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Integrated Water Resources Strategy Comments
November 1, 2009 – February 3, 2010

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Issue Paper Comments

Integrated Water Resources Strategy

Burnt River Irrigation District
Jerry Franke
November 19, 2009 (email)

I commend the four Water Resources Commissioners for taking the initiative to address the issue of an Integrated Water Resources Strategy.

I have studied the draft Issue Papers and am of the opinion it is a very good start. I think they addressed the diverse issues thoughtfully and in good detail. I am looking forward to the progression to item #8 Observations/Possible Next Steps.

Jerry Franke, Manager
Burnt River Irrigation District

Rachel Walker (Citizen)
November 19, 2009 (email)

First of all, thanks for presenting a paper that is well written and easy to read, so that it doesn't waste my time trying to figure out what you mean.

I really only wanted to give feedback that the issues paper will be a great first step for a non-beaurocrat that wants to participate in the IWS; for background material and to begin to get conversant with the lingo.

Thanks,
Rachel Walker

Oregon Cattlemen's Association - Water Resource Committee
Curtis Martin, Chair
November 24, 2009 (email)

Ms. Bateman,

Oregon Cattlemen's Association is very concerned with Oregon Water Resource Department's project titled "Oregon's Integrated Water Resource Strategy". We realize that Oregon's 75th Legislature passed HB 3369 authorizing IWRS, but in truth, we have existing strategy contained within Oregon's 1909 Water Code. Numerous times the Water Law of Oregon has been modified to reflect societal ideas of importance. As examples of policy change: minimum stream flows established, evolution of water storage and supply facilities, priority of multiple uses. The question for this IWRS further arises when consideration is given to ORS 536.300(2) that directs Oregon Water Resource Commission to "progressively formulate an integrated, coordinated program for the use and control of all the water resources of this state..." as contained within current law.

Also to address environmental concerns, our current Water Code has allowed the enactment of the Instream Water Rights Act. This for the direct benefit of aquatic species, as the Oregon Department of Fish and Wildlife has and continues to have direct involvement. Oregon's Department of Environmental Quality has an existing appropriate role by explicitly having the authority in regulating water quality issues in coordination with Water Resources Department. The current Water Code has allowed changes in use by market driven forces playing a substantially greater role in water allocation decisions. These are but a few of the examples of the ways the water law of Oregon has evolved.

In examining this current project's September 23, 2009 Briefer, it contains opposing statements within the paragraph entitled "What is a Statewide Integrated Water Resources Strategy". The fourth and fifth sentence: "The intention is not to overhaul Oregon water law as it relates to quantity and quality. Nor is the intention to lay out a plan that re-allocates water". The next sentence is diametrically opposed by stating: "If, during the process, statutory modifications are needed to achieve the objectives of the strategy, the Department will forward recommendations to the Legislature as part of its 2012 report". This is a DIRECT threat to current Oregon Water Law in existence for 100 years! Even more concern comes from this same 'Briefer' when there is only one Natural Resource group (Farm Bureau's Water Committee) listed as included with six governmental agencies, under the paragraph heading, "Recent Activity", August and September 2009. This lack of Resource user involvement is absolutely unacceptable.

At this time the Oregon Cattlemen's Association are requesting, at a minimum, two things. One, that there be more time (till June 30, 2010) for citizens to understand and comment on the draft IWRS Issue Paper, and the Preliminary 2009-2012 Work Plan. And two, if this project moves forward, that there be substantial resource organization representatives (OCA, Water for Life, Farm Bureau, Nursery, Agri-Business Council, to name a few) appointed to the Policy Advisory Group.

We appreciate this opportunity to comment.

Sincerely,

Curtis W. Martin, Oregon Cattlemen's Water Resource Committee Chair

Oregon Department of Forestry Comments on the Draft Oregon Integrated Water Resources Strategy Issue Papers

Introduction, Page 6, The Value of a Strategy: In the second sentence of the second paragraph add “social” to “economic and environmental.”

Water Quality, Page 15, Background Information: As already suggested by others, replace “hampered” in the second paragraph with “complicated.” In the third paragraph, third sentence, “water quality” should be “water quality standards.”

Water Quality, Page 17, Setting Water Quality Standards. Change the fourth sentence to read, “Standards also influence requirements for nonpoint source control. . . .”

Water Quality, Page 19, Key Challenges, Research, and Technical Questions: Please consider adding these additional bullets:

- Maintaining continued political and funding support for the Oregon Plan for Salmon and Watersheds and continued voluntary aquatic habitat and water quality restoration and enhancements actions by private landowners and watershed councils are needed.
- Research tells us that managing for the outcomes we expect from Oregon’s streams and rivers, including clean water and salmon habitat, will require acceptance of considerable variation in the structure, function and composition of the riparian environment in response to disturbance events. Dramatic changes in streams—including what we might consider degradation—are necessary and desirable over different temporal and spatial scales.
- Managers need to perpetuate the ecological processes—including disturbance dynamics—that contribute to desired habitat and water quality. A landscape level approach is needed. Fine scale, spatially explicit landscape analysis can identify strategic opportunities to restore or maintain important components of ecosystem processes—such as large wood—that interact with disturbance dynamics to create desired outcomes like salmon habitat.
- Management of aquatic ecosystems in response to climate change will need to mirror the management designed to perpetuate dynamic processes, including efforts to maintain stream flows, minimize floodplain and riparian diversions, and restore interactions between rivers and uplands.¹
- Understanding, acceptance, and support is needed across all land uses for relevant evaluations of water quality conditions based on beneficial uses, and the use of these evaluations to develop stream protection policies that result in consistent application of state water quality standards across land uses.

¹ Institute for Natural Resources. 2009a. Management of streams systems in an ecosystem dynamics framework. Recommendations from the February 17, 2009 seminar.
http://egov.oregon.gov/ODF/RESOURCE_PLANNING/docs/INR_Aquatics_White_Paper.pdf

- Continued long-term watershed research is needed to study the effectiveness of the most current forestry best management practices in providing protection for soil and water resources and promote the sharing and application of new knowledge.²
- The maintenance of forestland in forest uses and the promotion of the establishment of new forests are key elements in promoting high quality water.

Implications of Climate Change, Page 33 and elsewhere: Please consider adding the following concepts:

- The effects of climate change will be highly variable in Oregon. Some of the changes that occur will be the product of abrupt disturbance events, not gradual or linear changes.
- The effects of climate change on water delivery in Oregon will be mixed. Oregon’s “warm” snowpacks will most likely be among the first casualties of regional warming. Some areas of the state that have low summer stream flows are likely to see those flows occurring earlier in the year. Rivers sourced by spring flow from large volcanic aquifers will continue to have relatively high summer base flows.
- In general, the influence of the Pacific Ocean, the mid-latitude position of our state, and mountainous geography will probably result in less severe impacts from climate change relative to many other parts of the nation. This raises the possibility of significant environmental impacts from the indirect effect of climate-driven immigration of people. In-migration of large numbers of people will require a focus and emphasis on long-term land use planning. Managing people will be a critical part of managing climate change.
- Perpetuation over time of desired ecological processes, which involves maintenance of key components of these processes, such as fire adapted forest structures, large wood for streams, etc. could be promoted through the development of ecosystem services markets be developed to incentivize landowner action.³

Ecology and Ecosystems, Page 2: Change second paragraph to read: “Human activities such as land-use practices, competing demands for water resources, and pollution can have a significant and detrimental effect on Oregon’s ecosystems. Land management can also have positive effects, as demonstrated by the voluntary restoration accomplishments documented under the Oregon Plan for Salmon and Watersheds. Natural processes can also take their toll through droughts, floods, fires, and other events; however, the outcomes we expect from Oregon’s streams and rivers, including clean water and salmon habitat, will require acceptance of considerable variation in the structure, function and composition of the riparian environment in response to disturbance events. Dramatic changes in streams—including what we might consider degradation—are necessary and desirable over different temporal and spatial scales. . Climate change will continue to affect Oregon’s ecosystems as well, as indicated by increasingly sophisticated scientific models. This paper is not intended to cover all of the issues surrounding ecology and ecosystems in Oregon, but will focus on some of the significant challenges we can already anticipate.”

² Oregon Board of Forestry. 2003. Forestry Program for Oregon. Oregon Department of Forestry. Salem, Oregon. 76 pp. <http://egov.oregon.gov/ODF/BOARD/fpfo2003.shtml>

³ Institute for Natural Resources . 2009b. Managing for climate change in an ecosystem dynamics framework. Recommendations from the April 16, 2009 seminar. http://egov.oregon.gov/ODF/RESOURCE_PLANNING/docs/INR_Climate_Change_White_Paper.pdf

Ecology and Ecosystems, Page 4, Forest Lands: Please revise to read: “Oregon is comprised of 61 million acres of land. Nearly 50 percent of the state, or 30 million acres, is classified as forestland. Oregon today retains 92 percent of the forest cover that was present in 1850 and 98 percent of the non federal forestland present in 1974.⁴ Oregon’s forests help filter drinking water, provide habitat for diverse animal and plant species, supply oxygen, moderate temperatures and rainfall, and store atmospheric carbon. Healthy forests promote soils that provide natural filtration to keep streams clean and water quality high. Most of Oregon’s municipal water systems use water that originates from forestlands, including those managed for wood production.

“The quality of this source water is among the best in the nation. At the state scale, data collected between 1998 and 2007 indicate over 90 percent of the sampled sites on forestlands showed an Oregon Water Quality Index in good or excellent condition, and the remaining sites in fair or lower condition. Water quality was highest in the Willamette, Middle Columbia, and Lower Columbia hydrologic units. Overall water quality in the North Coast was intermediate compared to the other units. The South Coast showed the lowest overall water quality.

“Water quality is typically considered to be a major issue in several state hydrologic units, such as the Willamette. However, it is important to note these indicator results are reflective of conditions of forested lands only. Water quality was highest for generally higher elevation, higher stream gradient federal sites, with 97 percent in good or better conditions. State sites showed 89 percent in good or better conditions. Private industrial sites had 87 percent in good or better conditions. Private non-industrial sites, which are more likely to be intermixed with other land uses, had 77 percent in good or better conditions, and should perhaps be the highest priority for closer future study.⁵

Promoting the maintenance of forest land in forest uses and promoting the establishment of new forests can be key elements in promoting high quality water.”

Ecology and Ecosystems, Page 5, Water Quality: In the fifth sentence, revise the text to read, “These pressures on species and ecosystems will likely increase with the growth of Oregon’s population and climate change impacts—with riparian habitat and upland health directly driving the water quality issues of shade, nutrient filtration, and sediment trapping.”

Ecology and Ecosystems, Page 7, The Potential Consequences of Neglecting Ecological Considerations: Please consider adding the following text:

⁴ Oregon Department of Forestry. 2009 Oregon Indicator of Sustainable Forest Management C.a.: Area of non-federal forestland and development trends.

<http://www.oregon.gov/ODF/indicators/indicatorCa.shtml>

⁵ Hubler, S., S. Miller, L. Merrick, R. Leferink, A. Borisenko. 2009. *High Level Indicators of Oregon's Forested Streams*. Oregon Department of Environmental Quality, Laboratory and Environmental Assessment Division, Hillsboro, Oregon. 77 p.

http://www.oregon.gov/ODF/indicators/docs/High_Level_Indicators_DEQ09_LAB_0041_TR.pdf

“There is little appreciation among policy makers or the public that stream systems change dramatically. All streams are not ‘pristine’ at all times and departures from ‘pristine’ conditions such as landslides, muddy waters, etc., are actually an integral element of the landscape-scale processes that help create the conditions we associate with ‘pristine’ streams. Although managers strive to ‘protect’ streams for salmon, salmon are in fact highly adapted to dramatic changes to stream systems, as evidenced by straying of adults, high fecundity, and the mobility of juveniles.

