expect stress on streams to increase under climate change resulting in warming stream temperatures, the processes controlling stream temperature are complex and multiple local and regional processes need to be considered when determining climate change impacts on stream temp. “The one constant is that a healthy watershed will be more resilient to climate change than one that isn’t healthy- and that should continue to be the focus of restoration and management efforts.”

Your thoughts/suggestions:

Proposed Topic Area: How can we quantify / monetize the value of water left instream.

Recommended Action: Existing 3A: “Determine Flows Needed (quantity and quality) to Support Instream Needs”

Overview of Progress to Date:

- **Develop models/studies on economic value of instream and out-of-stream water.** ODFW has published studies on the value of fisheries, both recreational and commercial. See: http://www.dfw.state.or.us/agency/economic_impact.asp.

Your thoughts/suggestions:

Proposed Topic Area: Anticipate and prepare for effects of extreme events (flood, drought, fire, seismic)

Recommended Action: Would fit into a new 5C; give each extreme event its own number? May need action title broader than the existing “#5 Climate Change.”

Overview of Progress to Date:

Your thoughts/suggestions:

Proposed Topic Area: Drought: prioritization of water use

Recommended Action: Would fit into new 5C; May need broader title.

Overview of Progress to Date:

Generally, Oregon law does not provide a preference for one kind of use over another. If there is a conflict between users, the date of priority determines who may use the available water. If the rights in conflict have the same date of priority, then the law indicates domestic use and livestock watering have preference over other uses. However, if a drought is declared by the Governor, the Department can give preference to stock watering and household consumptive purposes, regardless of the priority dates. See <http://www.oregon.gov/owrd/PUBS/docs/aquabook2013.pdf> for more.

Your thoughts/suggestions:

Proposed Topic Area: Drought: economic incentives toolbox, such as instream leases, irrigation fees, mortgage subsidies

Recommended Action: Would fit into new 5C; May need broader title.

Overview of Progress to Date:

Your thoughts/suggestions:

Proposed Topic Area: Oregon Resiliency Plan – tie to its recommended actions regarding water supply

(i.e., conduct seismic risk assessments, encourage seismic design requirements, post-earthquake compliance, develop mitigation)

Recommended Action: Would fit into new 5C; May need broader title.

Overview of Progress to Date:

Your thoughts/suggestions:

Proposed Topic Area: Land-use and water intersection. Needs more work.

Recommended Action: Existing 6A-C: Improve integration of water Information into land-use planning & vice versa; update state agency coordination plans; encourage low-impact development practices

Overview of Progress to Date:

- **6A. Improve integration of water Information into land-use planning (& vice versa).** [No progress thus far.]
- **6B. Update state agency coordination plans in coordination with DLCD.** [No progress thus far.]
- **6C. Encourage low-impact development practices.** Compile and provide online information on low impact development policies. Update local development codes, improving local capacity to review and permit green infrastructure designs. DEQ and partners have a 2015 LID (low-impact development) manual for Western Oregon. <http://www.deq.state.or.us/wq/tmdls/lidmanual.htm>.

Your thoughts/suggestions:

Proposed Topic Area: Aging infrastructure, including storage

Recommended Action: Existing 7A, “Develop and upgrade water and wastewater infrastructure.”

Overview of Progress to Date:

- **Improve dam safety; retrofit for seismic issues.** Dams are regularly checked against public safety standards and hazard classifications. In 2014-15, the Department developed an updated set of dam safety rules to make sure that design and operation standards are clear and useful for dam owners and their consultants.
- **Develop emergency action plans for high hazard dams.** In Oregon, money from FEMA grants is used to help dam owners create Emergency Action Plans (EAP) for existing dams. An EAP helps identify situations where a dam failure might occur, and spells out actions that could save the dam and hasten evacuations. Rules in Oregon require EAPs for all new high hazard rated dams, to be completed at owners’ expense. Approximately 75 percent of all state-regulated high hazard dams have, or are in the process of developing, EAPs.
- **Properly abandon infrastructure at the end of its useful life.** Improperly abandoned or neglected wells are a health and safety threat to Oregon’s citizens and groundwater supplies. In 2014, there were approximately 900 wells abandoned statewide. These abandonments include wells constructed by licensed well

constructors and property owners under the direct supervision of WRD staff. During 2015, OWRD decommissioned a number of outdated measurement structures, such as stilling wells and cableways that are no longer in use.

