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MEMORANDUM

TO: The Water Resources Commission

FROM: Brenda Bateman, Senior Policy Coordinator
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SUBJECT: Agenda Item B, August 2, 2012
Water Resources Commission Informational Item

Integrated Water Resources Strategy: Next Steps in Implementation

I. Introduction

After the adoption of Oregon's Integrated Water Resources Strategy, the Project Team, comprised of staff from the Water Resources Department, Department of Environmental Quality, Department of Fish and Wildlife, and Department of Agriculture, have a responsibility to begin implementation of Recommended Actions contained in the IWRS.

This implementation has been designed with the realities of Oregon's economy in mind. The State will be unable to implement all of the Recommended Actions at once, given the significant cost associated with each Recommended Action. Instead, the Project Team offers in this report a tiered approach for review and discussion by the Commission. Below, the Project Team also poses a number of questions for the Commission to consider.

This is an informational item.

II. Draft Workplan: A Tiered Approach

Attachment #1 contains a draft workplan, meant to supplement Oregon's first Integrated Water Resources Strategy. This document travels separately from the IWRS and is not part of the document considered for adoption by the Water Resources Commission. It is however, meant to serve as a next step in implementation, noting where each of the Recommended Actions falls in the implementation timeline.

All of the Recommended Actions in the IWRS are enumerated here, along with notations about the primary agency responsible for implementation, the FTE and budget needed to begin implementation, and the current status of this work.

This document has been developed in partnership with OWRD's sister agencies, who have indicated whether they will be advancing budget requests during the 2013-15 biennium, above and beyond their current service levels in each of these program areas.

In the short-term, agency staff have already begun to implement some of the Recommended Actions noted in the IWRS. Some of this work focuses on inter-agency coordination and updating informational materials. Some of the short-term work, scheduled for completion during Fall 2012, includes:

Recommended Action #2E - updating Oregon's water-related permitting guide. In 2008, the state updated its guide, describing the regulatory and non-regulatory programs that influence the permitting of projects in wetlands and waterways in Oregon. Oregon's permitting guide needs to be updated to include working links to agency websites, updated forms, new contact information, and references to applicable rules and regulations. The Water Resources Department has had temporary help available this summer to work with sister agencies to update the guide, which is scheduled for release this fall.

Recommended Action #4C and #10A - increase water use efficiency (and energy efficiency). Recent surveys have shown that very few irrigators and irrigation equipment suppliers are aware of the Department's Allocation of Conserved Water program, which can yield benefits for both irrigators and the environment. The Strategy calls for efforts to improve awareness of programs such as this, as well as related programs in the area of energy efficiency. The Department has had temporary help available this summer to improve program materials available on the web, and has worked with key partners, including the Oregon Environmental Council, to design an outreach plan to reach key potential users of the program.

In later agenda items, the Department will delve into more detail about the legislative and budget requests planned for the 2013 Legislative Session.

III. Questions for the Water Resources Commission to Consider to Begin Implementation

Starting in 2008, the Water Resources Commission has made the Integrated Water Resources Strategy an agenda item in each of its quarterly meetings. This emphasis during each quarter has helped to keep staff and partners accountable for the continued progress towards the development of the IWRS.

Question 1. The question arises whether the Commission should retain such a schedule during the implementation phase as well, featuring implementation updates during each of its quarterly meetings.

Question 2. What kind of check-ins will Commissioners want to see on implementation?

IV. Summary

How Oregon goes about implementing these steps is important as well. The State has made commitments on a number of fronts, including accountability, a balanced approach, collaboration, an open public process, reasonable cost, science-based approaches, streamlining, and other principles memorialized as part of the Strategy's development.

Policy-makers responsible for implementation have a duty to conduct the next phase as carefully as they did in the development of the Strategy.

Attachment 1: Draft Workplan

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DRAFT IWRS Workplan (2012-17)

Supplement to Oregon's

Integrated Water Resources Strategy

Version Dated July 2012

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Draft IWRS Workplan (2012-17)

This document is a supplement to Oregon's Integrated Water Resources Strategy (IWRS).