“Managing for a range of conditions and ecological processes through time and space will require acceptance of dramatic changes to the structure, function and composition of the riparian environment. This type of management may present significant challenges to prevailing systems of land tenure. New terminology and concepts are needed to capture the intent of management that emphasizes processes, and changes in management practices will be required to achieve many desired outcomes.”⁶

Ecology and Ecosystems, Page 8, Salmon Protection and Retoration: Please add the following text:

“The Oregon Forest Practices Act became law in 1971 and was the first state forest practices act in the nation to regulate commercial forest operations on non-federal forestlands. Both the statutes and the administrative rules for the Act have evolved over time and today provide a comprehensive set of regulations designed to encourage the sound management of soil, air, water, fish, and wildlife resources. Some of the topics addressed by the Oregon forest practice rules include reforestation, forest chemicals, road construction and maintenance, harvesting, sensitive resource site protection and water protection. The purpose of the water protection rules is to protect, maintain and, where appropriate, improve the functions and values of streams, lakes, wetlands, and riparian management areas. Active management is encouraged where appropriate to meet this purpose. These functions and values include water quality, hydrologic functions, the growing and harvesting of trees, and fish and wildlife resources.⁷ Voluntary compliance by private forest landowners with the Forest Practices Act remains very high and water quality on forestlands is the highest of all Oregon land uses.”⁸

Ecology and Ecosystems, Page 11, Footnote #2: Please note that the Conservation Reserve Enhance Program currently provides a perverse incentive in that landowners who have maintained intact riparian vegetation, particularly forest landowners regulated by the Oregon Forest Practices Act are ineligible for CREP funds. Landowners who have totally removed riparian vegetation in the past receive the maximum CREP benefits when this vegetation is restored. Incentive programs should be designed so that “early adopters” are not penalized.

⁶ Institute for Natural Resources. 2009a. Management of streams systems in an ecosystem dynamics framework. Recommendations from the February 17, 2009 seminar. http://egov.oregon.gov/ODF/RESOURCE_PLANNING/docs/INR_Aquatics_White_Paper.pdf

⁷ OAR 629-635-0100 (3)

⁸ Cude, C. (Undated). "The Oregon Water Quality Index (OWQI) - A Communicator of Water Quality Information". Oregon Department of Environmental Quality. Portland, Oregon. 6 p. http://www.oregon.gov/ODF/indicators/docs/OWQI_Communicator.pdf



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January 7, 2010

Brenda Bateman
Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301 - 1266

Re: Comments on the draft Integrated Water Resources Strategy issue papers

Dear Ms Bateman,

Thank you for the opportunity to comment on the draft issue papers that will serve as a starting point for the Integrated Water Resources Strategy. These papers serve as a good start at describing the relationship between the issues affecting Oregon's water resources. We suggest several areas for improvement.

1. Introduction

The Value of a Strategy

There is a sentence in this section that reads, "Oregon's ecological needs come from the fish and wildlife..." This is an awkwardly worded sentence. The state's ecological needs do not "come from" fish and wildlife. Fish and wildlife are part of the natural ecosystems upon which human life depends. These ecological systems provide benefits that humans cannot easily replicate, commonly referred to as "ecological services."

Building on a Foundation of Data

Why is there no mention in this section of the information that was gathered in the Water Roundtables? The inventory of potential conservation programs includes already planned conservation programs, but it does not capture the full potential or need for conservation programs.

Developing a Strategy through Collaboration

The last sentence uses the loaded term "special interest groups," which often has negative connotations. Stakeholders might be a better term.

Conclusion

We agree that a successful strategy will include a vision of what Oregon's water resources will be like for future generations. Note that the draft issue paper describes this as a "visualization of what Oregon's water and landscape *should* look like and be like"(emphasis added). Use of the word "should" implies that this vision involves making some subjective choices. We believe that in addition to having a vision, a starting point, clear and compelling goals, and implementation tools, the strategy should also have triggers or benchmarks. Triggers or benchmarks will allow us to monitor our progress toward reaching our goals. If certain triggers or benchmarks are not met, we will know that the state is getting off track and additional actions will need to be taken if we are to reach our goals.

2. Water Quantity

Background Information

Just as the Water Quality paper describes the institutional structures regulating water quality in Oregon, this section should include a brief overview of water rights law and management in Oregon, including beneficial uses, prior appropriation, junior and senior water rights, etc. This section should also include some basic data about how water is used in Oregon (e.g., irrigated agriculture accounts for 85% of statewide demand).

This section describes demand forecasts from the Statewide Water Needs Assessment (September 2008). That assessment actually provides multiple future scenarios, including a conservation scenario and a climate change scenario, not just the one set of numbers cited here. It should not be assumed that the future scenario based on continuation of existing water uses is the most likely scenario. In several Oregon municipalities, current water demand is actually much lower than what they projected several years ago. Demand forecasts should not be treated as numbers written in stone, and it is critical to consider the assumptions those forecasts are based upon and whether those assumptions might actually change.

While in-stream water rights exist in many basins, it is incorrect to assume that those water rights are usually met and that the in-stream flows are actually protected. In fact, many in-stream water rights are routinely not met.

Figure 2, the map showing “available streamflow” in January does not take into account any consideration of in-stream needs for peak flows and ecological flows. It may not be scientifically accurate to assume that all that water is “available” for out of stream uses.

Key Challenges, Research and Technical Questions

The first bullet states that the WRD would like to conduct a basin yield analysis to understand “how much surface water each basin yields and how much is available for allocation and storage.” This assessment would also need to include a better understanding of how much needs to stay in the river at different times of the year.

Additional key challenges include:

- Lack of measurement of many water withdrawals limits our ability to understand how much water is actually being used and to accurately forecast demands.
- The number of exempt use wells is increasing in the state, and we lack data to understand how these wells are impacting groundwater availability and connected surface waters.

Conclusions and Next Steps

In some cases, opportunities for new groundwater uses are also limited by water quality conditions. Referring to the water quality issue paper here would improve integration of the issue papers.

3. Water Quality

The first paragraph states that there are frequent conflicts in the management of water quality and quantity. There are not only conflicts, but also intersections, overlaps, and opportunities for improved coordination.

Background Information

The second paragraph mentions that protecting greater quantities of water instream can make it easier to meet water quality requirements. This connection may not be obvious to readers. It would be helpful to explain that diluting pollution with higher stream flows makes it easier to meet water quality standards and, conversely, low stream flows result in more concentrated pollutants which makes it difficult to meet water quality standards.

Institutional Structures. Explain the difference between the Clean Water Act and The Safe Drinking Water Act – one is for surface water and the other is for drinking water, including groundwater.

Land use management resides with local planners and also with the state Department of Land Conservation and Development.

Beneficial uses of water. The water quality paper explains that this term is used differently in regards to water quality and water quantity. The water quantity paper should explain what beneficial use means in that context.

Surface water. This section should include some basic statistics on the number of stream miles that are impaired, data from the Oregon Water Quality Index on streams that are improving/declining, and the pollutants that most commonly cause impairment in Oregon. One of the most common impairments in Oregon is temperatures that are too high for native fish species. High water temperatures are closely influenced by water flows and quantity.

Groundwater. This section would benefit from a map of Groundwater Management Areas. In addition, explain why nitrate contamination of groundwater is a concern (e.g., blue baby syndrome).

The potential consequences of neglecting water quality in planning

The first paragraph states that the “the solution to pollution is dilution” technique is “falling out of favor”. Additional explanation would be helpful – this is not something that falls out of favor like a fashion trend. It is due to a greater understanding of the impacts of pollution, the fact that many pollutants have effects even at low levels and that they can accumulate over time. Dilution does not actually reduce pollution or prevent exposure to pollutants.

Additional results of neglecting water quality in the process of planning include:

- Endangered aquatic species, including the iconic salmon.
- Health advisories and fish consumption advisories. When surface waters are unsafe to swim in and fish and shellfish are unsafe to consume, the state Department of Human Services issues advisories to warn the public. Include a map or other statistics on the number and location of advisories in Oregon.

The Benefits of Integrating Water Quality and Water Quantity Planning

Your description of pharmaceuticals in wastewater is misleading because it says they “require” very expensive treatment processes. In fact, because there are no water quality standards for most pharmaceuticals, no treatment of them is currently required. They are released into rivers and streams with no treatment.

Key Challenges, Research, and Technical Questions

We suggest an additional bullet:

Synergistic effects of multiple contaminants and their effects on human and aquatic life are poorly understood.

Conclusion

Beef this up a little. How does water quality relate to developing an integrated water resources strategy? Next steps?

4. Ecology and Ecosystems

Introduction. This paper focuses on issues related to water and Oregon’s ecology and ecosystems – the focus on water should be made clear in the introduction.

The descriptions of Oregon’s eight ecoregions are inconsistent. Some focus on aquatic ecosystems, others focus on terrestrial ecosystems; some describe economic activities and others do not.

Forest Lands. Healthy forests keep streams clean and also *cool* – which is increasingly important for native fish.

Water Quality. EPA didn’t assess Oregon’s rivers, DEQ did.

Fish and Wildlife. For the purposes of this paper, it may work better to use the term “indicator species” than “keystone species.” It can be difficult for ecologists to determine which species are actually keystone species, and in this paper you are primarily describing how species can be indicators of overall ecosystem health.

The Oregon Plan for Salmon and Watersheds. We suggest you add to the last sentence the fact that these efforts are funded primarily by lottery dollars administered by the Oregon Watershed Enhancement Board.

Adequate Instream Protection. As you describe in the following sentences, 1,400 stream reaches in Oregon *have* in-stream water rights. That doesn’t necessarily mean they are “protected” because those in-stream rights sometimes aren’t met.

5. Economy

Background Information

In the paragraph on food processors, include data on the amount of water food processors use in Oregon annually.

Water and Recreation and Tourism. Describe what a “boat-use day” is along with the statistic. The last bullet says rivers are a clear favorite, primarily due to the accessibility of the Columbia and Willamette Rivers. This statement would be more useful with data to back it up. Many other Oregon rivers are also highly popular for recreation.

This section mentions sportfishing. There needs to be another section for commercial fishing and shellfish harvesting, which are inexplicably absent from this issue paper.

Water and Municipal Use. The connections between water and land use are barely addressed in these issue papers. Land use could have an issue paper of its own, but at the very least land use should be better integrated into the existing issue papers. This section on water and municipal use touches on some aspects of land use. However, one of the most controversial current water-land use issues relates to exempt wells and development that takes place

primarily in unincorporated areas. Another point that needs to be included in this paper is the fact that having a water right can substantially increase the value of land, a direct relationship between water and economy that is one of the reasons why property owners fear limitations on their water rights.

Water and Manufacturing. Include information about ports and the use of waterways for shipping. The last paragraph should mention that the 2009 Oregon Business Plan noted the importance of water to business in Oregon and included a set of recommendations regarding water management.

Water and Energy. Energy is required not only to divert and distribute water, but also to treat it for drinking and to treat wastewater before releasing it to streams. In the sentence about renewable resources, biofuels are another source of energy that could be significant in Oregon and requires water for production.

6. Social Issues

The section on water and tribes explains that tribal diets are heavily dependent on fish consumption. Additional detail should be added, explaining that in order to recognize the higher levels of fish consumption by tribal peoples, the fish consumption rate used to develop water quality standards in Oregon was recently increased tenfold. This will have broad impacts on water quality permits throughout Oregon.

We appreciate that this paper acknowledges the difference between “needs” and “demands.”

Key Challenges, Research, and Technical Questions

Regarding the bullet about land use planning, coordination should take place not just when conflicts occur, but earlier on in the planning process in order to reduce conflicts.

7. Implications of Climate Change

Regarding rainfall patterns, predictions of the impact of climate change on precipitation are less certain than temperature predictions. The primary conclusion climate change scientists draw about precipitation is that we can expect greater variability and more extreme events, but we don't know if we will have more or less rainfall on average.