- **Use an “asset management” approach to identify and plan for rehabilitation, upgrade or replacement of infrastructure.** The 2013 Legislature authorized and funded program (SB 839) that could provide funding for the rehabilitation of infrastructure; 2015 saw additional funding. In addition, due to recently enacted federal requirements, DEQ requires all publicly owned treatment works projects funded through the State Revolving Fund (SRF) to have a Fiscal Sustainability Plan in place by project completion. An FSP contains similar information as an asset management plan, including an inventory of critical assets, evaluation of conditions, and plan for maintaining/replacing assets.
- **Ensure that basic maintenance needs continue to be eligible for grant and loan funding.** The 2015 Legislature authorized Infrastructure Finance Authority to partner with communities, to evaluate, provide guidance, and prepare levees for the national flood program.
- **Advocate for continued infrastructure funding. See “asset management” approach, above.** In addition, the 2013 Legislature passed House Joint Memorial 7, urging the U.S. Congress to increase investment in the Drinking Water State Revolving Fund and Clean Water State Revolving Fund.
- **Encourage communities to consider natural infrastructure in lieu of, or as a complement to, built infrastructure.** For publicly-owned treatment works projects funded through the State Revolving Fund (SRF), DEQ may score applicants more highly if their project encompasses “green” components, such as green infrastructure, water and energy efficiency, and environmentally innovative projects. Such projects may also qualify for principal forgiveness.

Your thoughts/suggestions:

Proposed Topic Area: Public education, perception, buy-in. Need to develop a network of partners for easements, storage, conservation, etc.

Recommended Action: Existing 8C, “promote community education and training opportunities.”

Overview of Progress to Date:

- **Promote technical training for public and private partners.** OWRD provides technical training to partners and stakeholders through public presentations, American Water Works Association and American Water Resources Association webinars, and continuing education credit opportunities online and at certified water rights examiners (CWRE), dam safety, and Oregon Groundwater Association conferences.
- **Promote access to water-related recreational opportunities through the use of the Water Trails Program.** Oregon Parks and Recreation Department has nine designated [water trails](#) for the public’s use. The most recent water trail was completed in August 2012 for the upper and middle Rogue River between Lost Creek Dam and Grave Creek. In October 2014, Oregon Department of State Lands signed a formal agreement with Willamette Riverkeeper to encourage improvements and combat invasive species on state land along the Willamette Water Trail.
- **Continue to promote education and outreach through actions required in local Water Management & Conservation Plans.** [No progress thus far.]

Your thoughts/suggestions:

Proposed Topic Area: Interaction with federal policies (wild and scenic rivers, endangered species act, etc.). How are we doing?

Recommended Action: Existing 9C, “partner with federal agencies, tribes, and neighboring states in long-term water resources management.”

Overview of Progress to Date:

- **Protect Oregon’s interests in shared surface water and groundwater basins.** Oregon has conducted negotiations to protect and develop water supplies, convening a Columbia River–Umatilla Solutions Taskforce, an Upper Klamath Basin Settlement Agreement, and Klamath Basin Restoration Agreement. These efforts involved multiple stakeholders, disciplines, and states. Also, note recent work in the 15-Mile basin relating to irrigation and ESA. Fish kills were becoming frequent, and NOAA Fisheries began investigating “take” of listed species. Local irrigators worked with partners, including NOAA and ODFW, to develop a rotational agreement for water use that increased instream flow and decreased temperatures.
- **Partner to improve access to additional stored water.** A number of communities are considering rehabilitating their dams and reservoirs in order to improve storage capacity and/or instream conditions. There are funds available through the state for both the feasibility study and the implementation of such projects. [Federal nexus?]

Your thoughts/suggestions:

Proposed Topic Area: Water conservation & efficiency. Drive down demand. Consider setting numeric goals and/or incentives. Look at water-user policies at irrigation districts. Be mindful of the unintended consequences of water conservation. Related: water used for in-conduit hydro, do water users / sectors have disincentives in place, what's "waste."

Recommended Action: Existing 10A, "improve water-use efficiency and water conservation."

Overview of Progress to Date:

During the 2015 drought, the Governor issued Executive Order 15–09, setting numeric goals for state agencies to reduce their nonessential water consumption by 15 percent before the end of 2020. In addition:

- **Expand outreach and participation in the State’s water-use efficiency and conservation programs.** The Allocation of Conserved Water program has overhauled its forms and [materials](#), in order to make the program more understandable and user-friendly. Staff members have given presentations and tutorials in several venues. OWRD’s conservation section has also updated a guidebook for development of municipal water management and conservation plans.
- **Conduct a state-wide water conservation potential assessment.** [No progress thus far.]
- **Establish and maintain an online water-use efficiency and conservation clearinghouse.** [No progress thus far.]
- **Prioritize agricultural water-use efficiency.** [No progress thus far.]

