



Oregon

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MEMORANDUM

TO: Water Resources Commission

FROM: Phillip C. Ward, Director
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SUBJECT: Agenda Item A, November 20, 2008
Water Resources Commission Meeting

Oregon's Integrated Water Resources Strategy: November 2008 Update

I. Issue Statement

The Water Resources Commission is building upon its existing statutory authorities to move Oregon toward an integrated water resources strategy. The Water Resources Department has one policy option package in its proposed 2009-11 budget and one legislative concept developed in support of this activity.

During the Nov. 20, 2008 Commission meeting, Water Resources Director Phil Ward and Department of Environmental Quality Director Dick Pedersen, will present the draft legislative concept to the Commission (See Appendix A). The draft legislative concept clarifies what shape the process, timelines, and content may take. Directors Ward and Pedersen will then lead a discussion about next steps.

II. Background

During the May 2008 Water Resources Commission Workshop, the Commission began to discuss some of the fundamentals that a long-term water conservation and supply strategy might contain, in terms of both process and content. During the August 2008 Commission workshop, visiting colleagues from Washington and California discussed their experiences and lessons learned with regard to statewide water resources planning (See resulting minutes in Appendix B).

The November 2008 workshop will continue to fill in more details, as the Commission explores how it will: ensure public input, determine the primary focus of a water resource strategy, and ensure the utility of such a strategy.

Appendix C provides a draft outline containing components that the Commission may want to consider as it continues to develop a water resources strategy. The components are taken from notes compiled from previous Commission meetings and from the September through October 2008 Roundtable Meetings held around the state.

III. Discussion

During the November 2008 meeting, Directors Ward and Pedersen will discuss some of their goals for addressing water quantity and quality issues in an integrated water resources strategy. They will also describe the process the two Departments have engaged in with the Governor's office and an advisory group of stakeholders to develop Legislative Concept #663, "Developing an Integrated Water Resources Strategy." LC #663 builds upon the already-existing statutory language in ORS 536.220, to clarify the lead role the Water Resources Department will play in the development of an integrated water resources strategy. The Department of Environmental Quality will be responsible for developing water quality-specific narratives and data in the strategy.

The draft legislative concept emphasizes the need to work with a full spectrum of stakeholders, including the other natural resources agencies. It also notes the importance of continued data collection and quantification of water needs. The draft concept describes important components of a strategy, including: objectives, actions to achieve the objectives, adaptation plans related to climate change, an assessment of additional factors such as population growth or land-use change, and public policy options and recommendations.

The draft concept notes that the strategy shall take effect upon adoption by both the Water Resources Commission and Environmental Quality Commission, with an initial progress report to the legislature due Feb. 1, 2011, and the first completed strategy due Dec. 12, 2012. Updates should be completed every five years thereafter. Reports to the Oregon Legislature may include legislative concepts or budget recommendations.

Finally, Directors Ward and Pedersen will pose several public policy questions to the Commission. These questions are designed to elicit additional guidance on the structure and process of a strategy, and also to provide a feel for the types of issues that will need to be addressed as part of a strategy.

Policy questions the Commission may wish to discuss during the November 2008 meeting include:

- 1) What do we want the future to look like in Oregon in 50 or 100 years? Should we plan to meet all of the forecasted water demands all of the time or some of the time? Will the next 50 to 100 years result in significant changes in behavior or water use?
- 2) As a state, will we want to create a hierarchy of water quality requirements for designated uses (i.e., define those uses for which we will use potable water, and then find a way to supply the other uses with alternate sources)? If so, what form would the process take?
- 3) As a state, what would be the best way to take a hard look at our "need" for water and determine whether this is the same as our "demand"? This ties closely with public outreach and public education efforts that have been a central theme of the October 2008 OSU Water Roundtables.

- 4) As a state, will we want to ask local governments to meet basic planning, water efficiency, data standardization, or partnership requirements as a way to move up the funding ladder (e.g., grants for planning, for feasibility studies, and for construction/implementation)? If so, what models could we use?
- 5) What kinds of conservation programs would be financially and politically viable right now? 10 years from now? 50 years from now?
- 6) What other kinds of water resource management approaches should the state analyze right now? 10 years from now? 50 years from now?
- 7) What kinds of Advisory Committees and public outreach should the state use in order to develop and implement an integrated water resources strategy?
- 8) How can we best design a strategy that is “implementable”? Will it spell out a hierarchy of tasks to fund whenever funds become available? Will it prioritize research needs/questions? Will the state ask local governments or other partners to pursue any specific steps? Will the state provide financial or technical assistance to local efforts as part of this strategy?
- 9) A “one size fits all” approach is impractical on a state-wide scale. What issues should a state-wide strategy address, and how would basin or region-specific efforts fit into the picture?
- 10) With the first installment of such a strategy potentially due in February 2011, what will our next steps look like?

During the next several Water Resource Commission meetings, the Commission may want to consider inviting stakeholders to participate in a series of round-table conversations to address these topics, as well as those outlined in Appendix C. One possible timetable could include the following:

February 2009 WRC Meeting: Invite representatives of local governments, watershed councils, Soil and Water Conservation Districts and environmental and agricultural interests to comment on the structure of advisory committees and public outreach opportunities.