The next steps described here are based on the Recommended Actions in the 2012 IWRS, and identify lead agencies, as well as funding, and staffing levels necessary during the two next biennia to begin implementation. The next steps described here are heavily focused on the role of state agencies. Not only do opportunities exists for participation from other public and private sector partners—in terms of research, administration, and funding—there is also a leadership role for these partners as well. Much of that detail is not included in this document; however, it will reside in individual agency and organizational workplans and budgets.

The next steps described below are grouped into three categories: (1) steps already underway during 2011-13 biennium with no further requests for funding beyond current levels; (2) steps requiring Legislative assistance with policy and/or funding during the 2013-15 biennium; and (3), steps deferred until the 2015-17 biennium due to staffing or timing constraints. Next steps listed under each biennium are listed in numerical order, according to the numbered Recommended Action noted in the IWRS.

During the 2013-2015 biennium, the IWRS calls for Legislative assistance in three primary areas. These include the following:

Data Collection and Coordination. The IWRS calls for a significant investment in groundwater and surface water data, both quantity and quality. As one example, the State needs a more robust network of stream gages and observation wells in place to track the health of Oregon's water in each basin—to monitor groundwater levels, streamflows, water quality, and forest and watershed health. As another example, a statewide groundwater quality monitoring program does not exist today. Oregon needs to establish and maintain a statewide program, particularly related to nitrates, a known groundwater quality problem throughout Oregon. In a third example, increasing capacity for water use measurement and reporting would greatly improve management of Oregon's water resources. Trained personnel who are able to collect data, provide quality control, and process and share the results are a critical part of Oregon's data needs.

Water Management and Development Tools. The IWRS also calls for increased support for water management and development tools such as built storage, natural storage, water conservation and re-use, water right transfers, and instream protections. The Strategy also calls for the development of new tools, such as a water supply development program, to strengthen the State's role as a direct partner in water supply.

Funding State and Local Capacity. The IWRS recommends stabilized funding for the State's natural resource agencies with management responsibilities for water quantity, water quality, and ecosystems. The Strategy also advocates for funding to benefit local communities—to participate in place-based planning; to finance water and wastewater infrastructure; to improve fish passage, screening, and other ecological restoration efforts; and to develop water resources projects in partnership with the State.

This is a draft document, subject to change as the Governor's Office and Oregon Legislature make resources available for these efforts.

A number of acronyms are used throughout this document:

DCBS – Dept. of Consumer and Business Services
DEQ – Dept. of Environmental Quality
DOE – Dept. of Energy
DOGAMI – Dept. of Geology & Mineral Industries
DSL – Dept. of State Lands
GF – General Fund
IFA – Infrastructure Finance Authority
INR – OSU Institute for Natural Resources
OCCRI – OR Climate Change Research Institute
ODA – Oregon Dept. of Agriculture
ODE – Oregon Department of Education
ODF – Oregon Dept. of Forestry
ODFW – Oregon Dept. of Fish & Wildlife
OF – Other Fund
OHA – Oregon Health Authority
OSMB – Oregon State Marine Board
OWEB – Oregon Watershed Enhancement Board
OWRD – Oregon Water Resources Department
USGS – US Geological Survey

Implementing the second edition of the Integrated Water Resources Strategy will involve maturing into the programs initially laid out in 2012, as well as initiating work on Recommended Actions not funded in the first five years.

It will also involve addressing critical issues that emerge after the adoption of the initial rendition of Oregon's Integrated Water Resources Strategy.

2011-13

Steps Already Underway

Steps already underway during the 2011-13 biennium include a combination of long-running programs and newer efforts. These programs plan to continue forward into the next biennia without requesting additional budget resources, beyond current levels. Nor do they require new legislative authorities. Efforts expended in these areas do not come without a price; they represent a level of effort not spent in other program areas.

Step	Contributing Recommended Actions	Staff Required per 2 yrs	Total Cost Estimates per 2 yrs	Lead Agency(ies)	Requires Legislative Concept?
• Update Oregon's Inter-Agency Permitting Guide. In Oregon, protecting natural resources means a variety of local, state, and federal permits are required for residential, industrial, commercial, and public works projects in or near water and wetlands. The primary goals of these requirements are to avoid, reduce, or compensate for impacts to the state's natural resources. The State has developed a permitting resource for developers, planners, and economic development officers. The guide needs to be updated with new contact information, web links, and requirements.	2D	Intern	0	DSL, state & federal ptnrs	No
• Groundwater Dependent Ecosystems. Some of this work is already underway; the Nature Conservancy, working with the U.S. Forest Service, has been working on a series of methods and protocols for inventorying and monitoring groundwater-dependent ecosystems.	3B	Existing	Existing	Public & Private Partners	No
• Take Advantage of Existing Infrastructure to Develop Hydroelectric Power. Oregon has an expedited review process for new hydroelectric projects at existing infrastructure. A workgroup, formed after the 2011 Legislative Session, is developing options to identify and pay for fish protections that are absent from existing infrastructure.	4B	Existing Workgroup	0	ODFW, WRD	No
• Water Conservation and Efficiency. Revise informational materials supporting the agricultural and municipal Water Management and Conservation Plan programs and Allocation of Conserved Water program, to help make the business case to water users and to provide clearer guidance about how to participate in these programs. Improve partnerships with energy efficiency programs.	4C, 10A	Intern	0	WRD, DOE ODA,OWEB	No

Step	Contributing Recommended Actions	Staff Required per 2 yrs	Total Cost Estimates per 2 yrs	Lead Agency(ies)	Requires Legislative Concept?
• Down-scale Climate Change Models to the Basin Level, characterizing potential local changes in surface water and groundwater resources, as well as the effects of climate change on instream and out-of-stream demands and their associated water rights. Use peer-reviewed results to inform Oregon's water resource management decisions.	5A	Existing	Existing	OCCRI WRD	No
• Continue investment in the development and upgrade of water and wastewater infrastructure. The IFA makes resources available to finance water and wastewater systems through Community Development Block Grants, the Water Fund, and the Safe Drinking Water Revolving Loan Fund.	7A	Existing	Existing	IFA, DEQ, OHA	No
• Continue to develop and provide water-related education and outreach through K-12 education, water industry vocational and professional training, community workshops, and identification of research needs.	8a-8d	Existing	Existing	ODE, ODA, OHA, WRD	No
• Continue to develop protocols that allow the State and its customers to reach their environmental goals, using non-traditional means, specifically by developing protocols for translating water quality projects into credits and protocols for translating streamflow restoration into credits.	10D	Existing	Existing	DEQ, WRD	No
• Continue to invest in the improvement of watershed health, resiliency, and capacity for natural storage. These efforts focus on improving conditions in riparian areas, wetlands, floodplains and forests.	11A	Existing	Existing	OWEB, ODA, ODF, DSL, ODFW	No
• Continue efforts to prevent and eradicate invasive species. Current efforts are guided by the Oregon Conservation Strategy led by ODFW, the Oregon Invasive Species Council, the Insect Pest Prevention Program and Weed Control Program at ODA, and the ballast water management program led by DEQ. Some of this work is funded with fees on motorized and non-motorized boats.	11C	Existing	Existing	ODFW, DEQ, ODA, OSMB	No
• Continue to ensure the safety of Oregon's drinking water. Current efforts focus on the protection of drinking water sources, including to some degree monitoring public drinking water for contaminants of emerging concern. Another area of focus is to encourage more water providers to join the Oregon Water/Wastewater Agency Response Network.	12A	Existing	Existing	OHA	No

Step	Contributing Recommended Actions	Staff Required per 2 yrs	Total Cost Estimates per 2 yrs	Lead Agency(ies)	Requires Legislative Concept?
• Continue to reduce the use of and exposure to toxics and other pollutants. State agencies already have robust programs in place, and plan to continue implementation related to DEQ's Toxics Reduction Strategy, chemical purchasing practices, pesticide management and stewardship, brownfields rehabilitation, blue-green algae, and monitoring and outreach.	12B	Existing	Existing	IFA, OHA, DEQ, ODA, ODF	No
• Continue to implement water quality pollution control plans. During the coming biennia, the greatest focus will continue to be on development and implementation of TMDLs for water bodies that do not meet water quality standards. Agencies will continue to address nonpoint sources of pollution across all land uses, increasing monitoring where possible.	12C	Existing	Existing	DEQ, ODA, ODF	No

2013-15 New Steps Requiring Legislative Assistance

The authorizing legislation for Oregon's Integrated Water Resources Strategy (ORS 536.220) invites state agencies with responsibilities for developing the Strategy to identify legislative amendments and budget recommendations as part of their work product. Below are a number of such legislative and budget requests, specifically for the 2013-15 biennium. These are designed to make forward progress toward understanding and meeting Oregon's water needs. They are also designed to serve as a foundation for requests scheduled to come forward in the 2015-17 biennium.

Step	Contributing Recommended Actions	Staff Required per 2 yrs	Total Cost Estimates per 2 yrs	Lead Agency(ies)	Requires Legislative Concept?
• Groundwater Basin Investigations. These investigations characterize the relationship between surface water and groundwater, determining characteristics of groundwater (location, volume, quality, etc.). A typical groundwater basin investigation takes five to six years to complete; the State has conducted three so far in partnership with the USGS. It has prioritized five additional basins for subsequent groundwater studies. Additional components could include identifying the location and use of exempt use wells; identifying the location of underground injection control systems (UICs), and evaluating Critical Groundwater Areas (CGWA). Data from CGWAs need to be updated to reflect groundwater level trends, with comparisons to precipitation, recharge, and water use data. These analyses provide the foundation for "allocation orders" issued to water users in those areas each year. An evaluation of one CGWA takes one year to complete.	1A	Existing	$500K GF	WRD	No
• Water Resources Data Collection. Improve data collection and processing to capture and share basic water resources data. A recent stream gage evaluation has identified another 70 locations where additional stream gages would aid in water management; 30 of these are high priority. Similarly, an addition of 40 dedicated monitoring wells, owned and operated by the State, would aid in groundwater management in key locations. Trained personnel would collect, quality control, and process these data. This request also includes the establishment of a groundwater monitoring program at the Department of Environmental Quality. This would involve personnel and monitoring equipment. Finally, this request includes continued funding for the Dept. of Agriculture's Ag Water Quality Monitoring Program, previously paid out of Pacific Coast Salmon Recovery Funds.	1B	7-WRD 3-DEQ Ext.-ODA 2-ODF	$2,250K GF $962K GF $965K GF $735K GF	WRD, DEQ, ODA ODF	No

Step	Contributing Recommended Actions	Staff Required per 2 yrs	Total Cost Estimates per 2 yrs	Lead Agency(ies)	Requires Legislative Concept?
• Inter-Agency Data Coordination. Dedicate state agency staff to inter-agency data systems that coordinate with local, tribal, federal, and other public and private partners. This package builds upon the preceding basic data package, adding high level and information support system staff at key agencies to help with data coordination and access.	1C	1-WRD 2-DEQ 2-ODFW 1-ODA	$250K GF $300K GF $300K GF $250K GF	WRD, DEQ, ODFW, ODA	No
• Water Use Measurement and Reporting. Measurement and reporting facilitates the State's ability to manage water resources, particularly in basins with water shortage concerns or groundwater level declines. Oregon statutes and administrative rules require governmental entities to measure and report water use. Some private water users are also required to measure and report their use, in accordance with their water right permits. The Water Resource Department's requests re-instatement of its water-use reporting position, necessary to fulfill statutory responsibilities and technical assistance to water users. In addition, staff continue to implement the Water Resources Commission's Water Measurement Strategy (2000), requiring measurement devices on significant points of diversion in high priority watersheds. The cost to install weirs, flumes, meters, or other appropriate measurement devices can be significant. Cost share dollars for measurement devices are critical to this program's success. This concept re-capitalizes an already existing fund, called the "Measurement Cost Share Fund."	2B	1	$225K GF	WRD	No
• Rebuild Field Capacity – Watermaster Corps. Watermasters and assistant watermasters provide expertise in the field to protect Oregon's water resources and the rights to use this water. Local funding for assistant watermasters has declined from 37 positions in the 1990s to 14 partially funded positions today. High priority staff needs include two assistant watermasters in Klamath County to assist with post-adjudication water management, a watermaster in Wallowa County, and seasonal assistants to help each watermaster office with the installation of measurement devices. Phase in.	2B, 2C, 10A-E	2	$343K GF	WRD	No
• Update Water Right Records with Contact Information. Today, there are no statutory provisions that allow the name on a water right certificate to be changed, even if the original holder of the certificate has passed away or sold off interests. There are approximately 85,000 water rights in Oregon today. The State needs the ability to respond to holders of water rights who are asking to modify the names on these certificates, especially in light of recent court rulings, favoring the name written on a water right certificate over other factors. Such a change would facilitate other process efficiencies, such as communicating with water right holders, mapping water rights, updating the water right database, and improving compliance with measurement and reporting conditions. This would be a voluntary program, funded by fees.	2D	2	$430K OF	WRD	Yes

Step	Contributing Recommended Actions	Staff Required per 2 yrs	Total Cost Estimates per 2 yrs	Lead Agency(ies)	Requires Legislative Concept?
• Determination and Protection of Instream Flows. The Oregon Department of Fish and Wildlife, Department of Environmental Quality, and Parks and Recreation Department are authorized to apply for instream water rights for specific purposes, such as protection of fish habitat, water quality, and scenic waterways. Such applications require scientific analysis and modeling to determine the instream needs for base and elevated flows. ODFW requests three FTE to better calculate the need for both baseflow and elevated flows and to request additional water rights to protect these flows. WRD requests a hydrologist and water right permit writer to support these efforts.	3A, 11B	3-ODFW 2-WRD	$491K GF $368K GF	ODFW WRD	No
• Place-Based Planning. This package focuses on funding for one local community to participate in the development and testing of a template, designed to guide the development of place-based water strategies that roll up to the statewide IWRS. Interagency coordination on this and other topics takes place in subsequent workplan items entitled, "IWRS Coordination."	9a	0	$500K GF	WRD	No
• Implementation of the Umatilla Basin Aquifer Recovery Project, using aquifer recharge and aquifer storage and recovery techniques. At full build-out, this project could have capacity for 100,000 acre feet of water in the Umatilla Basin.	10B	Existing	$10M in bonds	WRD, DEQ, OHA	No
• Secure authority and funding for the state to establish a water supply development program. The establishment of a water supply development program would improve the Oregon's ability to assess, plan, stretch, and develop its water supplies, using a combination of tools. Such a program would necessarily work in tandem with a place-based planning approach, with state and local partners working together to determine needs, feasibility, funding, and implementation.	10A-E, 11A-D, 9A, 9C	4	$21M in bonds	WRD	Yes

Step	Contributing Recommended Actions	Staff Required per 2 yrs	Total Cost Estimates per 2 yrs	Lead Agency(ies)	Requires Legislative Concept?
• IWRS Coordination. The goals, objectives, and recommended actions spelled out in the IWRS will be meaningless without dedicated funding. This package would fund the implementation of the state's 2012-17 IWRS and development of the state's 2017-22 IWRS, with the primary staff member housed at WRD, and additional staff at DEQ, ODFW, and ODA. Part of this coordination will be to develop and test a template for place-based planning, to help assess and meet water needs and to plan for the Oregon's water future. Voluntary, local efforts will "roll up" into and inform the statewide Integrated Water Resources Strategy. Using a template provided by the State to guide the process, communities will address the unique hydrology and water needs (instream and out-of-stream) locally, optimizing outcomes. The State, through the four key IWRS agencies, will develop and test a template under the IWRS for place-based planning and will seek further grant funding and other incentives to assist with local planning efforts. This approach is meant to empower communities to conduct place-based planning in consultation with the State. These efforts also include cross-agency implementation of existing ecological plans and recovery efforts (e.g., coordinate water quality-related restoration with Fish Recovery Plan habitat restoration). This coordination effort will enable agencies to convene key partners and stakeholders as part of the place-based planning efforts described above, to pool resources, and to achieve multiple goals simultaneously.	13A, 9A-B, all of 10, 11, 12	3-4	$750K GF	WRD, DEQ, ODFW, ODA	No
• Secure stable funding for water resources management at the state level. Oregon's core scientific, field-based, and planning responsibilities related to water are underfunded and have been for years. Shore up General Fund base where possible, and develop additional sources of funding to mitigate the loss of General Fund to the state's key water-related agencies. Agency staff and commissions continue to work with the Governor's office and Legislature to analyze and finalize options for Legislative consideration in 2013.	13B	--	Self-funding	WRD	Yes
• Capitalize the SB 1069 (2008) feasibility study grant fund. These funds provide SB 1069 grants to help evaluate the feasibility of water conservation, storage, and reuse projects. In 2008, the Water Resources Department awarded approximately $1.3 million in feasibility study grants to 21 Oregon communities, plus funds for the Umatilla Basin Aquifer Recovery Project. In 2011, the Oregon Legislature provided another $1.2 million for this grant program, which funded feasibility studies in more than 20 Oregon communities.	13C	0.5	$1.2M in bonds	WRD	No

2015-17 Steps Requiring No Legislative Assistance

A number of Recommended Actions will require supervision of interns, temporary or volunteer staff. Neither supervisors nor existing staff members are currently available to undertake these projects. Agencies may be better positioned in 2015-17 to begin these efforts.

Step	Contributing Recommended Actions	Staff Required per 2 yrs	Total Cost Estimates per 2 yrs	Lead Agency(ies)	Requires Legislative Concept?
• Mapping Agency Responsibilities. Document Oregon's major water-related institutions and their involvement in water management at the local, state, federal, and tribal levels. This will strengthen the public's understanding of institutional linkages, and will help improve day-to-day collaboration, decision-making, and data coordination.	1C	TBD	0	WRD	No
• Energy Analysis. The development of renewable power systems brings with it as-yet-unquantified demands for water. An analysis of water demands for water-intensive energy development projects and policies in each energy sector is needed.	4A	TBD	0	DOE, WRD	No
• Update State Agency Coordination Plans. These Plans ensure that rules and programs affecting land use are compatible with acknowledged city and county comprehensive plans. Changes to state rules and programs, and to comprehensive plans, may lead to incompatibilities that are detrimental to state, local, and private interests. Keeping coordination programs up-to-date will help ensure state and local permitting actions can be completed efficiently.	6A, 6B	TBD	0	DLCD	No

2015-17 Steps Requiring Legislative Assistance

Next steps in this section are dependent upon actions mentioned on previous pages. This represents a staged approach to implementation.

Step	Contributing Recommended Actions	Staff Required per 2 yrs	Total Cost Estimates per 2 yrs	Lead Agency(ies)	Requires Legislative Concept?
• Update Oregon's Long-Term Water Demand Forecast. Regular updates include identifying water-use trends in economic development, agriculture, urban-rural population growth/shift, per capita demands, and anticipated effects of conservation and efficiency improvements. This action will benefit from information coming in from water-use measurement and reporting programs mentioned earlier (Recommended Action #2B).	2A	TBD	TBD	WRD	No
• Determine Pre-1909 Water Right Claims. These include completing unadjudicated areas of the state, as well as settling federal reserved claims and tribal claims, and establishing priorities for that work. Adjudication in the Klamath Basin, which began in 1975, is scheduled for completion by the end of the 2011-13 biennium (Rec. Action #2C).	2C	TBD	TBD	WRD	No
• Climate Change Adaptation. These efforts depend on the results of downscaling / modeling of local effects in Recommended Action #5A. Use peer-reviewed results to inform Oregon's water resource management decisions. Communicate information and resulting options to local water users.	5B	TBD	TBD	WRD	No
• Low Impact Development. There is a need for strong administrative support and direction to incorporate LID practices into codes or to encourage developers to try such projects. Local planning departments need technical resources and assistance to help familiarize themselves with low impact techniques, and to allow such projects to move through the local government approval process. Information gathered on LID policies in cities and counties across the state, would help encourage more effective use of these practices. Oregon communities should consider updating local development codes, where appropriate, and improving local capacity, both technically and legally, to review and permit green infrastructure designs.	6C	TBD	TBD	DCBS, DEQ	No
• Improve Oregon's Dam Safety Program. Additional assistance from a hydraulic engineer and a geotechnical engineer will provide the technical expertise Oregon needs to help dam owners better prepare for seismic and extreme precipitation events, particularly for high hazard dams.	7A	TBD	TBD	WRD	No
• Regional Infrastructure. Policy and funding discussions around regional infrastructure may be bolstered by the place-based planning efforts (9a) undertaken in 2013-15.	7B	TBD	TBD	WRD	No