Your thoughts/suggestions:

Proposed Topic Area: Why isn't water reuse more prevalent?

Recommended Action: Existing 10C, ""encourage additional water reuse projects""

Overview of Progress to Date:

- **Conduct a statewide assessment of the potential for additional water reuse.** [No progress thus far.]
- **Ensure that Oregon has the right policies and regulations in place to facilitate water reuse.** DEQ, WRD, and ODFW are working together to refine the recycled water registration process to ensure that each agency's interests and concerns are addressed in an integrated manner when applications are processed. May need more details on existing water rights that can be leased instream to offset what would have been discharged and the impacts to return flow on water availability.
- **Provide incentives for increased water reuse.** [No progress thus far.]

Your thoughts/suggestions:

Proposed Topic Area: Look into other sources? (e.g., mitigation programs, desalination, etc.)

Recommended Action: Fit into a new 10F

Overview of Progress to Date:

Your thoughts/suggestions:

Proposed Topic Area: Burden of proof, or the “precautionary principle,” in decision-making

Recommended Action: Fits into already-existing “Balance” and “Sustainability” Principles of the IWRS.

Overview of Progress to Date:

Your thoughts/suggestions:

Proposed Topic Area: Balance instream protections & economic development; is there systemic bias toward one or the other?

Recommended Action: Fits into already-existing "Balance" Principle of the IWRS.

Overview of Progress to Date:

Your thoughts/suggestions:

Proposed Topic Area: Water right transfers and reviews. How are we doing?

Recommended Action: Would fit into a new 10G.

Overview of Progress to Date:

Your thoughts/suggestions:

Proposed Topic Area: Ensure adequate field staff, for distribution of water, enforcement, conflict resolution, water user education

Recommended Action: Would fit into a new 10H.

Overview of Progress to Date:

Your thoughts/suggestions: Is this separate from the “funding” discussion in 13B? Describe service territory or shortfalls across all IWRS agencies.

Proposed Topic Area: Ensure adequate permitting staff, for timely decision-making, response to requests

Recommended Action: Would fit into a new 10H.

Overview of Progress to Date:

Your thoughts/suggestions: Is this separate from the “funding” discussion in 13B?

Proposed Topic Area: Instream protections

Recommended Action: Existing 11B, “develop additional instream protections.”

Overview of Progress to Date:

▪ **Establish additional instream water rights where needed to protect flows.** The 2013 Legislature authorized three additional staff members at ODFW to identify and analyze stream reaches for instream flow protections, although the positions were not filled due to budgetary issues. Funding was allocated again for the 2015-17 biennium, and three staff are currently conducting instream studies. Two additional positions at OWRD were filled to help establish additional instream water rights to support instream needs. There are approximately 450 stream reaches in the state that have flow recommendations described in ODFW’s Basin Investigation Reports but do not have instream water rights. ODFW has prepared a prioritized list of stream reaches for which it will apply for instream water rights based on number of listed species, active basin recovery plans, and level of existing downstream flow protection. ODFW will begin filing applications based on this priority list in the coming months. In addition, there are at least 1,500 sites that do not have an instream water right or an existing recommendation from a basin investigation report. As collection and processing of new data will be time-consuming, ODFW has set priorities for new studies beginning in the 2015-17 biennium. ODFW expects to complete 8 to 25 sites per year, depending on staffing. In addition, ODFW and OWRD are actively seeking resolution of protested instream water right applications across the state.

DEQ anticipates pursuing instream flow work in 2016 – 2017, to evaluate if and where additional instream protections are needed for pollution abatement.

- **Designate scenic waterways where needed to protect recreation, fish, and wildlife uses.** During 2013, the Governor directed the Oregon Parks and Recreation Department to identify and propose three streams per biennium for scenic waterway designations. OPRD and WRD worked with communities and stakeholders to propose the designation of two additional scenic waterways in the Molalla and Chetco Rivers. In 2016, the Governor designated both of these reaches as State Scenic Waterways. See <https://www.oregon.gov/oprd/NATRES/scenicwaterways/Pages/assessments.aspx> for more information.
- **Expand the use of voluntary programs to restore streamflow.** [No progress thus far.]
- **Expand the geographic range of flow restoration efforts.** [No progress thus far.]

Your thoughts/suggestions:

Proposed Topic Area: Groundwater protection (quantity & quality) — mined vs. sustainability.