May 2009 WRC Meeting: Invite representatives from local communities to talk about the kinds of success stories that should be highlighted and the ways in which a state-wide strategy could be most helpful to local communities.

August 2009 WRC Meeting: Report back from the 2009 Legislative Session, including the final status of budget requests and legislative concepts. Present a 2009-11 draft work plan and timelines for Oregon’s first Integrated Water Resources Strategy.

IV. Conclusion

The Water Resources Department has prepared a legislative concept and budget request to take to the 2009 Oregon Legislature, specifically to address the need for an integrated water resource strategy.

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The Water Resources Commission has long identified the need to develop a strategy as an important next step in meeting Oregon's current and future water needs. With similar calls for planning coming from the Governor's H₂O Initiative and the Oregon Water Roundtables, the time is right to continue to develop the details and timelines that continue this momentum.

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Appendix A:

Legislative Concept #663, "Developing an Integrated Water Resources Strategy"

DRAFT

SUMMARY

Directs Water Resources Department to develop state water resources strategy. Specifies content of strategy. Directs department to report to legislature regarding strategy.

A BILL FOR AN ACT

Relating to state water resources strategy; creating new provisions; and amending ORS 536.220.

Whereas the Legislative Assembly directs the Water Resources Department to study the state's existing water resources, the means and methods of conserving and augmenting water resources and the existing and contemplated needs and uses of water resources; and

Whereas the Water Resources Commission and Water Resources Department seek to address Oregon's water supply needs and to restore and protect stream flows and watersheds in order to ensure the long-term sustainability of Oregon's ecosystems, economy and quality of life; and

Whereas surface water is almost completely allocated across the state and ground water levels have declined precipitously in several areas; and

Whereas the Legislative Assembly notes that proper utilization and control of the water resources of the state can be achieved only through a coordinated, integrated state water resources strategy and through plans and programs for the preservation of the state's water resources; and

Whereas water quantity, water quality and ecosystem services are inextricably linked; and

Whereas to develop a coordinated and integrated state water resources strategy it is important for the Water Resources Department to work closely with the Department of environmental Quality and consult with other natural resource agencies in the state; and

Whereas the development of a long-term, integrated state water resources strategy is a cooperative and collaborative process; now, therefore,

Be It Enacted by the People of the State of Oregon:

SECTION 1. ORS 536.220 is amended to read:

536.220. (1) The Legislative Assembly recognizes and declares that:

(a) The maintenance of the present level of the economic and general welfare of the people of this state and the future growth and development of this state for the increased economic and general welfare of the people thereof are in large part dependent upon a proper utilization and control of the water resources of this state, and such use and control is therefore a matter of greatest concern and highest priority.

(b) A proper utilization and control of the water resources of this state can be achieved only through a coordinated, integrated state water resources policy, through plans and programs for the development of such water resources and through other activities designed to encourage, promote and secure the maximum beneficial use and control of such water resources, all carried out by a single state agency.

(c) The economic and general welfare of the people of this state have been seriously impaired and are in danger of further impairment by the exercise of some single-purpose power or influence over the water resources of this state or portions thereof by each of a large number of public authorities, and by an equally large number of legislative declarations by statute of single-purpose policies with regard to such water resources, resulting in friction and duplication of activity among such public authorities, in confusion as to what is primary and what is secondary beneficial use or control of such water resources and in a consequent failure to utilize and control such water resources for multiple purposes for the maximum beneficial use and control possible and necessary.

(2) The Legislative Assembly, therefore, finds that:

(a) It is in the interest of the public welfare that a coordinated, integrated state water resources policy be formulated and means provided for its enforcement, that plans and programs for the development and enlargement of the water resources of this state be devised and promoted and that other activities designed to encourage, promote and secure the maximum beneficial use and control of such water resources and the development of additional water supplies be carried out by a single state agency which, in carrying out its functions, shall give proper and adequate consideration to the multiple aspects of the beneficial use and control of such water resources with an impartiality of interest except that designed to best protect and promote the public welfare generally.

(b) The state water resources policy shall be consistent with the goal set forth in ORS 468B.155.

(3)(a) The Water Resources Department shall, to help implement the state water resources policy specified in subsection (2) of this section, develop an integrated state water resources strategy that is designed to meet Oregon's water needs.

(b) The department shall, in consultation with the Department of Environmental Quality, develop the state water resources strategy in consultation with other state, local and federal agencies, with other states, with Indian tribes, with stakeholders and with the public.

(c) In carrying out its duties under this section, the Water Resources Department shall, in consultation with the Department of Environmental Quality, develop data on an ongoing basis that forecasts Oregon's water needs, including but not limited to in-stream, underground water, human consumption and water supply needs.