There are two other important consequences of climate change:

- Increased water demand. Water demand is typically higher when temperatures are higher, both for agricultural and municipal uses.
- Climate immigration. Oregon's mild climate and water availability will likely be more favorable than that of many other states in a warmer global climate. Climate-caused immigration could increase population growth.

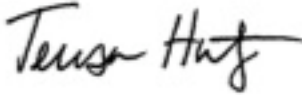
Key Challenges, Research, and Technical Questions

Research and Technical Questions. While we do need more research and modeling to project climate change impacts in Oregon, we will never have enough research to be certain about the future. What we do know is that we must expect and plan for uncertainty and flexibility.

Water Management. We need to understand what adjustments to our water management system could help the state's people, economy and ecology adapt to climate change.

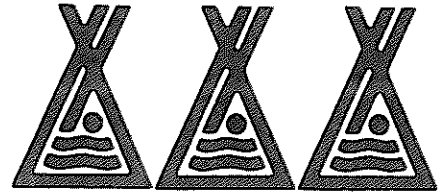
I would be happy to answer any questions you may have about these recommendations. You can reach me at 503-222-1963 x112 or teresah@oeconline.org.

Sincerely,

A handwritten signature in black ink that reads "Teresa Hunt". The signature is written in a cursive, flowing style.

Teresa Huntsinger
Program Director, Clean & Healthy Rivers

THE CONFEDERATED TRIBES OF THE WARM SPRINGS RESERVATION OF OREGON



P.O. Box C, Warm Springs, Oregon 97761

January 21, 2010

Ms. Mary Meloy
Oregon Water Resource Planning Committee
North Mall Office
725 Summer Street, NE Suite A
Salem, OR 97301-1271

Re: Comments on the Oregon Integrated Water Resources Strategy Issue Papers

Dear Ms. Meloy:

This letter is to provide initial comments from the Confederated Tribes of the Warm Springs Reservation of Oregon (“CTWS” or “Tribe”) on the Oregon Integrated Water Resources Strategy Issue Papers, dated September 10, 2009 and November 19, 2009. The Tribe is pleased that the State is engaging in an integrated planning effort and believes that the issue papers provide a good starting point for further discussion.

A. Background

The Tribe, as the legal and political successor in interest to the seven tribes and bands that were signatories to the Treaty with the Tribes of Middle Oregon of June 25, 1855, 12 Stat. 963 (“Treaty of 1855”), retained important off-reservation rights along the Columbia River and throughout the states of Oregon, Idaho and Washington. In addition, the Warm Springs Reservation is located within the Deschutes basin and borders both the Metolius and Deschutes Rivers.

Water is a central element to the Tribe and is vital to the Tribe’s economic and cultural future, and the Tribe takes an active management interest and role in water quality and quantity. Indeed, the 1855 Treaty describes a 10 million acre area of eastern Oregon ceded by the Tribe to the United States and contains an express reservation by the Tribe to the “exclusive right of taking fish in the streams running through and bordering [the Warm Springs Reservation] and at all other usual and accustomed stations, in common with citizens of the United States.” Streams running through and bordering the Warm Springs Reservation, where the Tribe has exclusive fishing rights, include the Deschutes, Metolius, and Warm Springs River systems. Streams within the ceded area where the Tribe has off-reservation rights at usual and accustomed fishing stations include the Columbia, John Day River, Fifteenmile Creek and Hood River. Additionally, the Tribe has off-reservation rights at usual and accustomed stations on streams

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outside of the ceded area, including, but not limited to, certain areas of the Willamette river, Clackamas river, Wychus Creek, White River, and McKenzie river.

The Tribe also holds a significant federal reserved water right. In 1997, the Tribe, the State and the United States entered into Confederated Tribes of the Warm Spring Reservation Water Rights Settlement Agreement (“1997 Agreement”) to determine fully and forever the scope and attributes of the Tribe’s reserved water right secured by its 1855 Treaty. This reserved water right can be considered a reservoir—or reserve—of water for both anticipated and unanticipated future demands from the middle Deschutes to the Columbia tidewater. The parties to the 1997 Agreement also agreed, based in part on their recognition as separate sovereigns, to continue cooperative efforts to efficiently manage water quality and quantity and other aquatic resources within the Deschutes Basin. The parties subsequently entered into a Memorandum of Understanding, dated April 1, 2002, to further define those cooperative efforts.

The Tribe has long been committed to improvement of water quality and quantity within these resources and has focused significant resources and attention on the Deschutes Basin, John Day, Hood River and Columbia River operations.

The Tribe is a member of the Columbia River Intertribal Fish Commission, maintains traditional fishery sites along the Columbia River, and has been a longtime participant in discussions and efforts related to the hydropower system operation as it is related to Columbia River fisheries. In the John Day system, the Tribe owns and manages the Pine Creek Conservation Area, the Oxbow Conservation Area and the Forrest Conservation area lands with conservation easements and operation funding from Bonneville Power Administration. These properties are managed specifically for fish and wildlife habitat protection and enhancement, including water quality and quantity issues. The Tribe is also a co-manager with the Oregon Department of Fish and Wildlife of the Hood River and operates a hatchery near the Tribe’s Parkdale office.

The Tribe helped to found the Deschutes River Conservancy and has worked diligently with irrigation districts, federal and local agencies, private landowners, and a host of others to make real progress toward the improvement of water quantity and quality and watershed health in the Deschutes Basin. The Tribe is part owner of the Pelton Project and with its partner PGE have committed \$10 million to watershed restoration and over \$100 million to fish passage efforts.

The Deschutes Basin stakeholders have a history of collaboration and cooperation that can help serve as an example to address the very real water issue challenges facing the State. Similarly, recent negotiations pertaining to the Fish Accords can also provide some important lessons and guidance on integrated resource strategies.

B. Overarching Obstacle to Meeting Current and Future Water Needs

The biggest obstacle to an expeditious, cost effective resolution of water issues is the overlapping but disjointed nature of the regulatory policies and agencies, fiscal policies and voluntary efforts. Each of the numerous stakeholders must deal with the particular legal mandates applying to it which could include the Clean Water Act, Endangered Species Act, Wild and Scenic Rivers Act, State Scenic Waterways Act, groundwater mitigation rules, Bureau of Reclamation project authorizations and a host of others that are largely uncoordinated, sometimes conflicting, and often ambiguous or uncertain in their requirements. At the same time, there are numerous voluntary efforts to improve various aspects of water quality or quantity. While the issue papers recognize this issue and that a collaborative effort is necessary, it is critical that all of the regulatory schemes are identified and that the stakeholders are included.

C. Need for an Integrated Strategy

An integrated water resources strategy is needed to achieve long-lasting, cost effective and adaptive solutions. Regulation tends to force narrowly defined regulatory responses to protect particularized stakeholder interests. In the process of one stakeholder addressing one regulation, unintended risks can be increased with respect to another stakeholder in the region. For example, the Pelton Project FERC license requirement to reintroduce threatened steelhead above the Round Butte dam has caused Deschutes Basin irrigation districts to address ESA regulations in their operations which response may, in turn, impact the ability of municipalities or rural development to obtain water for growing residential, commercial or industrial needs. The cascading impacts of water resource management decisions should come as no surprise given the essential role water quantity and quality play in our environment and culture.

The issue papers describe the value of the integrated strategy as providing a “blueprint” for the state to follow in meeting Oregon’s water needs now and into the future. It is critical to elevate or emphasize a few considerations implicit in this statement:

Future generations. It is very important to the Tribe to consider and plan for the needs of future generations in decisions made today. This needs to be an explicit goal of the integrated strategy.

Adaptability. Assuming a multi-generational intent of the integrated strategy and the uncertain implications of climate change, it is essential that the strategy build in mechanisms that will allow for the state’s management to adapt to changing circumstances.

All beneficial uses. The strategy must recognize the legitimate needs of all beneficial uses of water resources, or the strategy will not have short term or long term success. In addition to the proprietary/economic and environmental interests in water, cultural and

social interests must also be expressly recognized and all stakeholders invited to work collaboratively.

An overarching objective must be identified for the initiative through a simple statement that recognizes the need to meet the needs of beneficial uses now and in the long term—*e.g., restore, improve and maintain water quantity and quality in the State of Oregon for all beneficial uses, including but not limited to instream flows, fish and wildlife habitat, healthy forest and range, traditional plants, agriculture, recreation, and urban and rural communities through collaborative, adaptive and long-term management efforts.*

These management efforts need to be tested against their ability to produce certain desired attributes which would be by nature cross-jurisdictional—*e.g., among others, cost-effectiveness, equity, timeliness, minimum disruption, collaboration, certainty, and adaptability.*

D. Watershed Management, Climate Change, and Improved Data

An integrated resource management effort necessarily needs to emphasize coordinating management efforts within the watershed and improved data collection. The ecology and ecosystem issue paper recognizes how the ability of a watershed to host certain habitat structures and functions directly influences water quality and quantity. The Tribe is already witnessing shifts in some of its forested, range and wetland vegetation that can be attributed to changes in climate conditions. Further, current forest conditions throughout the state of Oregon are at high risk for catastrophic wildfire events that can dramatically impact water quality and quantity. Improved data regarding the impacts of land use decisions or management efforts on surface and groundwater quantity and quality is critical to better evaluate the potential benefits or impacts of land use or management decisions. Further, because the impacts of climate change are not fully understood or yet manifested, improved data will help us evaluate the existence of and magnitude of the impacts of climate change and the actions required to remedy, mitigate and/or adapt to those changes.

E. Ensuring a Comprehensive Approach—Basin by Basin Approach

The consideration of water resource issues in separate discussion areas—such as water quantity and water quality (which deal with the condition and regulation of water), ecology, economy, and societal (which address certain stakeholder groups) and climate change (which is an influencing factor on all)—may provide a useful starting point for the process; however, many beneficial uses can be categorized in multiple stakeholder categories. For example, the Tribe's goal of ensuring sustainable harvestable fisheries fits into ecology, economy, and societal. Accordingly, it is important to separately focus on the beneficial uses themselves and, from there, identify the water quality and quantity goals for that use, the stakeholders as well as the regulatory and voluntary efforts that influence meeting the needs of those uses. Identifying the

commonality of interests between stakeholders, who are the linchpin to the implementation of the strategy, can help facilitate cost effective and long term solutions.

Understanding that the issue papers represent a starting point, the issue papers omit or understate the importance of numerous stakeholders and managers of water. For example, irrigation districts, who are responsible for seasonal water diversion and use, directly impact both the quantity and quality of water at various times of the year. Similarly, vast amounts of the state land base and numerous water impoundment facilities are federally owned and managed. Federal land and reclamation managers need to be included as critical stakeholders in this process.

To ensure a comprehensive approach and functional result, it will be necessary to examine the unique attributes of each of the state's major water basins. Indeed, while certain approaches and concepts undertaken in one basin may be able to be applied as a statewide policy, there is a very real possibility that water management strategies may need to vary basin by basin.

Deschutes Basin

The Tribe has for many years taken a leadership role in trying to manage and improve water quality and quantity in an integrated manner, particularly in the Deschutes basin. The Tribe has multiple direct interests in water quality and quantity in this basin, including as a domestic water source, fisheries, hydropower, habitat for traditional plants and wildlife and other cultural and spiritual purposes.

Due in part to the Tribe's efforts, the Deschutes River Conservancy ("DRC") was formed. The DRC has worked collaboratively with stakeholders to return water back instream and, in doing so, to improve both the water quantity and quality of Deschutes basin streams. The DRC's mission is to restore streamflow and improve water quality in the Deschutes basin. Its formation and ongoing operation is based on several important principles: 1) sound science, 2) broad stakeholder participation, 3) consensus, 4) adaptive management and 5) use of market-based incentives to entice new directions. These principles have led to a highly effective organization achieving tangible success in fulfilling its mission.

As the DRC's work progresses, however, it is becoming more evident that the issues that need to be addressed to continue to maintain, improve and restore water quantity and quality are increasing complex. For example, addressing the storage, release and/or reallocation of water in the several subbasins will be necessary to ensure instream, quality flows for fisheries and other beneficial uses during different times of the year. The Deschutes River is managed by the DRC in three separate segments: lower, middle and upper.

The lower Deschutes, from Lake Billy Chinook to the Columbia River, is heavily influenced by groundwater recharge flows, and instream flows along with water quality are generally very

good year around. However, historic user conflicts in this stretch of the river in the past led to significant degradation of the resource. Through lengthy litigation and subsequent settlement efforts, management of the Lower Deschutes is guided by a single management plan with a multi-stakeholder management group. This now collaborative management of the Lower Deschutes, is resulting in dramatic improvements to the resource. This model should be studied as a management tool to be encouraged in the integrated strategy.

The upper Deschutes reaches from Wikiup reservoir to the City of Bend and is characterized by extremes—low flows in the winter that impact water quality and fishery habitat and high flows in the summer that induce streambank erosion and associated water quality concerns. The middle Deschutes reaches from the City of Bend to Lake Billy Chinook and suffers from extremely low summer flows and associated warm temperatures that adversely impact resident species such as redband trout as well as some habitat for threatened steelhead. Changes in irrigation district storage and release operations can moderate these extremes and improve water quantity and quality, but doing so will require involvement by many stakeholders to address complex legal, regulatory and policy issues.

The Metolius River has several layers of instream protections, including a 1997 Water Right Settlement between the State of Oregon and the Tribe that protects instream flows for the Deschutes and Metolius rivers. However, the Metolius tributaries—which are essential to the success of reintroduction efforts required by the Pelton Project and important for tribal management goals—do not. Protection of the Tribe’s water rights in the Metolius and fishery habitat in the Metolius mainstem as well as in its tributaries is of paramount importance to the Tribe. Modeling work done by the Tribe indicated the potential for significant impacts on important tributaries if major land use development took place in the basin. The establishment of the Metolius Basin Area of Critical State Concern (“Metolius ACSC”) by HB 3298 which prohibited such large scale development was in large part a reaction to the several uncoordinated management “silos” of the federal, state, tribal and local agencies. Indeed, establishment of an ACSC is premised on the existence of a gap in existing regulatory efforts. Establishment of the Metolius ACSC was highly controversial; accordingly, examining the factors that led to the designation may help to identify how to better coordinate or bolster existing management efforts and avoid future controversies.

The Deschutes basin, through the Deschutes Water Alliance and the Deschutes River Conservancy, also manages a ground water mitigation banking program. This program, facilitated by state statutes, has been successful through its years of implementation. It protects irrigation district flows, ensures surface water mitigation for groundwater withdrawals, and provides a mechanism to facilitate water needs of municipal, industrial, and rural water users. As with any program, further refinement of the mitigation impacts may be warranted as more data is collected and the groundwater-surface water interactions are better understood; however,

an integrated resources strategy should encourage the development of mitigation programs that can provide a win-win for a basin's stakeholders.

In the Deschutes basin, investment from economic development has been instrumental in the basin's restoration efforts. As noted above, the mitigation bank provides one mechanism to address the impacts of a development; however, the DRC bank is also managed for flow restoration. Water right holders can lease their rights instream as a beneficial use, and in doing so, protect their water rights while benefitting water quality and quantity. Further, voluntary restoration efforts by major property owners and managers are in some cases made possible by the investments made possible through economic uses of their lands. Last, the Pelton Project, long viewed as an obstruction to fisheries in the Deschutes basin, is now a major catalyst for fish reintroduction and habitat restoration funding. In other words, economic development need not only be viewed as a stakeholder group that has certain water needs, but should also be viewed as creating partnership opportunities for restoration efforts.

Data/Modeling Needs

As noted above, sound science is key to a successful water management strategy. Too often seen as an unaffordable expense, the better understanding of water quality and quantity interactions that comes from increased reliable and accepted data should be viewed as an investment in creating opportunities for cost-effective management efforts.

MODSIM Model. The Tribe has funded development of a surface water model of the Deschutes basin. The model is a tool which can be used to quantify the effects of different water use scenarios within the basin. The Tribe intends to use the model to protect and conserve its water resources obtained in the 1997 Settlement Agreement but it can be used to benefit other stakeholder interests. Model development has been pursued with assistance and guidance from the Oregon Department of Water Resources ("OWRD"), the U.S. Bureau of Reclamation ("USBR"), and the U.S. Geological Survey ("USGS"), under the leadership of the Tribes. The model is currently under revision based on comments obtained from USGS, USBR, and OWRD.

The USGS completed a groundwater study that established that there is a direct hydrologic connection between the groundwater in the upper basin and stream flows in the lower Deschutes River where it adjoins the Warm Springs Reservation. This fact, in conjunction with the complexity of water diversions for both agricultural and municipal uses, makes quantification of the effects of any potential changes to water use in the upper basin upon the Tribe's water resources extremely difficult. The Tribe's MODSIM model is a tool that can evaluate the effects of water use scenarios upon both the Tribe and other basin stakeholders.

For example, current efforts are being undertaken within the basin to distribute unallocated water in Prineville Reservoir, and the Tribe must evaluate the effects upon their water rights and hydropower interests, as well as upon vital fisheries within the basin. The reach of the Crooked

River between Prineville Reservoir and the confluence with the Deschutes is one of groundwater influx, and is also of importance to anadromous fisheries. The reintroduction of steelhead into the Crooked River will make accurate evaluation of the effects of storage distribution of even greater importance.

Similarly, the effects of proposed groundwater pumping upon surface waters can be evaluated using the basin model. Scenarios describing future water availability under scenarios of climate change and climate variability can also be evaluated using the basin model. These scenarios can be evaluated not only in terms of the Tribe's interests, but all basin water uses from agricultural to instream flows.

The model, while in an operational status, requires additional work to be able to evaluate the full suite of scenarios listed above. For example, the level of refinement of return flow locations and diversions within the Crooked River below Prineville Reservoir must be increased. This will allow stakeholders to properly quantify the effects of alterations of water use throughout the basin and within the Crooked River basin upon fisheries below Prineville Reservoir. The model can also be improved by refinement in Tumalo and Whychus Creeks. Finally, complete review from the U.S. Bureau of Reclamation—the operator of many basin reservoirs and water supply projects—will allow the model to gain more complete stakeholder acceptance.

Climate Change. The effects of climate change on a localized basis is not well understood. Numerous studies have documented significant changes in climate and hydrologic variables in the Pacific Northwest over the past half-century. Increases in temperature have occurred throughout Oregon and Washington resulting in an earlier onset of spring snowmelt in many streams in the Pacific Northwest. This region does not show significant or consistent trends in total precipitation, but more of the precipitation is falling as rain rather than snow. With both earlier snowmelt and less total snow, concerns are increasingly raised that snowpacks in the Pacific Northwest will continue to decrease in the coming decades. This trend could substantially modify the timing and quantity of river discharge. Projected climate changes or continuation of current trends of earlier snowmelt could have significant implications for water resource management, including hydropower production, in the Columbia River Basin.

Studies using downscaled Global Climate Model (“GCM”) projections and large-scale hydrologic models in the Columbia River Basin predict increased competition for reservoir storage, future difficulties meeting both hydroelectric and in-stream flow demands, and likely decrease in overall hydropower production. These trends are predicted for the Columbia River as a whole, but this regional-scale river system is an aggregation of a number of smaller basins, each with its own hydrologic signal and different response to climate change. Exploring the climate impacts at the entire Columbia River scale may wash out or obscure the local effects of climate change, effects that have significant impacts to individual basin stakeholders.

The effects of climate change on river flow and hydropower production have been examined in detail at regional scales using down-scaled GCM climate projections and large-scale hydrologic models. Although these approaches are useful for discerning regional trends, discrepancies in scale between climate model projections and river basin processes still pose significant challenges to predicting future flow regimes in many basins.

Advances have been made in techniques for downscaling GCM output, but the finer the scale of interest, the more difficult the task of downscaling. For basins smaller than the Columbia or for subbasins of the Columbia such as the Deschutes basin, additional work in downscaling GCM output is needed to be able to represent the hydrologic process behavior, and the integrated water resources management strategy should prioritize funding for such efforts.

For additional modeling efforts in the Deschutes basin, it is important to recognize that surface water diversions, irrigation return flows, groundwater pumping, reservoir operations, and other water uses all affect river discharge. These water uses respond to climate variability, but they also directly impact the availability of flow in a river. Projections of climate change impacts must therefore account for the inter-relationship between climate, hydrologic response, and water management. Water management and water uses will adaptively respond to a wide range of social, economic, environmental, and climate changes. Understanding climate impacts on river discharge must therefore consider how the climate-induced changes could feedback with other uses of the water resources. Accordingly, a comprehensive understanding of the effects of climate change upon water resources within the Deschutes basin requires combining two modeling efforts. The first is the development of a methodology for developing future climate scenarios independent of historic conditions and appropriate to meso-scale basins. The second is to use this methodology in conjunction with the surface water model developed by the Tribes to account for the relationship between flow availability and water management.

Cultural Resources

It is important to recognize that most tribes, including the CTWS, view “cultural resources” as inclusive of all of its traditional culture and the resources that sustained that culture. It is not limited to historic and archeological sites or even to the tribe’s ceremonies and traditions. Rather, it is inclusive of the native fish, wildlife, trees and plants, the habitat and watershed that sustain those, and the water, itself. Water is sacred to the CTWS as it is the basis for all life. Too often, statewide planning goal 5 and other state statutes, result in more narrowly tailored regulatory protections. This effort should closely consider the opportunity that cultural resource protections can play in assisting in an integrated water quality and quantity management strategy.

F. Conclusion

Ms. Mary Meloy
January 6, 2010
Page 10

As identified in the issue papers, the State contains numerous river systems and basins with distinct hydrological, geological, ecological, and cultural characteristics. It is no small challenge to develop a single integrated strategy that can be applied in the different basins. However, it appears that the State has identified in the issue papers the ingredients necessary for creating a successful strategy. In light of the central role that water plays in the Tribe's culture and management, the Tribe's extensive direct management efforts throughout the State and the likelihood that this strategy can directly impact these interests and efforts, the Tribe requests that it be identified as a key stakeholder in the process and included on both policy and technical advisory committees associated with the development of the strategy.

Best Regards,



Charles R. Calica, Secretary/Treasurer-CEO
Confederated Tribes of Warm Springs

Brenda Bateman
Senior Policy Coordinator
Water Resources Department
725 Summer St. NE, Suite "A"
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Re: Comments and Recommendations on Draft Preliminary Work Plan and Issue Papers for Oregon's Integrated Water Resources Strategy

Dear Ms. Bateman,

Thank you for the opportunity to comment on the draft Preliminary Work Plan and the Issue Papers for Oregon's Integrated Water Resources Strategy. As stated in the Water Resources Commission's Introduction Issue Paper, "[a]n integrated strategy would provide a blueprint for the state to follow as it prepares to meet Oregon's water needs: instream and out-of-stream; above and below ground; now and in the future". The Nature Conservancy supported passage of HB 3369 and strongly endorses this vision for an integrated water resource strategy.

The Preliminary Work Plan and the Issue Papers are a good start and touch on many of the key issues and potential approaches to achieve this vision. Our primary overarching concern about the work plan and issue papers is their heavy reliance on a single strategy -- the development of a toolbox of options for local and regional communities and governments. Instead, a more comprehensive statewide strategy is needed to identify and address long-term goals for water resources in a manner that balances water for people and water for nature now and in the future. Key expansions of the overall integrated strategy should include:

- a plan and timelines for determining the water needs for both people and ecosystems that uses best available science
- identification of and a plan to fill key data gaps such as groundwater availability and quality, instream needs for fish and wildlife including high flow needs, and impacts of climate change on water resources and aquatic ecosystems
- description and assessment of actions that the state will undertake to address water needs and implement water management
- an analysis of technical and policy requirements to implement the identified strategies

Below we provide specific comments and recommendations for changes to the Preliminary Work Plan and Issue Papers.

Preliminary 2009-2012 Work Plan

Section B. Defining a Statewide Integrated Water Resources Strategy (pg 2):

Recommendation 1: Under the heading on Page 2 “A state-wide integrated water resources strategy should:...”, we recommend that the following be added to this list: 1) Outline long-term goals for water resources and specific policy objectives; 2) Incorporate water needs, water supply, environmental flows, and how climate change will affect each of these; 3) Outline a process for compiling data in a scientifically rigorous manner that will comprehensively address water resources in Oregon.

Recommendation 2: The “Intention” of the strategy should be edited to better reflect the ultimate goal of developing a comprehensive water resources strategy, rather than to develop tools and resources that communities can use to address their water resources needs. We do not believe that the idea of developing tools and resources that communities can use (but perhaps are not required to), reflects the intention or direction of HB 3369.

Section C. Information Flow Chart (pgs 3-4):

Recommendation 3: The criteria for identifying and selecting members of the Policy Advisory Group (PAG) and Technical Advisory Group (TAG) should be specified. We recommend that both groups be designed to include a diverse and balanced set of interests and necessary technical expertise to meet the full purpose of the Strategy, including members with experience and expertise in ecological flow requirements, freshwater ecology, hydrology, groundwater systems, and policy, legal, and restoration-based protection and conservation strategies. The responsibility of individuals included in the PAG and TAG, the decision-making process within the group, and the role of the group relative to Department staff and the commission should be clarified.

Section D. Project Timeline (pgs 4-7):

This section states that the draft document contains a preliminary work plan, however it appears to address just a “First Edition” that is focused on developing a toolbox.

Recommendation 4: The work plan should outline a process for developing the comprehensive water resources strategy, and a description of how that strategy will be designed and realized over time. It should include specific elements such as compilation of scientific data, analysis of the water situation, analysis of the state’s ability to meet water resources needs now and in the future, and development and analysis of strategies for addressing water resources and water management in Oregon.

Once a work plan for the entire strategy is delineated, it can be worked on over time, with specific milestones and phases that can be completed as funding and resources are available. Many of these elements are addressed in the subsection “Technical and Policy Content of the 2009-11 Integrated Water Resources Strategy”, but we do not see these elements reflected in the phases and timelines.

Issue Paper 1. Introduction

This paper does a nice job of describing some of the critical issues facing Oregon, including current and future impacts to water quantity and quality, and associated effects on fish and wildlife. We appreciate the statement captured under “The Value of a Strategy” that describes the integrated strategy as “...a blueprint for the state to follow as it prepares to meet Oregon’s water needs: instream and out-of-stream, above and below ground; now and in the future”. We agree that the strategy should be such a blueprint, and as such, should include not only goals and a vision, but also strategies, actions, technical and policy solutions, and methods of implementation.

Issue Paper 2. Water Quantity

Background Information (pg 8):

We are concerned about the statements related to projected water demands and to instream needs for fish and fish habitat. These statements are based on information gathered through the Oregon Water Resources Department’s Oregon Water Supply and Conservation Initiative (OWSCI). As acknowledged by the Water Resources Department, OWSCI was a preliminary data collection effort, and in fact, relied significantly on survey data requesting information on water demands of various sectors. In particular, we are concerned by the conclusions drawn through OWSCI and repeated in the issue paper that instream needs for fish and fish habitat compared favorably with existing flow protection in basins such as the Sandy, Grande Ronde, Klamath and John Day. We do not feel that the current information on instream needs reflects the true needs for fish and other aquatic species throughout their life-cycle. Additionally, while many of the streams in the above-mentioned basins do have instream water rights, many of those are junior to out-of-stream water rights, and are therefore not met some, most, or all of the time.

Recommendation 5: The strategy should include a plan for updating and refining the instream needs for fish and wildlife and evaluating the current and future ability to meet those needs.

It is also important to point out that the map of January Available Streamflow is based on the state’s Water Availability Model, which does not account for peak or ecological flows that are important components of the instream flow needs for aquatic species during the winter and spring months. To say that there is “...a large part of the state where water is available for winter time allocation...” misrepresents the water availability picture in the state.

Recommendation 6: The Work Plan should delineate a process of data collection and analysis to determine the high flow needs for aquatic species and incorporate those numbers into the Water Availability Analysis.

The discussion of groundwater provides a good overview of the current and potential impacts of over-allocation of groundwater on human uses. This section does not discuss the groundwater needs of ecosystems and species, generally characterized in the literature as “groundwater-dependent ecosystems (GDEs). These GDEs include wetlands, springs and streams, as well as fish and other aquatic species, that depend on groundwater for some, or all of their water needs. The Nature Conservancy in Oregon recently completed an assessment of GDEs and their threats across Oregon, and this assessment documents the extent and distribution of GDEs and potential

impacts across the state. We would be happy to provide a copy of our report to the Department and the Commission or to present our assessment at a future commission meeting.

Recommendation 7: The Integrated Water Resources Strategy should include analysis of water needs for the Groundwater-dependent ecosystems similar to the assessment of instream flow needs, and incorporate these needs into future water management and planning.

Recommendation 8: The Strategy should address water quantity, timing and management issues related to dams and dam operations.

While we realize that in many cases the issues related to dams fall under the purview of the federal government, there are a myriad of state issues and opportunities regarding water availability and environmental flows related to the existence and operation of dams. For example, The Nature Conservancy has been working in several basins in Oregon to evaluate opportunities to modify dam management to provide instream flows at critical times to meet the needs of aquatic ecosystems. There are numerous other examples of this, including reservoir water storage allocations that are associated with instream water rights or instream flow needs. We believe that this aspect of water management should be an integral part of the Water Resources Strategy.

Key Challenges, Research, Technical Questions (pg 13):

This section discusses the need for identifying and prioritizing “other sources” of available water.

Recommendation 9: As other sources of available water are assessed, the strategy should consider the relationship of these other sources to instream flows.

For example, Aquifer Storage and Recovery (ASR) is a strategy that many feel can help provide a safe and reliable means for increasing water availability for human use. We feel that ASR may potentially be a useful tool for water management; however, an important consideration is that the water for storage within the aquifer would be captured during the winter high flow period when key environmental flows such as peak and ecological flows are required to meet aquatic needs. These instream needs should be factored into assessments related to ASR.

In addition, we are concerned with the assumptions behind language in this section. Other “new” sources such as conservation/efficiency, are in fact not new sources of water, and represent a redistribution of water resources. In some cases the “excess” water from an inefficient irrigation project may be an important source of instream flows, and the potential loss to instream flows needs to be considered in the assessment of these projects.

Recommendation 10: The following should be added as a key technical question: statewide determination of instream needs during the winter/spring high flow period and compilation of the data required to determine and protect instream water rights throughout the year.

Conclusion and Next Steps (pg 13):

We strongly support the call for additional groundwater investigations, and have supported additional funding for statewide groundwater studies.

Recommendation 11: Information on GDEs and their water needs should be explicitly captured in future groundwater studies.

Finally, we question the need for a “basin yield” assessment. It is unclear why the state needs calculations of basin yield when it has an existing Water Availability Analysis for the basins and subbasins of the state.

Recommendation 12: Remove basin yield estimates from the list of Key Challenges, Research and Technical Questions.

Issue Paper 3. Water Quality

Background Information (pg15):

We are concerned by the statement on page 15 that suggests that the problem with complying with water quality standards is that technology is improving, allowing us to better determine water quality impacts. The problem is with impaired water quality, not with either regulation or detection. Improved technology enhances our ability to better manage water quality, rather than hampers it.

On page 18, the paper states that “DEQ does not have the resources to continue to conduct a statewide groundwater assessment and monitoring program. Consequently, DEQ’s Groundwater program conducts on-going monitoring only within the existing GWMA’s”. Later in the Issue Paper, the point is made that, “We get into costly arguments about how best to resolve the problem after the water quality has degraded. This can be very expensive and disruptive to communities and businesses.” We concur with the concern that we only know about groundwater impairment in a small number of areas because we only monitor in those areas.

Recommendation 13: The state should invest resources proactively to track trends and address water quality issues before the problem is unmanageable. Investing in groundwater quality monitoring is a cost effective tool for addressing existing and potential future water quality problems.

The Potential Consequences of Neglecting Water Quality in Planning and The Benefits of Integrating Water Quality and Quantity in Planning (pgs 18-19):

Recommendation 14: Discuss the impacts of water quality degradation on fish and wildlife and the consequences on ecological systems of neglecting water quality in planning efforts.

Key Challenges, Research and Technical Questions (pgs 19-20):

Our work on Groundwater Dependent Ecosystems (GDEs) and the impacts of water quality degradation on GDEs has shown that in many instances the water quality impacts to GDEs are

different than those related to human uses. Thus addressing water quality impacts only to human uses (e.g. drinking water) will not adequately address water quality impacts to GDEs. For example, there are pesticides used in Oregon that are toxic to aquatic life, both in their parent form and in their breakdown products, but are less so for humans.

Recommendation 15: Add “Research and analysis of water quality degradation impacts on aquatic life” to Key Technical Questions.

Issue Paper 7. Climate Change

Background Information (pg 30):

We applaud the attention paid to the potential impacts of climate change, as this will significantly alter the timing of water availability, particularly in mid-elevation basins with maritime snowpack. Clearly the state, working with the research community, needs to continue to develop downscaled climate change models that can be coupled with hydrologic models that incorporate both surface water and groundwater.

At the same time, sufficient understanding exists now about potential changes in snowpack, runoff, and streamflow to develop climate adaptation strategies for freshwater resources. Indeed, natural resource managers have always dealt with uncertainty by simultaneously refining the science while moving forward using the best available information. Climate change is no different.

Recommendation 16: The issue paper should clarify that the strategy should emphasize the need to move forward on developing reasonable adaptation strategies now while at the same time continue research to advance the scientific knowledge relative to climate change.

Nevertheless, one of the areas of greatest uncertainty is in the potential impacts of climate change on groundwater, and in particular rates of groundwater recharge.

Recommendation 17: Given the importance of groundwater to groundwater-dependent ecosystems, agriculture, and as a source of drinking water, emphasis should be placed on this for further investigation.

Potential Consequences of Neglecting Climate Change (pgs 30-33):

We find it unbalanced that there is a discussion of climate-induced changes to sea level and forests, which have only an indirect connection to a statewide water resources strategy, but no discussion on sectors whose water consumption/uses will be greatly affected by changes in water supply such as agriculture, municipalities, dam management, industry, and other types of water management infrastructure. The ways in which these sectors will respond to climate change effects on water resources will have a significant impact on freshwater ecosystems.

Recommendation 18: Add a discussion of the potential consequences of neglecting climate change on the relationship between water use and effects on freshwater ecosystems.

Key Challenges, Research and Technical Questions (pgs 33-34)

We question the concept of low or no regrets strategies. As discussed above, a number of strategies that might be considered no regrets, for example water efficiency and aquifer storage and recovery, may indeed have unanticipated consequences to freshwater ecosystems. We believe that the Integrated Water Resources Strategy should develop a plan that includes a suite of strategies and actions, and it should assess, to the extent practical, the utility and efficacy of those actions, and delineate a process for evaluation and refinement over time.

Concluding Comments

The Nature Conservancy is pleased to see the state move forward on the concept of an Integrated Water Resources Strategy. Only through comprehensive, systematic, long-range planning will we be able to meet the water resources challenges of the 21st century. We look forward to working closely with the Oregon Water Resources Department and the Oregon Water Resources Commission on further refinement of the work plan and development of the Strategy.

Sincerely,

A handwritten signature in black ink that reads "Leslie B. Bach". The signature is written in a cursive style with a long, sweeping tail on the final letter.

Leslie B. Bach, Ph.D.
Director of Freshwater Programs



Water for Life appreciates the opportunity to provide written comments on the draft *Oregon Integrated Water Resources Strategy Issue Papers* dated September 10, 2009. As the Department is aware, Water for Life has strong concerns with plans for developing an integrated statewide water resources strategy and opposed the legislation calling for the development of such a strategy. In this regard, a copy of Water for Life's comments on SB 193 (2009) is attached for review. Though legislation creating a statewide water resources strategy was ultimately enacted over Water for Life's objection, Water for Life's comments opposing the legislation remain relevant as efforts are undertaken to implement the strategy called for in the legislation.

As a review of Water for Life's previous comments hopefully makes clear, Water for Life is not opposed to the state taking a forward-looking approach to water management. Instead, Water for Life is concerned that any such strategy be focused on striking an appropriate balance between out-of-stream and instream needs. In addition, Water for Life thinks it imperative that a single agency ultimately be responsible for the management of the state's water resources. Each of these two points is discussed more fully below.

Striking an appropriate balance between instream and out-of-stream needs is easier said than done. When water is used out-of-stream there is less water available for instream use and vice-versa. Thus, water management decisions aimed at balancing instream and out-of-stream needs should be made with a conscious recognition of the trade-offs being made in each water management policy decision. Unless tradeoffs between instream and out-of-stream needs are identified, acknowledged, and catalogued each time such tradeoffs occur, it will not be possible to objectively determine whether instream and out-of-stream needs are being balanced. Instead, parties concerned primarily with instream water uses will have a felt sense that instream concerns are getting short shrift. Conversely, those concerned primarily with out-of-stream needs will feel that state policy is skewed toward consideration for instream needs. The development of a framework for identifying, acknowledging, and cataloguing the instream/out-of-stream tradeoffs involved in every water management policy decision would provide objective data that could then be used to: (1) determine whether instream and out-of-stream needs are in fact being balanced, and (2) rebalance instream and out-of-stream needs when an imbalance is evidenced by the objective data.

The above suggestion is by no means unprecedented. Executive Order 12866 signed by President Bill Clinton in 1993 requiring cost/benefit analysis to be undertaken when making certain environmental decisions is suggestive of how

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Oregon's integrated statewide water resources strategy could proceed to ensure that instream and out-of-stream needs are appropriately balanced. The creation of a similar approach to strategic water management decisions could play an important role in balancing instream/out-of-stream concerns.

Water for Life's second fundamental concern with the development of an integrated statewide water strategy is that it has potential to decentralize control over the state's water resources to such a degree that it creates a vacuum. Collaboration and coordination between agencies is valuable and important. However, it is essential for there to be an agency that has final authority over water management decisions. Policy expressed in Oregon statute, which remains in effect to this day recognizes:

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. See, ORS 536.220(2)(a):

Adherence to the above policy is essential as efforts to develop an integrated statewide water resources strategy are pursued. Allowing input from DEQ and other agencies on particular aspects of Oregon water policy is probably beneficial. However, if DEQ and other state agencies are required to approve certain water-related actions before such actions can proceed, a situation will likely create a bureaucratic maze that defeats the purposes the integrated statewide water resources strategy aspires to accomplish.

Water for Life appreciates the opportunity to provide comments and hopes the suggestions contained herein are useful as this project proceeds.

MEMORANDUM

To: Senate Committee on Environment and Natural Resources
From: Richard Kosesan, On Behalf of Water for Life
Re: Senate Bill 193
Date: March 24, 2009

Water for Life appreciates the opportunity to comment upon Senate Bill 193. Water for Life opposes SB 193 because Oregon already has a water policy; the measure creates administrative complications, and overlooks the fact that Oregon's existing water strategy is already integrated.

Oregon Has A Statewide Water Strategy

Oregon has a longstanding and constantly evolving state water resources policy. The foundation of that policy is the Water Code of 1909. The Water Code established a permitting system through which water rights could be acquired after the date of the act and regulated in accordance with the doctrine of prior appropriation. The Water Code also protected undetermined vested rights acquired prior to 1909 and provided a process, known as adjudication, through which such rights could be quantified. In 1955, the Legislative Assembly adopted the Ground Water Act that implemented a substantially regulatory framework to govern the state's ground water resources.

While the fundamental tenants of Oregon's state water policy were established in 1909, the state's water resources policy has evolved substantially over the course of the past 100 years. Oregon has adopted specific policies on minimum stream flows, water storage facilities, water supply, priority of uses, and a host of other related issues. *See* ORS 536.235, ORS 536.238, ORS 536.241 ORS 536.310. It has even adopted a policy directing the Oregon Water Resources Commission to "progressively formulate an integrated, coordinated program for the use and control of all the water resources of this state..." ORS 536.300(2).

The state has recognized the value of maintaining stream flows for fish and wildlife and enacted a policy known as the Instream Water Rights Act, which recognizes instream flows as a beneficial use of water entitled to legal protection. ORS 537.332 *et seq.* Oregon has recognized the highest and best use of water changes overtime and has liberalized its appurtenancy rules to allow water rights to be leased and transferred. *See, e.g.* ORS 540.505. The allowance for changes in use has allowed market driven forces to play a substantially greater role in water allocation decisions. Oregon has recognized the importance of conserving water and enacted conserved water statutes to facilitate and encourage water conservation practices. ORS 537.445 *et seq.* As scientific understanding of the hydrologic connection between ground water and surface water has increased, Oregon has developed regulatory policies that account for this

connection in determining whether ground or surface water is available for new appropriation. Oregon has developed policies that enable the Oregon Water Resources Commission to designate critical ground water and ground water limited areas to address problems in geographic areas where ground water resources are particularly scarce.

SB 193 Creates Administrative Complications

The Oregon Water Resources Commission, in conjunction with the Oregon Water Resources Department, maintains primary responsibility for managing the state's water resources and integrating the state's water resources policy. Senate Bill 193 proposes to interject the Department of Environmental Quality and Oregon Department of Fish and Wildlife into the establishment of the state's water resources policy. Interjection of DEQ and ODFW conflicts with the state's existing policy, which provides that "It is in the interest of the public welfare that a coordinated, integrated state water resources policy be formulated and...carried out by a single state agency..." ORS 536.220(2)(a).

Beyond the conflict with existing policy on the subject, the interjection of DEQ and ODFW creates significant questions as to who is ultimately in charge of managing the state's water resources. Furthermore, no one is suggesting the Oregon Water Resources Department be granted corresponding ability to interject itself in establishing policies that are at the heart of ODFW and DEQ's missions. Similarly, one might ask whether it is prudent and beneficial to interject ODFW and DEQ into establishing core policies for the state's water resources agency. Oregon has single agencies with primary authority over discrete regulatory fields for the same reason the United States has a single president and Oregon has a single governor, because when multiple agencies or individuals are given co-equal authority, there is always uncertainty and confusion as to who is really in charge.

DEQ and ODFW Already Play An Appropriate Role In Water Management Decisions

Water for Life's opposition to DEQ and ODFW being granted co-equal authority on water resource issues is not intended to suggest there is not an appropriate role for those agencies. Rather, the point is that existing law already provides DEQ and ODFW with appropriate roles. Oregon law explicitly authorizes the Department of Environmental Quality to regulate water quality issues and coordinate with the Oregon Water Resources Department with respect to those issues. Similarly, Oregon law embodies a strategy for managing the fish and wildlife that live in Oregon's rivers and streams and provides ultimate management authority to the Oregon Department of Fish and Wildlife. Oregon law currently provides ODFW and WRD the ability to coordinate in circumstances where issues within the jurisdiction of ODFW intersect with issues involving WRD. Similarly, Oregon law contains policies respecting the use of Oregon's rivers and streams for recreational uses. The agency responsible for implementing those policies is the Oregon Parks and Recreation Department. Once again, existing law provides opportunities for OPRD to work with WRD, ODFW, and DEQ when issues within their respective jurisdictions intersect. In addition, ODFW and DEQ are able to participate in water right permitting processes to the extent such decisions impact instream rights associated with those agencies.

January 30, 2010

Brenda Bateman,
Senior Policy Coordinator
Water Resources Department
725 Summer Street NE, Suite “A”
Salem, OR 97301-1271

Re: Comments, Draft Ecology and Ecosystems Issue Paper, Integrated Water Resources Strategy

Dear Ms. Bateman,

Thank you for the opportunity to comment on the Ecology and Ecosystems Issue Paper that was developed as part of the State of Oregon’s Integrated Water Resources Strategy planning effort. Below our WaterWatch’s initial comments on the draft, which correspond with the sections as set forth in the paper.

General Overview, pg. 2:

- While the general overview of ecosystems/ecology is helpful, it would be helpful the reader if it were made clear that focus of the integrated water resource strategy will be the freshwater aquatic ecology/ecosystems—both surface and groundwater---of the state of Oregon.
- Paragraph 2: the term “competing demands for water resources” replaced with “surface and groundwater withdrawals and storage”. It is not the competing demands for water that are necessarily causing the detrimental impacts to Oregon’s freshwater ecosystems, it is the physical diversion and/or dewatering of streams that is having the impact.

Background Information, pgs. 2-6:

- Forest Land, pg. 4: While it may be true that Oregon today retains 92 percent of the forest cover that was present in 1850, this sentence should also include a qualifier that says something like “though the distribution of age classes and structure have changed”. Without the qualifier readers might be misled into thinking that Oregon’s forests remain largely the same as they were one hundred and sixty years ago.
- Rivers (currently omitted): Notably missing from this section is a “rivers” section. This should be a key section of this issue paper. Included in this section should be a general discussion of the various stream types found in Oregon, as well as the many stream functions of a healthy aquatic habitat. Essentially a “river ecology 101” section that outlines what a healthy aquatic river ecosystem is comprised of. This also would be a good place to outline the various quantity/quality issues facing Oregon’s rivers today.
- Groundwater (currently omitted): Missing from this section is a discussion of groundwater dependent ecosystems and species. This should be added. In 2009 The Nature Conservancy released a study—Groundwater Dependent Biodiversity and Associated Threats: A statewide screening methodology and spatial assessment of Oregon--- that would likely be useful to the WRD in drafting this section.

- Water Quality: While this section does point out that the strategy will address issues affected by both quality and quantity, it would be helpful to have information on the interplay between low flow and water quality problems.
- Fish and Wildlife: We support the inclusion of listed fish and the notation that the importance of these fish cannot be overstated. We would suggest that the “threats” sentence also include dewatered streams and passage barriers. We also think there should be a brief discussion of what stream conditions are important for the various lifecycles of these fish (quantity, temperature, substrate, vegetation, etc).
- Riparian Lands (currently omitted): In addition to the floodplain/wetland section we’d recommend inserting a riparian corridor section that briefly discusses what a healthy riparian ecosystem looks like, and what the state of Oregon’s riparian ecosystems currently are. The ecological health of riparian corridors is key to supporting water related functions.

Also, as an organizational point, we suggest that this section be reorganized to put those sections most germane to an integrated water resources strategy first (i.e. rivers, fish and wildlife, water quality, groundwater, floodplains/wetlands, riparian areas).

Limiting Factors (currently omitted): We recommend that a subsection be added that more broadly outlines the effect that current water use and management has on listed species and other instream ecosystem values. This could include the effects of storage (passage, temperature, flow, etc) and water withdrawals, among other things. For instance, as an example, something similar to the following language from a NOAA publication might be helpful to the reader to understand the effects of certain water practices:

Water storage, withdrawal, conveyance, and diversions for agriculture, flood control, domestic, and hydropower purposes have greatly reduced or eliminated historically accessible habitat and/or resulted in direct entrainment mortality of juvenile salmonids. Modification of natural flow regimes have resulted in increased water temperatures, changes in fish community structures, depleted flows necessary for migration, spawning, rearing, flushing of sediments from spawning gravels, gravel recruitment and transport of large woody debris. Physical features of dams, such as turbines and sluiceways, have resulted in increased mortality of both adults and juvenile salmonids. Attempts to mitigate adverse impacts of these structures have to date met with limited success.

Natural resource use and extraction leading to habitat modification can have significant direct and indirect impacts to salmon populations. Land use activities associated with logging, road construction, urban development, mining, agriculture, and recreation have significantly altered fish habitat quantity and quality. Associated impacts of these activities include: alteration of streambanks and channel morphology; alteration of ambient stream water temperatures; degradation of water quality; reduction in available food supply; elimination of spawning and rearing habitat; fragmentation of available habitats; elimination of downstream recruitment of spawning gravels and large woody debris; removal of riparian vegetation resulting in increased stream bank erosion; and increased sedimentation input into spawning and rearing areas resulting in the loss of channel complexity, pool habitat, suitable gravel substrate, and large woody debris. Studies indicate that in most western states, about 80 to 90 percent of the historic riparian habitat has been eliminated. Further, it has been estimated that during the last 200 years, the lower 48 United States have lost approximately 53 percent of all wetlands. Washington and Oregon’s wetlands have been estimated to have been diminished by one third, while it is estimated that California has experienced a 91 percent loss of its wetland habitat.

NOAA, Pacific Salmonids Major Threats and Impacts, <http://www.nmfs.noaa.gov/pr/species/fish/salmon.html>

The Potential Consequences of Neglecting Ecological Considerations, pg. 7

This section should be expanded to discuss the consequences on 1) species dependent on Oregon's freshwater habitats, 2) cultural values, 3) economic values (i.e. commercial fisheries, recreation, and 4) water users.

The Benefits of Integrating Ecology in Water Resources Planning, Pg. 7-8

It would be helpful to the reader to have a brief overview of the general benefits of a healthy aquatic ecosystem to Oregon's freshwater dependent species, cultural values, economic interests and water users. We do not have specific language to offer today, but would be happy to work with the WRD on this concept.

Additionally, as an organizational suggestion, it might make sense to divide this section into regulatory tools (i.e. Scenic Waterway Act, Instream Water Rights Act, Management Tools), Statewide Initiatives (i.e. the Oregon Plan) and Basin Specific Restoration Projects (i.e. Umatilla Project, Marmot/Savage Rapids Dam, Deschutes River restoration, etc)

- **Scenic Waterway Act, pg. 8:** The Scenic Waterway Act mandates that the highest and best uses of water within scenic waterways are recreation, fish and wildlife uses. It directs the state to maintain the free-flowing character of scenic waterways in quantities necessary for recreation, fish and wildlife. To achieve this, the Act prohibits the construction of dams or other impoundments within scenic waterway, prohibits the issuance of new water rights if scenic waterways are not met (except for a very limited exception for human consumption and livestock), requires mitigation for the use of hydraulically connected groundwater, and limits certain land use practices on riparian lands. This law was passed by a majority of Oregon voters to help protect the river values of select rivers of the state.

This section should be reworked to make clear the strength of this landmark law. We would suggest striking language about “cooperative protection”, “wise use of rivers” and “protecting private property rights.”

- **Instream Water Rights Act, pg. 8:** We recommend that this section start out with a brief overview of the provisions of the bill. First, this Act allows three state agencies –Parks, DEQ and ODFW—to apply for instream water rights for fish, wildlife, pollution abatement, and scenic and recreational values that had the same legal standing as consumptive water rights (i.e. junior users can be regulated off in favor of instream water rights). Second, it allows the transfer or lease of existing consumptive water rights to instream water rights that, like consumptive water right transfers, preserve the priority date of the original water right. And third, it directed the WRD to convert existing minimal perennial streamflows to instream water rights.

As to the number of instream water rights, it would be helpful to the reader to have the 1400 instream water rights be broken out by agency. The vast majority were applied for by ODFW, with only a handful from DEQ and, as we understand it, even fewer from Parks. This information is important to inform the development of a strategy that might call for new instream water rights to support different values of the three relevant agencies.

This might also be a good section to set forth the Oregon Plan's objective to have ODFW apply for instream water rights on all core stream reaches that do not have existing or adequate instream water rights for which flow information exists, and to develop a plan to obtain flow information to support instream water rights where flow information does not currently exist. Oregon Plan Measure ODFW IVA.

Finally, the instream flow number of 900 cfs has increased substantially with the conversion of the Grants Pass Irrigation District right instream (additional 800 cfs).

- **Water Management Tools (currently omitted):** Currently the WRD has the authority to institute a broad array of management tools to help restore and protect streamflows. These include authority to require measurement, prohibitions against wasteful use of water, directives to create efficiency standards, the ability to designate Serious Water Management Problem Areas, etcetera. We recommend that a section be added to briefly outline key management tools/actions.
- **Salmon Protection and Restoration, pg. 8:** The fact that many salmon and steelhead are listed as threatened and endangered in Oregon somewhat incongruous with the opening sentence’s implication as to the resiliency of these fish. Given that, we recommend that the opening sentence either be struck or somehow qualified to tie it to the current status of these fish today. Moreover, it would also be helpful to have a cite to the ODFW study referenced here.
 - The Umatilla Basin Project, pg. 9: It would be helpful to insert how much water was returned to the Umatilla River as part of this project. The fact that a river that was largely dewatered now has water in it year round is key to the project’s success.
 - The Oregon Plan, pg. 9: As noted on the state of Oregon’s website: “The Oregon Plan was established by then-Governor John Kitzhaber and the Oregon Legislature in 1997 to respond to the listing of several salmon and steelhead species under the Endangered Species Act. Populations of salmon and steelhead have declined dramatically all over the Pacific Northwest to a small fraction of their historical levels.” We suggest that this or similar language replace sentence three.

This would also be a good place to broadly outline some of the actions specific to DEQ, ODFW and WRD that are called for in the plan (i.e. WRD—measurement, efficiency standards, peak flow protection, ODFW—instream water rights, fish passage, screening).

Key Challenges, Research, and Technical Questions, pg. 9-11

- **Institutional Coordination:** Either in this section, or in a stand alone issue paper of its own, it would be very helpful in the development of the integrated strategy to have a section that describes the various agencies and their authorities with regards to the water resources of this state, as well as a clear discussion of just what the coordination issues are facing these agencies. Without this information, it will be hard to clearly understand what challenges the state faces today. This in turn will make the drafting of a truly integrated strategy to address these challenges difficult.

In addition to this broader comment, this section lays out a sampling of local, state and federal entities “with a responsibility for ecosystem protection and restoration” in Oregon. This list also includes a number of nongovernmental organizations. While it may appear self serving, we do think WaterWatch of Oregon should be on that list. As the first conservation group in the West to focus exclusively on protecting and restoring streamflows, and, importantly, as the drafters of the 1987 Instream Water Rights Act that has allowed both the establishment of instream water rights and flow restoration via transfers and leases, we think our organization warrants mention.

- **Adequate Instream Protection:** It would be helpful to the reader to have a sense of how many reaches do not currently enjoy the protection of an instream water right. This will be an important fact as the development of the strategy progresses.

Moreover, this would be a good place to state the WRD’s policy on in instream flow protection, namely: “Protecting streamflows which are needed to support public uses is a high priority for the state. The long term goal of this policy shall be to establish an instream water right on every stream, river, and lake which can provide significant public benefits. Where streamflows have been depleted to the point that

public uses have been impaired, methods to restored the flows are to be developed and implemented.”
OAR 690-400-030(1).

- **Peak and Ecological Flows:** We support the inclusion of a section on peak and ecological flows. However, we recommend this section be expanded to include the benefits of peak and ecological flows as well as a discussion of past directives to protect these flows (i.e. the 1997 Oregon Plan directs WRD/ODFW to protect peak flows).
- **Research needs(currently omitted):** It would be useful to the reader to understand key research needs, i.e. state groundwater studies, increased streamflow monitoring sites, measurement of water uses, etc.
- **Water Management (currently omitted):** It would be useful for the reader to understand the limitations on current management that are affecting Oregon’s resources (i.e. agency funding, limited number of watermasters, political considerations, etc).

Thank you very much for the opportunity to comment on this draft issue paper.

Sincerely,

A handwritten signature in blue ink, appearing to read "K. Priestley", is centered on a light blue rectangular background.

Kimberley Priestley

Preliminary Workplan Comments
Integrated Water Resources Strategy

City of Salem
Patricia Farrell
November 5, 2009 (email)

Dear Water Resources Department and Commissioners Meloy, LeJeune, Jackson and Roberts;

Thank you for the opportunity to provide comments on the *Preliminary 2009-2012 Work Plan: Oregon's Integrated Water Resources Strategy*.

The City of Salem recognizes the need for a statewide strategy and appreciates the intent and vision as stated in the Workplan. We also appreciate the dedication of limited state funds and staff in this complex and multiple year undertaking.

As municipal water providers we draw our drinking water from the North Santiam River. In addition to domestic and industrial water supply, this river has many beneficial uses, such as recreation, irrigation, hydropower and fish habitat. The City supports an integrated and holistic management of this water to meet the multiple social, environmental and economic uses this water provides.

We support the State's endeavor and intend to participate as fully as possible throughout the process.

Thank you.

Patricia Farrell
Natural Resource Specialist
Water Resources Section
City of Salem, Public Works Department
555 Liberty Street SE
Salem, Oregon 97301-3503
pfarrell@cityofsalem.net
503-588-6211 x7489

Newton Consultants, Inc. (Randy Jones)
February 3, 2010 (email)

Dear OWRD,

One of the core, common outcomes from the 08-09 Statewide Water Roundtables was a concern for education. I don't see Education as a formal section or strategic topic in the Sept. 2009 draft. Will Education be considered in the IWRS moving forward, especially integrated, multidisciplinary water education? Water-Education would seem well-placed with elected and appointed officials at the local, regional, and even state levels. It certainly would segway with the Oregon No Child Left Inside Act (and its Federal counterpart) and the Oregon Environmental Literacy planning going on right now. Lastly, such focus by a major State Department could be an additional bridge between public school elementary/secondary education with higher education and the Oregon University System.

Thank you.

Randy Jones

Senior Water Resources Scientist

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January 7, 2010

Brenda Bateman
Senior Policy Coordinator
Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301-1266

Re: Comments on draft preliminary 2009 – 1012 work plan for Oregon's Integrated Water Resources Strategy

Dear Ms. Batemen,

The Oregon Environmental Council (OEC) appreciates the opportunity to comment on this initial draft of the work plan for developing the state's first ever Integrated Water Resources Strategy. Developing this strategy is an important and challenging undertaking, and we believe that the Water Resources Department is setting the right tone by seeking input from stakeholders at this early stage in the process.

We believe that one of the greatest challenges in developing the Integrated Water Resources Strategy will be taking a truly holistic approach that integrates the closely linked issues of water quantity, water quality, and ecological needs in the context of surface water, ground water, in-stream needs and out of stream needs. It must be challenging because no other state has done it. It is critical to develop a workplan that will actually achieve this goal. We have a few comments and recommendations that we think would improve the process and help develop a truly integrated strategy that will be a useful tool to help the state carefully manage our water resources into the future.

A. Statutory Foundation and Legislative Direction

HB 3369 states that the integrated water resource strategy shall describe the following:

- (A) Oregon's in-stream and out-of-stream water needs, including but not limited to ecosystem services, water quality and water supply needs.
- (B) Objectives of the strategy.
- (C) Actions that are designed to achieve the objectives of the strategy.
- (D) Plans related to the challenges presented by climate change.
- (E) Provisions to ensure communication and partnership with key stakeholders.
- (F) Specific functions and roles to be played by state agencies, including but not limited to 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, the State Parks and Recreation Department, the Department of State Lands and other relevant state agencies.
- (G) Public policy options and recommendations.
- (H) Relevant strategy factors, including but not limited to population growth and land use change.
- (I) Recommendations of the Water Resources Department regarding the continuous monitoring of climate change effects on Oregon's water supply and regarding water user actions that are necessary to address climate change.

The preliminary workplan does not describe how each of these components will be completed, and many of these components are missing from the definition of the integrated water resources strategy. One major gap is defining the objectives of the strategy. Shouldn't those objectives be included in this workplan? Will they be defined by the advisory groups? That should be explained in this workplan.

B. Defining a Statewide Integrated Water Resources Strategy.

For the most part we agree with the working definitions of "statewide" and "integrated." However, according to HB 3369 the strategy should provide more than a statewide set of tools. It should also provide actions, plans, and policy recommendations. With regards to the tension between regional/basin-level planning and statewide planning, the workplan should describe how the process will take into consideration the varying conditions and needs of different parts of the state and what role local communities will play in the process.

The draft workplan states that the integrated water resources strategy should develop a vision, and it includes a vision statement for the strategy. We believe that an important part of the process would be to develop a vision for the future of Oregon's water resources, which is different than developing a vision for the strategy. Various stakeholders will have different visions for the future of Oregon's water resources, and developing an integrated water resources strategy should involve agreeing upon a vision for the future and developing a strategy to achieve that vision.

In identifying a likely range of future scenarios, those scenarios will be impacted by factors that are primarily out of our control, such as climate change and population growth, and those scenarios will also be impacted by things that are in our control such as policy choices and the way we manage our water resources. The stakeholder process should show how different choices will result in different scenarios, and in the impacts of future scenarios being felt differently depending on the choices we make today. For example, a dry water year in a scenario where certain conservation strategies have been adopted and some flexibility has been built into the system will result in different impacts on Oregon's economy and ecological systems than a dry water year in a scenario where the status quo exists. Making choices about future scenarios is a useful tool for involving stakeholders in land use and transportation planning, and it could be an equally useful tool for developing the integrated water resources strategy.

C. Information Flow Chart

Given that the lead agency on this project is the Water Resources Department, and that the strategy must be adopted by the Water Resources Commission, we would like to have a greater understanding of the role of the project team, which includes staff from DEQ and ODFW. It would be all too easy for this strategy to become a water supply strategy, and for the challenging concept of developing a strategy that integrates water quality and ecological needs to drop off. The ongoing, close involvement of staff from DEQ and ODFW will be critical to help guide the creation of an integrated strategy, as will communication with the state agency advisory group and the other advisory groups. More clarity about where the decision-making power lies in the process would be helpful.

D. Project Timeline

The project timeline and information flow chart need a clearer description of the public participation process. We suggest that, in addition to the possible venues listed in section 1.3, the process include clearly outlined public comment periods built into the timeline, with time for comments to be reviewed and incorporated into final products, and a transparent description of which decision-making bodies will review those comments. Meetings and advisory groups are valuable components of public involvement processes, but there also need to be ways for people to participate that are less time consuming. The public also needs to know how their comments will be used in order to feel that it is worth the effort to participate. It is imperative that public involvement be more than “window dressing” and that the public’s involvement is considered a critical part of the decision-making process.


As described above in our comments regarding the definition of the strategy, *Phase II: Identifying water resource needs* should include developing a vision for the future of Oregon’s water resources. Future scenarios naturally lend themselves to making choices about which scenarios we want to see in Oregon.

The workplan jumps from *Identifying Water Resource Needs* to *Developing a Toolbox*. What’s missing is a strategy. A strategy is more like a plan than a toolbox. You will make more progress building a house with a toolbox and a blueprint plan than with only a toolbox. Developing the strategy will need to involve agreeing upon where we’re going and making some decisions about what we will need to do to get there, which is different than gathering together an unprioritized set of tools.

We look forward to continuing this statewide dialogue, including participating in the Policy Advisory Committee, as the Integrated Water Resources Strategy is developed.

If you have any questions about these comments, please contact me at 503-222-1963 x112 or tereah@oeconline.org.

Sincerely,



Teresa Huntsinger
Program Director, Clean & Healthy Rivers

Online Survey Responses

Integrated Water Resources Strategy

Burnt River Irrigation District
Jerry Franke
November 16, 2009

1. Describe the organization you represent and its interest in an Integrated Water Resources Strategy for Oregon.

We are an irrigation district in Baker County. Our interest is in protecting our existing water rights and improving overall irrigation efficiency

2. We are seeking the widest possible input on this strategy from all interested parties throughout the State. How do you think we can best do this?

By listening to the diverse needs and varied geographical conditions

3. Are there particular approaches that you have used or seen in planning processes that we should use as well? (e.g., use of a SWOT strength-weakness-opportunities-threats assessment, or other specific process). Which, in your view, are processes that work well and which are not?

Solicit cooperation, encourage participation, and work with the different interests to improve the process. Do not resort to heavy-handed restrictions and enforcement except as a last resort.

4. How formal should this process be, in terms of advisory or technical groups?

As informal as possible while maintaining over-all control of the process.

5. What do you think about piggybacking this process onto already existing events, activities, or opportunities? For instance, when is your annual organization or association meeting and could a water resources discussion with interested members be held in conjunction with the event?

Too big and important an issue to be lumped together with other issues.

6. What are your main concerns about the process of water resource planning, or are there potential obstacles/deal breakers we should keep in mind?

Too much emphasis placed on agenda driven interests and not enough emphasis on produces that deal with water issues on a daily basis and have a financial stake in the outcome.

7. Would the organization that you represent be willing to participate in the planning and development process of Oregon's Integrated Water Resources Strategy? In what way?

Yes. Any way we can be of assistance.

Caroline Milbank (Citizen)
December 4, 2009

1. Describe the organization you represent and its interest in an Integrated Water Resources Strategy for Oregon.

League Women Voters. LWV published Water in Oregon-Not a Drop To Waste 2/09 Part I Regulating Water In Oregon League now starting Part Two of the publication as part of its Public Education Branch. Have volunteered to help with Part Two.

2. We are seeking the widest possible input on this strategy from all interested parties throughout the State. How do you think we can best do this?

Possibly through owners of Exempt Wells , Community wells; notices/articles in publications i.e. Oregon Conservation League, Water Watch, Sierra Club, Future Farmers of America and other organizations directly related to water affairs (is if non of us have a direct line through the kitchen sink faucet!. Speakers/slide shows at Salem Neighborhood Association (go thru City Hall) City Club?

3. Are there particular approaches that you have used or seen in planning processes that we should use as well? (e.g., use of a SWOT strength-weakness-opportunities-threats assessment, or other specific process). Which, in your view, are processes that work well and which are not?

No comment.

4. How formal should this process be, in terms of advisory or technical groups?

Do not complicate the issue with "processes" where volunteers are concerned.

5. What do you think about piggybacking this process onto already existing events, activities, or opportunities? For instance, when is your annual organization or association meeting and could a water resources discussion with interested members be held in conjunction with the event?

See #2. Have booth at any and all public gatherings at City Park

6. What are your main concerns about the process of water resource planning, or are there potential obstacles/deal breakers we should keep in mind?

No comment.

7. Would the organization that you represent be willing to participate in the planning and development process of Oregon's Integrated Water Resources Strategy? In what way?

I can not speak officially for the LWV but because the Salem Branch has already committed itself to a Part 2 study of Regulating Water in Oregon they will approach this as one would preparing to write a thesis - <http://marionpolk.or.lwvnet.org>

Rachel Walker (Citizen)
November 7, 2009

1. Describe the organization you represent and its interest in an Integrated Water Resources Strategy for Oregon.

My main interest is personal, but I volunteer with several organizations that I feel need to be kept in loop on this process and because some don't keep abreast themselves: Spring Valley Watershed Council, Eola Neighborhood Groundwater Network, Polk Soil and Water Conservation District.

2. We are seeking the widest possible input on this strategy from all interested parties throughout the State. How do you think we can best do this?

How to engage the public proactively is a difficult problem. Articles in local papers and the Capital Press are good. Possibly connecting with City Council meetings. The University of Oregon quite often does canvassing about various issues. You might be able to engage several universities to do this.

3. Are there particular approaches that you have used or seen in planning processes that we should use as well? (e.g., use of a SWOT strength-weakness-opportunities-threats assessment, or other specific process). Which, in your view, are processes that work well and which are not?

I think you have to allow enough time for word of mouth to get the project out there.

4. How formal should this process be, in terms of advisory or technical groups?

Watershed councils might be able to ask for a few local people who are knowledgeable, yet outside the regular red tape sphere. It can be too formal and I have become discouraged in the public input process because the organizations soliciting input often don't listen.

5. What do you think about piggybacking this process onto already existing events, activities, or opportunities? For instance, when is your annual organization or association meeting and could a water resources discussion with interested members be held in conjunction with the event?

In conjunction with is good. I have tried to spread the word about the IWS with the flyer Brenda Bateman gave me.

6. What are your main concerns about the process of water resource planning, or are there potential obstacles/deal breakers we should keep in mind?

Only as I already mentioned, that people come out in droves when there is a popular problem to rally around, but don't become informed and involved when ahead of time.

7. Would the organization that you represent be willing to participate in the planning and development process of Oregon's Integrated Water Resources Strategy? In what way?

I can only speak personally, but would be glad to ask at meetings if it would be possible for Polk SWCD and the Watershed Council to be involved. I have a fairly flexible schedule for some degree of input.

1. Describe the organization you represent and its interest in an Integrated Water Resources Strategy for Oregon.

I am a city councilor for the city of Forest Grove. I sit on the Joint Water Commission for Forest Grove. I also sit on CWAC (Clean Water Advisory Commission representing District 4, plus I represent Forest Grove on the Water Consortium Board. Even though I work to protect the multiple water sources that Forest Grove owns, I am very concerned about water resource protection and integration on a state level. So I am a new member of the LOC water & wastewater commission.

2. We are seeking the widest possible input on this strategy from all interested parties throughout the State. How do you think we can best do this?

Remember to include citizen participation representatives in the groups as well as us lower level elected representatives.

3. Are there particular approaches that you have used or seen in planning processes that we should use as well? (e.g., use of a SWOT strength-weakness-opportunities-threats assessment, or other specific process). Which, in your view, are processes that work well and which are not?

I find the SWOT one of the most inclusive processes possible for digging down to all related issues.

4. How formal should this process be, in terms of advisory or technical groups?

The process is best if all levels of involvement are used.

5. What do you think about piggybacking this process onto already existing events, activities, or opportunities? For instance, when is your annual organization or association meeting and could a water resources discussion with interested members be held in conjunction with the event?

I have been trying to get over all water resources discussions going at all levels in the organizations that I am currently participating in. Just trying to open discussion has been met with resistance from some water providers. I would love to have presentations to any of the groups I have listed in question one.

6. What are your main concerns about the process of water resource planning, or are there potential obstacles/deal breakers we should keep in mind?

Each provider fears loss of control at local level.

7. Would the organization that you represent be willing to participate in the planning and development process of Oregon's Integrated Water Resources Strategy? In what way?

I have been trying to get over all water resources discussions going at all levels in the organizations that I am currently participating in. Just trying to open discussion has been met with resistance from some water providers. I would love to have presentations to any of the groups I have listed in question one.