Recommended Action: Would fit into a new 11E.

Overview of Progress to Date:

Restrictions on new uses from groundwater aquifers are adopted to ensure sustained supplies for existing water users and to protect important natural resources. Except in very severe situations (e.g., critical groundwater areas), these restrictions do not affect existing water uses, only WRD's ability to authorize new uses in these basins. See <http://www.oregon.gov/owrd/PUBS/docs/aquabook2013.pdf> for discussion of basin programs, critical groundwater areas, and more.

Your thoughts/suggestions:

Proposed Topic Area: DEQ's toxics reduction strategy, pesticide management plans, status of pesticide use & reporting system

Recommended Action: Existing 12B, "reduce the use of and exposure to toxics and other pollutants."

Overview of Progress to Date:

- **Implement Oregon DEQ's Toxics Reduction Strategy.** DEQ continues work on the short-term Toxics Reduction Strategy priority actions established in 2012. The primary focus of work focuses on the following activities: developing and implementing low toxicity state purchasing guidelines; advancing Green Chemistry in Oregon through collaboration with other agencies and other states; developing and implementing a pesticide waste collection strategy; and, expanding and enhancing watershed-based Pesticide Stewardship Partnerships throughout the state. DEQ plans to revise and update its Toxics Reduction Strategy in 2016.
- **Implement green chemistry executive order, including revising purchasing practices related to toxic chemicals.** As part of the green chemistry executive order (#12-05), DEQ helped the Oregon Department of Administrative Services (DAS) develop Green Chemistry purchasing guidelines (adopted as policy in 2014) and implement a low toxicity product purchasing pilot project for janitorial supplies. Current projects include establishing green chemistry purchasing criteria for furniture, office supplies, and building materials, and working with Business Oregon to identify possible projects for key industry sectors or process chemical categories that could produce both significant environmental gains and economic opportunities. DEQ is also working with businesses and agencies throughout the region to raise awareness of the need to conduct effective chemical hazard and alternatives assessments, thereby avoiding the problem of "regrettable substitutions" of chemicals. The environmental agency directors for the three West Coast states signed a Memorandum of Understanding (MOU) in 2015 to facilitate collaboration on training, tool development, and safer product and chemistry pilot projects. In addition, DEQ is actively involved in the Interstate Chemicals Clearinghouse (IC2 - <http://theic2.org/>), which helps states exchange and generate information on priority toxic chemicals and develop tools for chemical alternatives assessments, as well

as Northwest Green Chemistry (<http://www.northwestgreenchemistry.org/>) , a multi-stakeholder group established to advance Green Chemistry in the region.