(d) The state water resources strategy shall describe Oregon's water needs, including but not limited to in-stream, ecosystem services, water quality and water supply needs. The state water resources strategy shall also describe the following:

- (A) Objectives of the strategy;**
 - (B) Actions designed to achieve the objectives of the strategy;**
 - (C) Plans related to the challenges presented by climate change;**
 - (D) Additional factors, including but not limited to population growth and land use change;**
 - (E) Communication and partnership with key stakeholders;**
 - (F) Specific functions and roles for other state agencies, including but not limited to the State Department of Fish and Wildlife, the State Department of Agriculture, the State Forestry Department, the Department of Human Services, the Economic and Community Development Department, the Department of Land Conservation and Development, the Oregon Watershed Enhancement Board and the State Parks and Recreation Department; and**
 - (G) Public policy options and recommendations.**
- (e)(A) The state water resources strategy shall take effect when it is adopted by reference in rules promulgated by both the Water Resources Commission and the Environmental Quality Commission.**

(B) The commissions shall review and update the state water resources strategy every five years thereafter. Any revisions of the strategy shall take effect when the revised strategy is adopted by reference in rules promulgated by both the Water Resources Commission and the Environmental Quality Commission.

SECTION 2. (1) The Water Resources Department shall, in consultation with the Department of Environmental Quality, submit a report by February 1, 2011, to the Seventy-sixth Legislative Assembly, in the manner provided in ORS 192.245, detailing benchmarks and progress toward the development of the state water resources strategy described in ORS 536.220 and discussing whether the strategy will be complete by December 31, 2012.

(2) As part of the report specified in subsection (1) of this section, the Water Resources Department, in consultation with the Department of Environmental Quality and with other state agencies, may identify legislative amendments and submit budget recommendations, including but not limited to requests for a long-term, dedicated funding source to implement the state water resources strategy.

NOTE: Matter in boldfaced type in an amended section is new; matter *[italic and bracketed]* is existing law to be omitted
New sections are in boldfaced type.

Appendix B: Notes from the August 2008 WRC Workshop

During the Aug. 21, 2008 meeting, the Commission hosted two representatives from states that have experience in long-term water conservation and supply planning: (1) Daniel R. Haller, P.E., Columbia River Engineer, from Washington's Department of Ecology, and (2) Kamyar Guivetchi, P.E., the Manager of Statewide Water Planning for California's Department of Water Resources. The two individuals addressed the following questions as part of their presentation:

1. What is the fundamental objective of your state plan?

Objectives of each plan have changed over time.

In *California*, this effort represents more than just a data exercise, and is the beginning of a state-wide policy. State and Federal water projects in California manage approximately 20 percent of the state's supplies. The remaining 80 percent is developed and managed locally and in a disaggregated way. For example, there are about 2,300 special districts that include water supply agencies, flood protection, storm water, and water quality agencies as well. None share data on any kind of integrated basis. The California Water Plan, however, is moving these entities toward regional planning, in an integrated, coordinated way. The Governor, Department Director, and Legislators, increasingly refer to the plan and cite it often.

In *Washington*, the idea of "planning" is still in its infancy. Washington's Department of Ecology is primarily an allocator of water. As supplies became more scarce because of competition and because of Endangered Species Act (ESA) listings, the Department of Ecology moved into a strong regulatory role. The 2006 Columbia River Water Management Program has allowed the Department of Ecology to become more of a water supply development agency. The fundamental objective of the Columbia River Water Supply Program is to create an inventory of opportunities for conservation and storage. It also forecasts demand, determining where and how much demand will occur, and how that will compare to available supplies.

2. What components comprise the plan (i.e., demand studies, grants, recommendations, etc.)?

In *California* the plan originally served as an engineering blueprint, then evolved to a data document, and is becoming a water policy document. One difficulty the state has faced in its data collection efforts was different methodologies and measurements in use by local communities and agencies. The state continues to pursue the idea of coordinating data collection, setting data collection standards and providing data exchange tools, so that information can be aggregated and used at the state level. Another important obstacle has been getting access to local data, since there is no integrated data system within state government. The idea here is not to create a huge centralized data repository, but to find a way to link the data on-line and develop a common data glossary. For information about the content of the 2005 update of the California Water Plan, see all four volumes of the plan: the Strategic Plan, 25 Resource Management Strategies, 12 Regional Reports, a Reference Guide

of 65 articles and documents used to prepare the rest of the plan, and a Technical Guide.

In *Washington*, the plan has three basic components, a Supply Inventory, Demand Forecast, and Grant Funding. In its current form, the document is “short on policy and long on data.” The geographic coverage for this effort is for the Columbia River Basin only, representing about two-thirds of the state (Puget Sound is most of the other third, with a separate planning effort). For the Demand Forecast, the Department of Ecology hired a private firm to forecast water needs in the agricultural, hydropower, and municipal sectors. This information was then displayed on a “mart map” (GIS) and overlaid with an inventory of potential supplies. The state legislature allocated \$200 million toward the Grant Funding Program, in order to fund projects on the ground. The state is funding areas where demand exists and where the state feels it needs to aggressively develop solutions.

3. What are the basic statistics of the plan (cost, staff, year established, frequency of updates)?

California began writing these plans 50 years ago, and is statutorily mandated to update them every five years. The state has set budget aside for these purposes, but sees it dwindling over time. In 2000, the budget was \$4.5 million per year. Now it is between \$2.5 and 3 million. There are 40 to 50 part-time staff throughout the state who work on data collection and water budgets, 15 more in district offices conducting data processing, and an additional 30 to 40 experts who provide in-kind technical work. In 2005, about 2,000 people contributed to the preparation of the report, including their participation through public comments. This facilitated process has provided a good way to pull in a lot of perspectives, expertise and information. Although the process sounds burdensome, there are real benefits, including political support, positive media coverage, transparency, and public buy-in.

For its most recent plan, *California* has conducted about 12 regional workshops in both 2007 and 2008 to develop regional reports. About 500 participants have attended so far. The *California Water Plan* is now regarded as a continuous planning process. The technical work does not stop between published updates, and the updates themselves are seen as a snapshot of continuing activity.

Washington has completed two updates already, with the third to be completed soon. The 2006 report emerged a few months after the legislature authorized funding, and was produced by one full-time employee and a \$300,000 contract with a private consulting firm. In the first round, the state compiled already existing information throughout the state. The Department of Ecology completed the 2007 version internally, with two to three full-time equivalents (FTE). *Washington* is trying to reduce the overall effort by building more internet platforms for participants to use. The most recent efforts include funding additional demand studies that take a more robust look at agricultural demand, instream flow needs, and hydropower needs.

Washington received authorization from the Legislature to issue \$200 million in bonds during the next ten years. Two-thirds of the funds must be spent on storage projects, with the remaining one-third spent on conservation projects. Program managers evaluated economic

development programs and watershed council programs to get ideas about process design. Successful projects are defined as those providing (1) increased water supplies and (2) environmental benefits. In the first round of grant making, successful projects including canal piping and lining, surface and aquifer storage and recovery, and innovative studies like beaver dams. The evaluations came down to 20 different projects that were diverse in their geography, type of project, and project size. The program awarded about \$50 million in this first grant-making phase.

4. Describe the process in terms of public input, advisory/technical groups, ratification.

In *California*, planning and outreach has become an integral part of the document itself. Much of the budget goes toward public process and outreach. The state has hired professional facilitation staff at the Center for Collaborative Policy at California State University in Sacramento. Four facilitators manage a very large process. In 2005, the California Water Plan had 65 members on an advisory committee; for the 2009 plan, there is now a steering committee of 20 state agencies, a public advisory committee of 45, a technical advisory group of more than 40 individuals, a climate change technical advisory group of 25, and 10 full-time staff to coordinate this activity. There is a four-page description of the framework/approach used in the 2005 report, because project managers wanted to memorialize the successes and ensure their replicability. The 2005 and 2009 updates include much more emphasis on public outreach, including invitations to Federal agencies and nearly 200 California Native American Tribes (federally recognized and non-recognized).

In previous rounds, data and analyses become obstacles to agreement on policy issues. For example, the 1998 California Water Plan displayed a single “likely future,” which bogged down the policy discussion, as the public disagreed with the single outcome the report predicted. In subsequent years, the project team produced multiple scenarios to show a range of possibilities. The California Water Plan now describes multiple plausible yet different future scenarios that address uncertainties and the concerns of differing interest groups. Project managers note the importance of getting to agreement on the common body of technical knowledge first. That then frees participants up to grapple with the policy issues. It is also important to identify where and how the state wants to invest in the development of research and analytical tools. There are no off-the-shelf analytical tools to help with integrated water resources management, including economic, environmental and social considerations.

When *Washington* began to design its process in 2006, officials traveled to California to meet with planning experts and get their perspective. One lesson imparted was the need to form an advisory group of external stakeholders to provide input and perspective. With help from its group of 40 advisors, the Department of Ecology has enjoyed increased support during its Legislative Sessions. A technical advisory group of 15 participants helps to keep the project on track, meeting the goals outlined in the plan. Washington uses open houses, watershed planning groups, a websites and email listserves to involve the public and solicit input.

Like California, Washington also received a fair amount of push-back in the wake of its first plan / report. This was because of the wide margin of error associated with its demand forecast, and because the state began moving too fast to meet that forecasted demand with new supplies. The project team took a harder look at its demand numbers in future versions.

5. What are the most significant obstacles, lessons learned, and advice for those starting out?

In *California*, a strong public process has been crucial to success. Smart, motivated people involved in the process have added knowledge and information that the project team would not otherwise have had or would have had to pay for. The 2005 California Water Plan involved “nine person years” worth of interaction with stakeholders, including other state agencies. Because of the public process, the 2005 plan was not contentious, compared to the 1998 plan. It was still not perfect, but it was widely seen to be moving in the right direction. For the first time, the 2009 plan is building on the previous update.

The Plan itself cannot mandate nor appropriate funding. To implement recommendations contained in the plan, further action must be taken by the Governor, Legislature, or ballot measures. Proposition #50 and #84 provide about \$1.5 billion of public (general obligation) bond funds for implementing management strategies in the California Water Plan as part of an integrated regional water management plan.

One of the biggest challenges was the buy-in required from staff members, in order to make this a more public process. California had written its water plan in the same way for many years. Asking staff to “open the door” and let the public see in was a scary prospect. People got defensive about their long-standing assumptions and perspectives, fearing public backlash or criticism. In the end, however, these same staff members confided that it was the best water plan they had worked on. After identifying and discussing some of the flaws, stakeholders ended up providing staff with even better resources, methodology, and approaches. Internally, the Department reorganized into inter-disciplinary teams to develop water demand, water quality, water supply, and environmental water data. The Department has begun to organize its structures and its work along the lines of the plan itself.

The obstacle that *Washington* faced was quite a different one. The planning process we have discussed with the Commission is not state-wide, so the Department of Ecology has received complaints about “equity” from other portions of the state. For any plan, the project team must make sure there is clarity of focus, geography, and intent. Here is where it is important to convene an advisory group every month or two. These groups will ensure that differing perspectives are brought to the table and heard. This provides an open, constructive environment with non-binding approaches.

In addition, Washington had some difficulties interpreting the original legislation, which was developed very quickly and signed within a matter of days. Staff members were left with a lot of questions about implementation. In one example, the Legislation refers in one place to the “Columbia River Mainstem,” and in another to the “Columbia River Basin.” The latter

term refers to a geographic area that is much wider in scope than the former, and caused some confusion when it came to the scope and coverage of the program itself.

Finally, Washington has had to nestle its planning efforts in with its mission of water allocation and regulation. Although the project team found good opportunities to fund projects that improve fish and wildlife habitat and water supply, these projects do not always work well within the state's water law, dating back to 1917, because some of the water rights used to implement these projects are more "junior" rights.

At the conclusion of formal remarks, the Commission posed additional questions to the presenters:

6. Tell us more about your advisory committees. How do you get the most critical people in the room?

In *California*, the composition of the advisory committee is deliberative and prescriptive. The Legislature has identified certain interest groups that must be represented (see list #3 in California's Process Guide online; those groups with an asterisk are required). The California Water Plan uses a formal advisory group, comprised of statewide organizations and interests. Its regional workshops and forums are comprised of local governments, agencies and interests, and its technical advisory group is comprised of scientists and engineers. With this number of people, the state has a greater ability to involve more interest groups, including water quality, land-use, and flood management organizations. These meetings are held "in the round," arranged to ensure a lot of interaction, and they are led by a formal facilitator.

All of the working committees have charters, which are posted on-line and represent an agreement the committee members themselves. The charter lay out the rules, purpose, membership, and decision-making process.

The *Washington* project does not have statutory requirements for committee membership, but did implement similar kinds of committees after visiting California officials. In the quest for committees that were "functional but inclusive," Washington has grown its policy advisory group to 30 voting members. The meetings are also public, so anyone can attend and provide comment. Every meeting agenda allots time for public input. Washington also uses a profession facilitator to ensure that everyone is heard and that important issues are addressed.

7. Do these strategies include discussions of water quality?

California. Yes, before 2005, water quality was discussed only conceptually. The state has Water Quality Basin Plans that have now been folded into the California Water Plan. Now six of California's 25 resource management strategies relate to water quality. Water Quality-related agencies are members of work teams, and water quality is an integral component of the California Water Plan.

Efforts in *Washington* are much less integrated than in California, and still focus primarily on water quantity / water supply. While water supply development must take into account the effects on fish and wildlife, water quality as a whole is not yet well integrated into the equation.

8. What about Federal Agencies? How has your planning included them?

California works with the Bureau of Reclamation, the U.S. Geological Survey, National Marine Fisheries Services and others. For the most part, we coordinate with them through other, already-existing venues. Our planning process does not necessarily change the way they conduct business, and they have contributed ideas into our planning process. In one example, the U.S. Forest Service and other federal agencies manage about 50 percent of the land in California. USFS officials noted that upland watershed meadows can store a great deal of water if managed correctly. They have become an active part of our planning process, and we have asked them to help write a new resource management strategy on forest management. In addition, Federal agencies are a great source of cost-share funding.

Washington works closely with Bonneville Power Administration, National Marine Fisheries, the Bureau of Reclamation, and U.S. Army Corps of Engineers. The state of Washington is funding these and other federal entities to conduct studies and develop projects that meet the state's Columbia River objectives.

9. How are exempt-use wells handled?

In *California*, ground water is not permitted by the state, but is locally controlled. Land-owners have access to ground water through the land they own. As such, it is very difficult to get good information about ground water. While there are monitoring wells established through voluntary partnerships, they are few and far between. The states does have evidence of ground water overdraft where land subsidence has occurred; water users are drawing ground water more rapidly that what is recharged. If adjacent landowners can show injury for related to ground water quantity or quality, they can take the issue to the California Water Control Board or the courts.

In *Washington* the Columbia River Legislation does not specifically address exempt use wells, but state officials have tried to estimate their impacts in the planning process. In Washington, uses are exempt if they total less than 5,000 gallons per day for domestic uses. The Department of Ecology did conduct an state environmental protection assessment to cover the entire Columbia River program. The state needs to be thinking about exempt-use wells as part of its overall water budget. The state has used start cards to try to track the numbers and location of exempt wells. In some counties, where there are instream concerns, some exempt-use wells are required to be metered.

10. Do you have Water Resource Commissions similar to Oregon's, and if you did, what would you ask from them?

In *California*, there is a Water Commission that has authority for land condemnation. During recent decades, however, it has not been active in forming water policy. For a while, it did not have a quorum. The Commission has not been central to the planning discussions, not even during the formation of the draft strategic plan. If we did have a strong Commission, it would make sense to ask the members to represent this planning process and advocate it widely throughout the state, not for the purpose of getting more money, but to help focus the state's priorities and bring this focus to the Legislature and the Governor. Any recommendations from such a group carries considerable power in the political arena.

In *Washington*, there is no analogous Commission. Requirements for the Dept. of Ecology to bring updated plans to the Legislature has only hinted at the potential for public policy, but have not really pushed the envelope. This is where the voice of a Commission might be more helpful—removing existing policy barriers and providing greater clarity in legislative language. Department staff members have less stature to be able to play that role.

11. Did your outreach work bring other state agencies on board?

Yes, in *California*, these efforts created a “buzz in the air,” about public funds and policy decisions, and became a very attractive forum for other agencies. One major selling point, in recruiting other agencies to participate, was that our project managers met with each of the other agencies and personally invited their senior staff to join the Steering Committee. Everyone accepted. Some did note that they had resource limitations, but this also created a robust public process for them to use when vetting their own projects. The water-energy team of California's climate change initiative used this forum, and the “20 Percent by 2020” water conservation policy planners are also using this same public forum and process.

Yes, in *Washington*, the Department of Fish and Wildlife, the state's Conservation Commission, Department of Health, and other agencies have been integrated into the program.

12. Regarding data, it sounds reasonable to agree early on to standardize information, work on multiple scenarios, and then work on policy. How do you remind folks that these planning efforts will evolve in stages?

California has given people the opportunity to engage in developing information; that is what they want. In 1998, stakeholders' concern was for project staff to “show what information was used to create the plan.” *California* learned from that experience and now requires an “Assumptions and Estimates Report,” which allows project staff to ask: What did we miss? What did we get wrong? What are the data gaps? The project team has to publish its assumptions one year before draft comes out for public review. This is very much an iterative approach, and with all the formal comment periods for Update 2009 the public will have “five bites at the apple.” The project team used to publish a product that was largely in

its final stages; now stakeholders have a chance to participate in the development of the rudimentary pieces too.

The *Washington* project provides an on-line mapping application to stakeholders, so they can see the location of water rights in the basin, metering data, well construction reports, and aerial photography. This information was made electronically available, because the Dept. of Ecology heard many of the same concerns about whether information was correct, complete, etc. The Department continues to add more features to its water supply and planning tool.

13. What do you say to the Executive and Legislative branches at the state level, in order to get the type of support you need for these efforts? Funding is on-going problem for all of us.

In *California*, the executive branch and cabinet have been very supportive, encouraging the Department to use a very public process. In the Legislature, members have been citing the California Water Plan as part of the legislation, bond programs, and other policy documents. This shows that they are paying attention, reading the information provided, and acting on it.

Lester Snow, Director of the California Department of Water Resources, has noted that it does not work to fund water planning activities by moving from bond fund to bond fund, and has advocated establishing a sustained baseline revenue stream through user fees. At the same time, every subsequent budget crises continues to whittle down existing general funds even more. Although many believe California needs a “Water Resources Investment Fund,” funded with water user-based fees, this has met opposition from many water utilities. As such, one ongoing recommendation is for the Legislature to find a way to provide sustained funding for state-wide water resources planning.

In *Washington*, on-the-ground results for both the instream and out-of-stream components of the Legislation are keeping Legislators engaged and supportive (both politically and financially). The Department of Ecology believes it has made much progress during the past two years. Keeping local government leaders involved (through the Policy Advisory Group for example) also keeps political issues from bogging down the process. The Department meets regularly with caucus staff from both parties to make sure they are aware of the program’s process and policy choices.

14. The workshop concluded with comments from Commissioners, including the following:

- We are heartened that some of our fears have already been experienced by you. We can steel ourselves and figure out beforehand how to handle it.
- We are still so early in the process. One thing that stands out from today’s discussion is for the need to standardize data among different levels of government. Consistency is important.
- We have a made real progress with regard to data and conservation opportunities because of the work that State Engineer Barry Norris has conducted during the past several years. Having a common set of facts, we will have a greater ability to focus on solutions.
- We will need to go back time and again to check our strategy against our data. We will need to constantly correlate the two.

- I see the importance of setting the table and inviting people to participate. We do not want to get too many side processes underway. We need to keep focused on the planning process.
- Oregon has a long history of public involvement. It sounds as though work in other states was strengthened because there were good mechanisms in place for public involvement. If we can continue to develop that carefully by defining committees, charters, and processes, that will strengthen the plan and garner better support.
- The economics of working together are increasingly important, and will be mutually beneficial.
- Our successes will depend on the amount of resources we can secure, if we want to move forward from here. California and Washington have already made these significant investments. Oregon had not made any until 2007 with modest investments in the Oregon Water Supply and Conservation Initiative. The next step will be to secure additional investments for the next phase through the Governor's budget. If we want to protect the resource and shaping our future "in the Oregon way," we will need real investment.

Appendix C: Draft Outline for an Integrated Water Resources Strategy

The Water Resources Dept. staff has compared the content of various state water resource strategies, and has created a draft outline of the kind of processes and content the Department and Commission may want to address during the development of an Integrated Water Resources Strategy. The idea here would be to create an outline that could serve as a blueprint, in the development of an initial “strategy.” Some of these components are already mentioned in Legislative Concept #663 (See Appendix A), prepared for the 2009 Legislative Session.

Oregon’s Integrated Water Resources Strategy could consist of three volumes:

Volume I: An introduction and an executive summary.

Volume II: A statewide overview and regional summaries in a number of technical areas, including the state’s existing water supplies, projected future water supplies, and forecasted water demands in the municipal, industrial, domestic, agricultural, and electric power generation sectors, and ecological/instream needs. Volume II will evaluate a number of policy options, designed to help Oregon meet its future water needs.

Volume III: Include data references and a technical description of modeling assumptions and methodologies used to develop estimates for existing and future water supplies (surface and ground water), forecasted water demands, and possible policy options. Include any relevant journal articles or scientific studies that helped formulate key assumptions.

Volume I

The Introduction will explore the distinctive and unique features of Oregon’s Integrated Water Resources Strategy and explain why it represents a major milestone in water resource planning in Oregon. In addition, the introduction will provide a general overview of the process.

The Executive Summary will:

- Review statutory provisions that authorize and provide the foundation of an Integrated Water Resources Strategy.
- Provide an overview of the state’s current and future water resources (both surface water and ground water) and water needs (ecological, instream, and consumptive).
- Set forth overall objectives of the Integrated Water Resources Strategy, followed by water management and other strategies designed to achieve these objectives.
- Discuss the outreach to and roles for stakeholders, local governments, state and federal agencies, tribes, and other partners. Include the possibility of forming a Policy Advisory Committee for state agency partners, a Stakeholder Advisory Committee for federal agencies, other states, local governments, tribes, non-profits, and private organizations, and a Technical Advisory Committee.

- Describe the ratification process.
- Conclude with an analysis of Oregon's public policy priorities, options, and recommendations.

Examples of policy recommendations/action plans could include:

- Data Development – Oregon needs to continue gathering basic data regarding both the supply and need for water resources in order to quantify the extent of existing supplies and their capacity over time to meet future water needs. Data needs include climate change modeling, surface water and ground water monitoring, water-use measurement, determinations of basin yield and peak flows, and pilot projects that monitor, measure, and collect data necessary to quantify conservation and other water supply opportunities.
- Increased water conservation – One important component of water supply development comes from water conservation. An integrated water resources strategy could evaluate several types of conservation opportunities, including the development of a Best Management Practices Guide for municipal and agricultural water users, the implementation of a Water Efficiency Tax Credit, creation of an investment program at the Department to implement water conservation projects, and other policies and incentives to encourage demand reduction and increased efficiency.
- Water supply development - Investigate additional environmentally appropriate water supply strategies available for communities, including storage (both natural and active), reuse, water quality protection of drinking water sources, etc.

Volume II

Volume II will provide detailed information regarding the state's existing water supplies, as well as projected future water supplies and forecasted water demands in the municipal, industrial (including mining), domestic (including exempt uses), agricultural (including livestock), and electric power generation sectors, and ecological/instream needs. This information will be presented on a statewide and regional/basin-wide basis.

Vol II Chapter 1–Highlights

Oregon's Integrated Water Resources Strategy will provide information at the state and regional/basin-wide level. This Chapter will highlight basic statistics and primary conclusions.

Vol. II Chapter 2–Current Water Use: Regional/Basin Summaries

This chapter will examine the pattern of water use for each region and/or basin. Estimated total water use will be shown by region with water use separated into the following categories: municipal, industrial (including mining), domestic, agricultural (including livestock), electric power generation, and ecological/instream.

Vol. II Chapter 3–Water Demand Forecasts: Population, Land-Use, Agriculture, Climate Change

This chapter will provide a baseline 50-year forecast of Oregon’s water demand forecast, both statewide and on a regional/basin-wide basis. Using a variety of “scenarios,” this chapter will look at population projections, land-use changes, agricultural use, and climate change models. Forecasts of water demand will be divided into the following categories of use: municipal, industrial (including mining), domestic, agricultural (including livestock), electric power generation, and ecological/instream.

This chapter will also include a discussion of methodologies and assumptions used to arrive at the baseline demand forecast. This chapter could pose questions for future public discourse, asking for example, whether the above assumptions about water demands are fixed and immutable, or whether they could be altered through public policy and public education.

Vol II Chapter 4–Water Supplies: Surface Water and Ground Water

This chapter will estimate the amount of Oregon’s surface water and ground water supply on a statewide and regional basis. Estimates will be provided for a 50-year horizon, and will take into account:

- Potential reductions in existing reservoir storage capacity due to sedimentation and invasive species.
- Climate change modeling at the state and regional level, including assumptions about the disappearance of mid-level snow pack.
- Information about basin yield and peak flows, based on data collected from Oregon’s network of stream gages.

This chapter will also provide a basic accounting of surface water rights and ground water rights for these same water sources, demonstrating whether these sources have been fully allocated.

Surface Water Resources. This sub-chapter will provide historic background for Oregon’s major river basins, including maps, estimates of water availability (including basin yield and peak flows), descriptions of water quality, an assessment of the role and potential for reservoir sites, a description of surface water availability modeling, and other relevant water resource information. In addition, this subchapter will examine the history and role of basin planning/rulemaking in water resource management in Oregon.

Ground Water Resources. This sub-chapter will include baseline information on Oregon’s aquifers including ground water management, the state’s ground water monitoring and sampling programs, and water quality issues.

Conjunctive Management and Surface and Ground Water Resources. This sub-chapter will examine the hydrologic connection between surface and ground water resources in Oregon, including how the management of these resources has evolved over time.

Vol II Chapter 5-Water Resource Management in Oregon: Background

This chapter will present a comprehensive review of the development of surface water and ground water administration/regulation in Oregon.

This chapter will include an historical review of the Oregon Water Resources Department and its predecessor agencies. In addition, this review will include an examination of the prior appropriation doctrine, federal reserved water rights, and the statutory provisions and processes applicable to final adjudication of water rights in Oregon.

Vo. II Chapter 6-Water Resource Management Strategies

This chapter will examine a suite of water resource management strategies that Oregon communities might pursue now and into the future. Local success stories, if available, could help demonstrate the benefits of such strategies. Strategies could include:

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|---------------------------|--|
| 1) Conservation programs | 10) Adaptation to climate change |
| 2) Below-ground storage | 11) Intersection with the land-use system |
| 3) Above-ground storage | 12) Intersection with energy generation |
| 4) Water re-use projects | 13) Public outreach and education |
| 5) Pollution prevention | 14) Interstate partnerships |
| 6) Temperature management | 15) Examination and removal of public policy |
| 7) Storm water management | barriers (e.g., granting joint authorities, |
| 8) Flood management | reconciling conflicting rules, funding |
| 9) Drought management | community solutions, etc.) |

Vol II Chapter 7– Water Management Organizations in Oregon

This chapter will discuss the coordination and interplay of state, local, and federal entities whose jurisdictions influence water resource planning and management in Oregon. The chapter will identify and discuss specific interagency coordination efforts of particular importance. These efforts include planning, research, and project financing. In addition, this chapter will examine treaties (U.S./Tribal) and interstate compacts relevant to water resource planning in Oregon.

State. This subsection will discuss the specific role a number of state agencies could play in the development and implementation of Oregon's Integrated Water Resources Strategy, including possible participation in a Policy Advisory Committee. The agencies include, but are not limited to:

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|--|--|
| 1) Water Resources Department | 6) Department of Human Services |
| 2) Department of Environmental Quality | 7) Dept. of Economic & Community Dvlpmnt |
| 3) Department of Fish and Wildlife | 8) Dept. of Land Conservation and Devlpmnt |
| 4) Department of Agriculture | 9) Watershed Enhancement Board |
| 5) Department of Forestry | 10) Department of Parks and Recreation |

Local and Regional. This section will discuss the role a number of local and regional water entities play in the development and implementation of Oregon's Integrated Water Resources Strategy, including possible participation in a Stakeholder Advisory Committee. These organizations include, but are not limited to:

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|--|-----------------------------|
| 1) Counties | 6) Non-profit Organizations |
| 2) Cities | 7) Private Organizations |
| 3) Special Districts | 8) Other States |
| 4) Watershed Councils | 9) Tribes |
| 5) Soil and Water Conservation Districts | |

Federal. This subsection will provide an overview of federal water resource planning and regulatory agencies and authorities that influence state and regional water resource planning and project implementation. The following groups could participate in a Stakeholder Advisory Committee, or other formal advisory group.

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|---|--|
| 1) U.S. Army Corps of Engineers | 6) U.S. Geological Survey |
| 2) U.S. Bureau of Reclamation | 7) National Oceanic & Atmospheric Admin. |
| 3) U.S. Bureau of Land Management | 8) National Marine Fisheries Service |
| 4) U.S. Environmental Protection Agency | 9) Bureau of Indian Affairs |
| 5) U.S. Fish and Wildlife | 10) Bonneville Power Administration |

Vol. II Chapter 8–Glossary/Definitions. This volume will include data, technical explanations, modeling assumptions, and methodologies used to determine the projections described throughout Volume II.