- **Implement the Water Quality Pesticide Management Plan.** Approved by the U.S. EPA in 2011, Oregon's Water Quality Pesticide Management Plan outlines the roles, policies, and legal authorities of each government agency with responsibilities for protecting Oregon's water resources from pesticides and the process by which these activities will be coordinated. The Water Quality Pesticide Management Team is an interagency group who coordinates these activities. The Oregon Department of Agriculture maintains a [website](#), providing background information on pesticides of interest and concern, benchmarks for aquatic life and human health, and other relevant resources. ODA also produces a bi-annual bulletin regarding pesticides issues.
- **Support Pesticide Stewardship Partnerships.** Oregon's Pesticide Stewardship Partnership program (PSP) brings state agencies together to work with watershed partners to reduce pesticide levels, while measuring improvements in water quality and crop management. The partnerships combine local expertise and water quality sampling results to encourage voluntary changes in pesticide use and management practices. Partners include DEQ, ODA, ODF, OWEB, OSU-Extension, watershed councils, soil and water conservation districts, local landowners and growers, and tribal governments. For the 2015-2017 biennium, the PSP focused on monitoring efforts for eight existing and one new PSP watershed, statewide pesticide waste collection (see "take back programs" below), and technical assistance and support for existing PSP watersheds. The new state funds allocated by the Oregon Legislature also supported pesticide stewardship technical assistance efforts in PSP watersheds. Grants were awarded to local agencies, non-profits and a university to conduct direct assistance to pesticide users to improve pesticide and pest management practices in ways that will benefit water quality. These grant projects will address pesticides used in an array of applications in both rural and urban areas.
- **Establish and fund "take back programs."** In 2014, the U.S. Federal Register published new disposal regulations under the Secure and Responsible Drug Disposal Act of 2010, expanding the number of options for unused medication collection to: collection receptacles, mail-back program, and take-back events, similar to the U.S. Drug Enforcement Agency's bi-annual Drug Take Back Day. Prior to the law changes, hospitals and pharmacies were banned from accepting old or unused medication. In addition, funds have been allocated by the Oregon Legislature, as part of the Pesticide Stewardship Partnership, to collect unwanted and unused waste pesticides from agricultural producers, forest landowners and other commercial pesticide applicators. From July 2014 through calendar year 2015, over 160,000 pounds of waste pesticides have been collected from 265 participants. Several more pesticide collection events are planned for 2016.
- **Continue to identify and address hazardous or contaminated sites, including brownfields.** The Oregon Health Authority-Public Health Division (OHA-PHD) Brownfield Initiative provides assistance and serves in an advising capacity to local jurisdictions across the state to support the integration of health considerations into area-wide and site-specific redevelopment and land reuse efforts. OHA-PHD, Oregon DEQ and Business Oregon work collaboratively on various projects to link and maximize the health, environmental and economic outcomes of brownfield redevelopment efforts. OHA-PHD also provides small capacity building grants in support of brownfield efforts that engage and connect low income and underrepresented communities to resources and partners that enrich quality of life, address health inequities, and support community health improvements through redevelopment. The OHA-PHD Brownfield Initiative provided assistance to the following cities: Astoria, Baker City, Beaverton, Chiloquin, Coos, Eugene, Grants Pass, Klamath, Medford, Portland, Salem, Sherwood, St. Helens, Sweet Home, Tigard, Union and counties: Columbia, Coos, Klamath, Lane, Linn, Marion, Multnomah, Tillamook, and Washington.
- **Monitor recreational waters and inform the public when contaminants are present.** OHA and DEQ work in partnership to monitor coastal beaches during the summer season for indications of fecal bacteria. When DEQ finds high levels of bacteria, OHA issues a public health advisory. During the off-season, DEQ takes a deeper look at local areas with known bacteria issues to help identify and hopefully correct causes of beach contamination. More information can be found at <http://healthoregon.org/beach>. OHA also works in partnership with federal, state and local natural resource-related agencies to advise the public about harmful algae blooms. When natural resource agencies notice the formation of an algae bloom, they take samples to detect concentration of blue-green algae (technically known as cyanobacteria) and/or their related cyanotoxins. If either are present in levels of concern, OHA issues a public health

advisory. More information can be found at <http://healthoregon.org/hab>.

OHA works with ODEQ and U.S. EPA to evaluate fish tissue data collected either during aquatic resource survey monitoring or during hazardous site assessment monitoring. Sometimes levels of contaminants can bioaccumulate and present a hazard to those who depend on fish as part of their diet. Typically, high levels of mercury and PCBs lead to fish consumption advisories in Oregon waters. More information can be found at <http://healthoregon.org/fishadv>.

- **Prevent blue-green algae from forming beyond natural background levels.** [No progress thus far.]

Your thoughts/suggestions:

Proposed Topic Area: Protect vulnerable populations

Recommended Action: Fits into already-existing “Public Process” and “Sustainability” Principles of the IWRS.

Overview of Progress to Date:

Your thoughts/suggestions:

Proposed Topic Area: Maintain public funding programs for core needs, not just inter-agency, integrated needs

Recommended Action: Existing 13B, “fund water resources management at the state level.”

Overview of Progress to Date:

- **Fund those water management activities for which the State has responsibility.** The 2013 Legislature increased the Department’s transaction fees for a four-year period beginning July 1, 2013. The 2013 Legislature also authorized a watermaster for Wallowa County where there was none, and an assistant watermaster in Klamath County to help with increased workload in the wake of the Klamath Adjudication. The Legislatively Approved 2015-17 Budget includes a hydrologic technician and a water right specialist to assist in implementation of the Klamath River Basin agreements, as well as a Groundwater Data Chief. The 2016 session provided additional resources to support a groundwater study in the Harney Basin.
- **Ensure increased and adequate funding from the General Fund.** Recent Legislatively Approved Budgets have moved natural resource agencies from one percent of the State’s General Fund Budget to closer to two percent.
- **Seek additional funding sources.** Bond funds dedicated to funding water resources development projects have increased from \$3.5 million dollars in 2009-11 to \$23.9 million in 2013-15, and \$50 million in 2015-17.

Your thoughts/suggestions:

Proposed Topic Area: Agency funding: adequate for the job? How do we measure “enough”?

Recommended Action: Existing 13B, “fund water resources management at the state level.”

Overview of Progress to Date:

See above.

Your thoughts/suggestions: