Public Comments on June 23, 2011 Draft Recommended Actions
Oregon's Integrated Water Resources Strategy
September 29, 2011 Water Resources Commission Meeting

Note: If possible, personal information has been removed from the following public comments, i.e., an individual's personal email address, physical address, and/or phone number.

From: Nancy Matela
Sent: Monday, August 22, 2011 11:30 AM
To: waterstrategy
Cc: David Delk
Subject: Comments on the Water Strategy draft

Great report. Comprehensive job!

This is my one disappointment however.

Nowhere (and I must confess that I didn't read it word for word) does it recognize that water is a right of all living things. It does a great job of presenting the fact that energy production takes an enormous amount of water...in fact, it is the single largest user of water. But, when the time comes that a decision must be made between producing power and keeping nature alive, there must be an over-arching mandate that living things always come first.

The recent dilemma with Bonneville Power and the wind generators speaks to these types of decisions. Maybe the right decision was made. I would contend that the decision did not have a strategic mandate to guide it however. (Yes, this is slightly different but it is in the same league.)

Nancy Matela
Alliance for Democracy
Host, *The Water Spot*
503-267-1401

Oregon's Integrated Water Resources Strategy draft recommended actions Comments
August 31, 2011

To: Alyssa Mucken
Policy Coordinator
Integrated Water Resources Strategy
Oregon Water Resources Department
725 Summer St NE., Suite A,
Salem, OR 97301

From: Clair Klock
Board member
American Rainwater Catchment Systems Association (ARCSA)
clair.klock@arcsa.org

Comments

After examining the recommended strategy and listed priorities I would recommend that rainwater harvesting systems references be included in all phases of the strategy.

1. It is a well-known fact that we cannot increase our usage or capacity from either groundwater or surface water without further environmental consequences.
2. Rainwater has less chance of pesticide, pharmaceutical and nutrient contamination.
3. If actively maintained and controlled, rainwater systems can be used as stormwater mitigation.
4. Rainwater systems, when use in conjunction with smart irrigation management in agricultural, can lead to decreased groundwater and surface water withdrawals.
5. Agricultural rainwater harvesting is viable in any location with large tanks or impermeable pond
6. Rainwater harvesting is a variable and cleaner supplement to municipal drinking water systems.
7. The technology is present for both passive and active use of rainwater harvesting systems.

8. Rainwater harvesting systems should be included in the education objectives of both school students and adult programs.
    a. Emphasize training of planners and inspectors to understanding implementation of rainwater systems.
9. Fund both municipal and agricultural rainwater harvesting infrastructure to increase water storage water capacity
10. Covered rainwater harvesting systems can decrease water loss thorough evaporation by up to 1/3.

Thank you for your attention. Please contact me with any question and I would be glad to help draft and review any change that you may develop.

August 31, 2011

Alyssa Mucken
Policy Coordinator, Integrated Water Resources Strategy
Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301

Re: Oregon's Integrated Water Resources Strategy – Draft Recommended Actions

Dear Alyssa,

Thank you for the opportunity to comment on the Oregon Water Resource Department's (OWRD) Draft Recommended Actions for Oregon's Integrated Water Resources Strategy (IWRS). We appreciate the OWRD's efforts to develop an integrated strategy as well as the agency's commitment to continue communication and engagement with the public as it moves forward. We found the Bulletin format, with background information and the identification of additional information, very helpful.

Overarching Comments: We have reviewed the document and have the following overarching comments.

Increasing pressure on Oregon's limited water supplies from increasing development, population growth, climate change impacts, and so forth, make it imperative that Oregon better manage its water resources into the future. Fundamental elements of improved water management, several of which are captured in the draft strategy document, include:

- Measurement of diversions statewide
- Increased field presence
- Enforcement of laws and permit conditions
- Enforcement against of waste
- Conservation and efficiency
- Ensuring all water allocation and reallocation processes adequately protect instream values (i.e. institute a public interest test on transfers).
- Increase surface/groundwater management to account for the relationship between groundwater and surface water and to protect groundwater dependent ecosystems
- Ensure that the OWRD water right database is current

In addition, American Rivers strongly supports the following fundamental water management strategies:

Instream Values – OWRD should prioritize its efforts to identify, establish, protect and restore instream flows, including both minimum flows and higher flows needed to maintain river habitat and trigger biological responses in aquatic species.

Data Collection – Robust data on out-of-stream uses, exempt well use, groundwater, instream flow needs, and so forth, are essential to OWRD's efforts to better manage Oregon's waters. Adequate funding needed to collect this critical data is crucial.

Funding – Any future agency funding requests to the Legislature should have rough parity between out-of-stream and instream projects. A fund for improved water management that would help pay for increased measurement, replace lost agency water management capacity, increase field presence and provide agency capacity to understand and meet Oregon's future instream needs should be established.

Integration – Consultation and coordination between state agencies that would account for the water quality and fish and wildlife impacts of water allocation and management decisions. Currently, the agencies with responsibility for water allocation, fish and wildlife and water quality do not coordinate sufficiently to make integrated decisions about water.

Specific Comments:

Bulletin 2:
American Rivers supports efforts to improve water use measurement. We recommend that such an effort go beyond the targets set forth in the 2000 Strategy. In addition, there must be a concerted effort to better understand the impacts of exempt wells.

Bulletin 3:
As noted above, an increased understanding of instream flow needs, both base and instream, is a critical component of any comprehensive, integrated water management strategy and must be a priority for the agency.

Bulletin 4:
American Rivers supports efforts to explore the potential to add hydropower to existing infrastructure provided it can be done in a manner consistent with meeting instream flow needs and protecting aquatic resources. We do not, however, support Action 4.B regarding engaging with Bonneville Power Administration to gain access to unallocated water when high flows exceed spill maximums. The appropriate level of spill is a contentious and unresolved issue; as such any discussions related to a "spill maximum" are premature. Moreover, there are other laws in place that address the issue of Columbia River unallocated water that must be upheld.

Bulletin 5:
American Rivers strongly supports ongoing assessments of climate change and the assessment of various models / scenarios as set forth in this bulletin. Any long-term water management strategy must incorporate anticipated climate change impacts on our freshwater resources. It is not clear, however, whether the recommended actions for models/scenarios include an assessment of climate change impacts on aquatic resources and instream flow needs. The recommendations should be clarified to ensure the development and incorporation of such information.

Bulletin 6:
American Rivers strongly supports a number of elements set forth in this bulletin including (1) sourcewater protection scenarios and recognition of the role of forest lands in drinking water supplies, (2) the need to adopt stronger regulations that ensure protection of drinking water sources, and (3) identification of water related ecosystem services.

As noted above, studies to determine the location and average usage of exempt wells should be a priority as should the identification of exempt well reforms.

Bulletin 7:
American Rivers encourages the use of green infrastructure or natural solutions such as restoring rivers, wetlands, floodplains, and upland and coastal areas functions, land use protections and restrictions, setting levees back or modifying levees to allow for overtopping, removing or modifying dams, watershed based planning, and low-impact development to meet our infrastructure needs. Natural systems are significantly more resilient and dynamic than engineered, structural infrastructure. Indeed, functioning natural systems provide a host of ecosystem services.

OWRD should identify and develop incentives to support increasing use of green infrastructure solutions.

Bulletin 10:
Reexamination of the Columbia River Treaty provides a unique opportunity to broaden the purposes of the Treaty beyond power generation and flood control to include ecosystem services. The Corps of Engineers and the Bonneville Power Administration, as part of its multi-year effort associated with the Treaty, are just beginning to explore ecosystem needs. We recommend that the IWRS include a recommendation that ecosystem services not only be considered in the Treaty process, but be given equal weight to power and flood purposes.

American Rivers also supports ongoing participation by the agency in the Klamath Basin Restoration Agreement and its related work groups.

Thank you for the opportunity to comment. Please contact me at (503) 827-8648 if you have any questions.

Sincerely,

Brett Swift

Brett Swift
Northwest Regional Director

AMERICAN WHITEWATER

Megan Hooker
Stewardship Assistant
7315 SW 34th Ave
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503-928-7711
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megan@americanwhitewater.org

August 31, 2011

Attn: Water Strategy
c/o Oregon Water Resources Department
725 Summer Street, N.E., Suite A
Salem, OR 97301

Re: Oregon's Integrated Water Resources Strategy

To Whom It May Concern:

American Whitewater appreciates having the opportunity to comment on the Oregon Water Resources Department's Draft Recommended Actions for the state's Integrated Water Resources Strategy. Issues of water quality, quantity and ecological and recreational needs are interwoven and we applaud the efforts of the Department to manage them in an integrated fashion. We support efforts to meet instream recreational and habitat needs while ensuring that water policies are balanced and management actions will protect and restore healthy waters across the state.

American Whitewater is a national non-profit 501(c)(3) river conservation organization founded in 1954. We have over 5,000 members and 100 locally-based affiliate clubs, and represent the conservation interests of tens of thousands of whitewater enthusiasts across the nation. American Whitewater's mission is to conserve and restore America's whitewater resources and to enhance opportunities to enjoy them safely. A significant percentage of American Whitewater members reside in Oregon and throughout the Pacific Northwest and regularly recreate on Oregon's spectacular rivers, from the Clackamas and the Hood to the Deschutes and John Day. We place a high value on protecting naturally functioning river ecosystems, including their fish and wildlife, geomorphic processes, and incredible riparian forests. These river systems and associated riparian zones represent defining landscape features throughout the state that are highly valued by our membership and the general public.

As is noted in the Draft Recommended Actions, river recreation is vitally important to local economies throughout the state. We write to express our support for establishing, protecting and restoring instream flows to protect all beneficial uses, and using natural flow regimes to do so. We applaud efforts to look beyond minimum instream flows through assessing peak and ecological flows, and support the 2007 Oregon Department of Fish and Wildlife guidance recommendation that transitional ramping flows be considered to ensure that peak and ecological flows do not drop too fast. This will protect both the biological processes that were triggered and recreational uses of the river.

Oregon's rivers are fed by rain, snow, or a combination of the two. In snowmelt dominant systems, it's important that spring peak flows gradually recede to summer base flows. The importance of this "spring snowmelt recession" was highlighted in 2010 in a study published at U.C. Davis Center for Watershed Sciences.[1] Maintaining the natural flow regime for rain and mixed systems is equally important, and hydroelectric and water resource operations on rivers can severely alter natural flow patterns. This can result in vegetation encroachment, altered breeding cues for aquatic species, and a homogenous channel that is lacking in habitat diversity. This in turn increases the potential for invasive species to take hold.

Maintaining all phases of the natural flow regime will help to meet recreational, ecosystem and fish and wildlife needs. American Whitewater also supports an integrated plan that incorporates groundwater and surface water resources with off stream and instream uses. These systems are all linked, and actions that recognize this will increase the likelihood of a successful plan. The management goals outlined in the plan, however, cannot be accomplished without proper funding to collect the necessary data necessary and increase the capacity and field presence of the agency. Additionally, the goals will be best accomplished when state agencies coordinate their decisions regarding water quality, quantity and fish and wildlife impacts of water allocation and management decisions.

We appreciate your efforts to improve water management in the future, and thank you for considering our comments. If you have any questions regarding American Whitewater's comments or interest in the plan, please contact Pacific Northwest Stewardship Director Thomas O'Keefe at 425-417-9012 or okeefe@americanwhitewater.com

Sincerely,

Megan Hooker
Stewardship Assistant

[1] Yarnell, S. Viers, J. and Mount, J. 2010. Ecology and Management of the Spring Snowmelt Recession. BioScience 60: 114-127.

From: Gil Riddell
Sent: Thursday, August 18, 2011 8:39 AM
To: waterstrategy
Cc: Alan Unger; Dennis Doherty; Brenda Bateman
Subject: IWRS - comment

Greetings.

In my some 25 years of direct involvement with local government, I have heard repeatedly, and at times emotionally, about the multiplicity of permitting required for single, environmentally sound water projects. The regulatory hurdles are so high that it is understandable that communities would walk away from the extended time and enormous expense of developing projects, which would be beneficial to community residents and the State.

The IWRS would blow a golden opportunity if it were not to examine this issue. After all, what is the meaning of "integrated" if it does not include at least a look at all the state and federal jurisdictions that alone have the power to stop a project. Let's see - OWRD, ODFW, DEQ, Corps of Engineers, EPA, FWS, NOAA-Fisheries, etc.

This issue shadows the IWRS work, and must not be ignored if that work will prove to be successful.

Thank you for the opportunity to comment.

Gil Riddell

AOC Association of Oregon Counties
Gil Riddell
Policy Coordinator
503-585-8351
www.aocweb.org

Oregon Integrated Water Resources Strategy

Comments from Central Oregon Irrigation District (COID)

Overall the State should be commended for pursuing the formulation of a water strategy. This is obviously overdue, and while generating much debate and likely some friction among stakeholders, is the type of process that must be undertaken to generate consensus and eventual success of efforts.

The process and representation to date has been positive with diversity geographically and good transparency. There appears to be some recognition that each watershed is different but the overall perception of the IWRS is an eventual centralization of effort in Salem that drives towards less collaboration capacity and a "one size fits all" mentality. The challenge will remain to be efficient with process which requires some centralization but somehow maintain diverse geographic involvement and consensus decision making across stakeholders. As soon as the perception occurs that the Strategy will be finalized solely in Salem then consensus will not be obtainable and therefore the execution and utilization of the Strategy will fail.

It should also be noted that there is no mention of respecting existing water right holders and uses in many of the proposed actions. There are several proposed actions, or bullets, that appear to be suggesting a compulsory reallocation of water and an attempt to diminish the values of existing water right holders and uses. The IWRS will need to respect existing water rights while collaboratively providing solutions to increase supply to meet the "newer" or unfulfilled demands.

Bulletin 1, Action 1.B, Page 8 bullet 2, Integrate Water Quality/Quantity Efforts:

It is very unclear what "fully incorporate water quantity into DEQ's TMDL requirements" means. The statement is very expansive and is worded such that one could translate this proposed action to imply any number of steps. Very specific definition of this item is required in order to provide adequate comments.

Bulletin 2, Action 2.A, Page 13 bullet 1, Update Statewide Demand Forecast:

In order for the forecast to be useful and to be updated in the future there must be some baseline standards or methodologies established. This insures that basin to basin comparisons can easily be made as "apples to apples" and collectively give an accurate picture at a state-wide level.

Formulation of these standards should be provided by a regionally broad cross-section of representatives geographically and include urban, rural-agricultural, and environmental stakeholders along with a cross-section of stakeholders from each region from County Planning departments, municipal public works staff, irrigation district managers and watershed council executive directors.

Bulletin 3, Understanding Oregon's Instream Needs

- see comments on Bulletin 12 and how they relate to each other

Action 3.A Complete Our Understanding of Flows Needed to Support Stream Functions

There is no guidance or definition of which scientific methodologies are to be utilized to determine the stream functions. Will there be peer review? Which habitat function gets prioritized? How are competing species in a particular stream prioritized for importance with function? This Action is defined too broadly and desperately needs more specificity.

Action 3.B Improve Our Understanding of the Relationship Between Groundwater & Ecosystem

There must be recognition in this effort to not only build upon previous work, but also take have analysis on which springs are generated artificially, e.g. seepage from man-made conveyance systems. The analysis should include estimates of artificial contribution to identified springs and evaluation of potential impacts as water conservation projects from piping and lining that may possibly be implemented. There is a general lack of meaningful dialogue, or at least recognition of the paradox, that is resulting from conserved water keeping natural stream flow instream and improving the natural hydrograph and the perceived zeal over protecting springs that may be artificial in whole or in part. It is very difficult to have it both ways – keeping springs artificially recharged and improving the natural hydrograph with reduction in diversions out of stream.

Bulletin 4, The Water & Energy Nexus - Action 4.B, Take Advantage of Water Infrastructure to Develop Hydroelectric Power:

Clarification and standardization of State requirements for hydroelectric generation off-stream, i.e. FERC in-conduit exemption projects in irrigation canals is needed. The statutory process leaves ambiguity on requirements for fish screens and fish passage in particular and provides too much discretion without firm deadlines for agencies' staffs to provide comments on such perceived requirements. This existing ambiguity creates uncertainty to project development and costs and will therefore reduce the instances of projects being constructed which will lower the amount of renewable energy generated within the State and therefore the corresponding economic and environmental benefits.

While not specifically within the scope of the IWRS, the issue of interconnection between hydroelectric facilities and utility companies is still a very cumbersome and unpredictable process that is limiting the development of additional hydroelectric generation in the State.

Bulletin 6, The Water & Land Use Nexus – Action 6.C, Fully Integrate Water Information into Land-Use Planning:

There should be an emphasis on helping local governments integrate information about water into land-use decisions and plans, particularly in critical ground water areas and in the Deschutes Basin where ground water mitigation is required. Decisions are made without regard to impacts on water supply and demand.

Bulletin 9, Funding for Oregon's Water – Action 9.A, Establish a Water Management Fund for the State of Oregon & Action 9.B Capitalize Funds for Local Water Projects

Implementation of a water right management and/or wastewater fee should be avoided. The impact on municipalities, manufacturing and food processing could further devastate local and State economies by driving out current and potential industry, reducing revenues and employment options for its' citizens while increasing the cost of living.

There is significant concern that a dedicated water rights management fee would be additive to the already increased fees charged by the WRD for water right transactions. There would likely be more support for this concept if there was assurance that the more stable and predictable management fee would displace or lower transaction fees.

Preferred option is the capitalization of revolving, low interest loan program(s) that can self-sustain over time. Review current programs such as the DEQ Clean Water State Revolving Fund. Also suggest further review of State of Washington general bond obligations.

Bulletin 11, Water Management – Action 11.B, Increase Built Storage:

The second bullet "Allocate and reauthorize existing storage projects" does nothing to increase built storage. There is no recognition of existing water right holders to the current allocation being protected or preserved. Frankly this reads as a grab for someone else's perfected water rights. Remove "reauthorize existing storage projects" from language. This opens the door to legal challenges that could tie-up projects in the court system for years and result in the waste of dollars paying legal bills versus providing new supply.

The correct logic is to increase built storage for allocation of the new additional supply to multiple uses not previously authorized. This is very much a federal arena and the likelihood of success to authorize for new uses without increasing supply or with protection to existing rights is not very good and will surely result in litigation.

Bulletin 12, Ecosystem Health & Public Health Needs – Action 12.B, Pursue Additional Instream Protections:

How will this affect existing out-of-stream water rights? What is the impact to irrigation districts? There is a lack of information regarding any science behind flow requirements. An application for a new instream water right to protect flows [DEQ, ODFW, OPRD] should require a scientific peer review.

From: Larry M. Chase
Sent: Monday, August 29, 2011 9:35 PM
To: waterstrategy
Subject: IWRS comments

In April of 2011 the Fifth Circuit Court of Appeals ruled in the case of National Pork Producers Council v US EPA (no 08-61093; 2011) that the EPA cannot regulate a point source under CWA rules unless a pollutant (i.e. an actual foreign substance) is actually introduced into navigable waters. Because of a consolidation of cases, this ruling applies to Oregon. How does this ruling affect what rules Oregon can make and/or enforce in their attempts to comply with EPA directives that may in fact no longer be legal?

Larry M. Chase
Springfield, OR 97477

— CITY OF PORTLAND —
ENVIRONMENTAL SERVICES
1120 SW Fifth Avenue, Room 1000, Portland, Oregon 97204 ▪ Dan Saltzman, Commissioner ▪ Dean Marriott, Director

August 24, 2011

Water Strategy
c/o Oregon Water Resources Department
725 Summer Street N.E., Ste A
Salem, OR 97301

Attention: Integrated Water Resources Strategy Draft Recommended Actions

The City of Portland Bureau of Environmental Services (BES) provides Portland residents with water quality protection, watershed planning, wastewater collection and treatment, sewer installation and stormwater management. Many of the recommendations in the Integrated Water Resources Strategy support our work, and we appreciate the opportunity to comment on these recommendations prior to finalization. The Portland Water Bureau is also submitting comments in a separate letter, specific to that bureau's mission and interests, which BES also supports.

The work done so far has been impressive, given the limited resources available to the agencies involved. We appreciate the focus on integrating water quantity and quality into a larger framework, and look forward to reviewing the draft strategy next year. With the limited budgets and resources available to the various agencies, it will be important to choose very carefully which recommendations will be priorities for implementation. We also encourage the agencies to acknowledge that some of the work reflected in the proposed actions is already being done. Some actions appear to suggest new program development where the effort would be better spent on identifying gaps and supplementing currently available programs. Specific comments are outlined below.

Action 4.B.: Installation of small hydroelectric power generation facilities on existing infrastructure is a good idea that should be encouraged and supported by the State, as long as projects are required to follow all existing laws and regulations including those pertaining to fish passage and water quality.

Action 4.C.: BES supports the goals of increased energy efficiency and renewable power production. We have made great progress in this area, including installation of fuel cells, micro turbines and a co-generation facility at our Columbia Boulevard Wastewater Treatment Plant. We support the general recommendation, but have some potential concerns with bullet 4. Working with energy companies to optimize energy efficiency and also to encourage opportunities for wastewater utilities and energy companies to partner and beneficially reuse biogas would go much farther in promoting and

encouraging energy efficiency than would imposing additional requirements on an already heavily regulated industry.

Actions 5.A., 5.B., and 5.C.: State support for climate change research, scenarios/models, and development of adaptation strategies will help local communities, including Portland, to better understand climate change at a local level and prepare for adaptation. BES is in the process of adaptation planning for both built infrastructure and natural systems, and supports and looks forward to working with the State in implementing the actions indicated in the IWRS. As part of this effort, it will be important to make sure action 5.B. includes sustaining natural systems as a water use in bullet 3.

Action 6.B., bullet 3: BES has taken actions toward determining the economic benefits of ecosystem services in our Grey to Green program. A 2010 report summarizing our work, and suggesting next steps where the State could focus efforts, can be found at http://www.portlandonline.com/bes/index.cfm?c=52055&a=298042. It is particularly important to make sure benefits are not limited to fish/wildlife and water quality benefits, but also include benefits such as access to nature, health benefits (mental and physical), benefits of natural vistas, etc. If the State moves toward establishing regulations pertaining to when and how ecosystem service values are to be defined and used, care should be taken to ensure that these regulations are not overly burdensome.

Action 6.C., bullet 6: Improving UIC location information is a worthy goal. However, it should be expanded to address the conflict between well siting and UIC location. Under current law and regulations, new wells may be drilled within the UIC setback, forcing the UIC owner to close, retrofit, or prove that the UIC is not a problem. There are no provisions for well drillers to consider UICs when locating a well or for UIC owners to be notified (in fact, the information about a new well site is confidential for a year after drilling). The recommendation should also include a reexamination of both UIC and well regulations to ensure consistency and prevent conflicts.

Action 7.A.: This recommendation appears to combine planning and coordination based on hydrologic boundaries with "regionalization". In some areas, a city's boundaries may be sufficiently broad or isolated enough that comprehensive sub-watershed planning can be done without coordination with other regional entities. Funding should be prioritized based on the best solution for each specific area and circumstance. Regionalization implies there must be coordination with other local entities, and may not make sense in some areas; it would be wrong to try to push these communities toward regionalization or to unfairly disadvantage them in grant and loan situations if they resisted that pressure.

Action 7.B., bullet 3: According to the EPA website[1], the definition of green infrastructure is,

> An adaptable term used to describe an array of products, technologies, and practices that use natural systems – or engineered systems that mimic natural processes – to enhance overall environmental quality and provide utility services. As a general principal, Green Infrastructure techniques use soils and vegetation to infiltrate, evapotranspirate, and/or recycle

[1] *http://cfpub.epa.gov/npdes/greeninfrastructure/information.cfm#glossary*

> stormwater runoff. When used as components of a stormwater management system, Green Infrastructure practices such as green roofs, porous pavement, rain gardens, and vegetated swales can produce a variety of environmental benefits. In addition to effectively retaining and infiltrating rainfall, these technologies can simultaneously help filter air pollutants, reduce energy demands, mitigate urban heat islands, and sequester carbon while also providing communities with aesthetic and natural resource benefits.

This action proposes to include maintenance in the definition of green infrastructure. Basic maintenance clearly does not fall within the EPA definition. It would be inappropriate to attempt to alter the State definition for the purpose of diverting targeted funding to projects that fall outside the Federal definition.

Action 8.A.: BES encourages State support for water quality and quantity education. However, there are many programs throughout Oregon that currently do this quite well. The State's limited resources would be better spent on assessing what is currently available and identifying gaps, rather than designing another new program.

Action 9.A.: Water and Wastewater utilities are already facing rate pressures. Adding a fee would only make matters worse, compromising our ability to adequately fund operations and remain in compliance with Federal and State regulations. More detail would be needed about the structure and use of the proposed fee to make specific comments, but any addition to the wastewater rates would be very difficult for local communities.

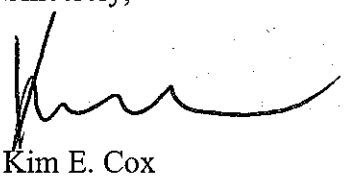
Action 11.D.: BES supports the establishment of ecosystem credits and markets. This will help establish the value of ecosystem services and funding mechanisms for mitigation of pollution. For some of these services, it is essential that the benefits be kept in close proximity to the impacts which are being mitigated. We are concerned that marketing outside the metropolitan region or State could bring about a situation where Portland residents experience local impacts, but benefits are felt elsewhere.

Action 12.A.: BES fully supports this action. Protection, development of assessment methodology, and establishment of statewide policies related to natural storage, floodplain functions, and riparian areas will greatly help BES fulfill our mission. To improve this recommendation, we suggest the addition of ODFW to the list of agencies in bullet 4. In addition, the State should include the FEMA and NOAA guidelines in Oregon and Washington as resources.

Action 12.C., bullet 1: The Department of Environmental Quality already regulates toxic chemicals in water (NPDES permits, setting water quality standards, SB737 implementation, etc.). DEQ has adequate authority to take necessary actions to reduce releases and exposures to toxic chemicals. BES questions the value of establishing an interagency team to duplicate this work by developing yet another list of toxic chemicals of concern. BES supports all of the other recommendations in 12.C.

Thank you for the opportunity to provide input. If you have any questions related to our comments please contact Alice Brawley-Chesworth at 503-823-4913 or alice.brawley-chesworth@portlandoregon.gov.

Sincerely,



Kim E. Cox
Environmental Policy Division Manager
Bureau of Environmental Services

Oregon's Integrated Water Resources Strategy draft recommended actions Comments
August 31, 2011

To: Alyssa Mucken
Policy Coordinator
Integrated Water Resources Strategy
Oregon Water Resources Department
725 Summer St NE., Suite A,
Salem, OR 97301

From: Clair Klock
Senior Resource Conservationist
Clackamas Soil and Water Conservation District
220 Molalla Ave
Oregon City, OR 97045
503.210.6007
cklock@conservationdistrict.org

Comments

After examining the recommended strategy and listed priorities I would recommend that rainwater harvesting systems references be included in all phases of the strategy.

1. It is a well-known fact that we cannot increase our usage or capacity from either groundwater or surface water without further environmental consequences.
2. Rainwater has less chance of pesticide, pharmaceutical and nutrient contamination.
3. If actively maintained and controlled, rainwater systems can be used as stormwater mitigation.
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7. The technology is present for both passive and active use of rainwater harvesting systems.

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Thank you for your attention. Please contact me with any question and I would be glad to help draft and review any change that you may develop.

Confederated Tribes *of the*
Umatilla Indian Reservation
Department of Natural Resources
Administration

46411 Timíne Way
Pendleton, OR 97801

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Phone 541-276-3165 Fax: 541-276-3095

August 31, 2011

Via E-Mail and U.S. Mail

Ms. Brenda Bateman
waterstrategy@wrd.state.or.us
Attn: Water Strategy, c/o the Oregon Water Resources Department
725 Summer Street N.E., Suite A
Salem, OR 97301

Dear Ms. Bateman:

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Department of Natural Resources (DNR) appreciates the opportunity to submit the attached comments on Oregon's "Integrated Water Resources Strategy." I have been a participant in the advisory board that has been involved in the development of this comprehensive document, and recognize the extensive time and effort that it reflects.

Water is the first of our "First Foods," without which nothing else would be possible. Oregon's water resources presents us with many substantial management challenges, they also provide many important benefits. The Strategy offers a number of sound approaches for addressing them, and I hope that our comments will help to strengthen and enhance its recommendations. Thank you for your consideration.

Sincerely,

Eric Quaempts
Director, Department of Natural Resources

Cc: Fish and Wildlife Commission
Tribal Water Commission

EQ: cfm

Confederated Tribes of the Umatilla Indian Reservation (CTUIR)
Department of Natural Resources (DNR)
Comments on Oregon's Integrated Water Resources Strategy
August 31, 2011

As a general matter (i.e., applicable throughout the document), the "Draft Recommended Actions" frequently mention the need or direction for Oregon (OWRD or other agency) to coordinate or consult with other sovereign entities or agencies on water management issues. Commonly listed are federal agencies and local governments, stakeholders, etc.; there is often no mention of "tribes" among these co-managers. The only place we could find an exception is on p. 53, where "Indian tribes" are specifically recognized as one entity with which the state should coordinate. The document should make clear, at the outset and throughout, as appropriate, that tribes are in many cases water resource co-managers, based on well-established legal rights and interests. The document should list "tribes" whenever it discusses collaborative efforts, coordination, consultation, etc., in the various "Bulletins."

As an example of where tribes are not mentioned and should be, see Bulletin 1, p. 7:

> **ACTION 1.A: "MAP" OREGON'S WATER-RELATED INSTITUTIONS**
> There are more than 15 state agencies whose responsibilities touch upon some aspect of water management and data collection, as well as dozens of federal agencies and hundreds more private and local entities. Document the major agencies involved in water management and supply in Oregon, describing their areas of responsibility and available data sets to further integrate across jurisdictions and improve coordination.

In the first bullet under Action 1.B (p. 8), does OWRD have a priority order for the basins that need further study? Are the basins listed in the first sentence on p. 6 the priority basins? If so, the strategy should make a specific connection between Action 1.B and the priority basins. What are the timelines for completing the needed water resources studies in the priority basins? The Conclusion (p. 7) identifies the funding problem, but the Strategy (Bulletin 9 in particular) does not identify how OWRD will overcome the funding problems to make real progress on completing the needed studies as indicated in the first bullet of Action 1.B.

Bulletin 2, p. 12, discusses Out-of-Stream Needs and adjudications, identifying the Umatilla Basin as having already been adjudicated. While this process did occur in the early part of the last century, it was very legally flawed and the CTUIR does not accept the results. Currently we and many others (including state and federal agencies and local stakeholders) are in the initial stages of quantifying and settling, through negotiations, the CTUIR's water rights in the Umatilla Basin. The document should clarify, via a parenthetical insert or footnote, that the Umatilla Basin is a unique situation that should not be identified as properly or definitively adjudicated. Bulletin 2 contains a specific recommended action to complete water right adjudications:

ACTION 2.C. COMPLETE WATER RIGHT ADJUDICATIONS
Complete areas of the state that have not undergone the adjudication process, including reserved water right claims that still exist for tribal or federal lands.

This recommendation should be supplemented by adding another bullet, stating that "Where areas of the state have undergone earlier adjudication processes with flawed outcomes that are marred by problematic legal anomalies and historic biases to the detriment of bona fide tribal water right claims, Oregon should explore and pursue revisiting and reconsidering those earlier processes and outcomes."

We agree that these important and substantial rights, which have early priority dates, should be a priority for resolution by the State. The Strategy, however, should consider adding target time frames for completing these adjudications.

Bulletin 1 states that surface water is "fully allocated" in many streams statewide during the summer months. It seems appropriate to add a recommended action in Bulletin 3 which connects the two bulletins. The Strategy should consider recommending that no further surface water permits be issued by OWRD for a particular stream until (a) the instream needs are identified, and (b) there is a determination that sufficient water is in the stream to meet the instream need. Without such action, the State risks creating more conflict between instream needs and out-of-stream appropriations.

Bulletin 4, p. 21, states:

ACTION 4.B. TAKE ADVANTAGE OF WATER INFRASTRUCTURE TO DEVELOP HYDROELECTRIC POWER
Engage with Bonneville Power Administration to gain access to unallocated water in the Columbia River when high flow events have exceeded spill maximums. [State – Federal – Local]

It is not entirely clear what "engage" and "to gain access to" means in this context. "Engage" is probably relatively innocuous, meant to suggest possibly "contact" and "discuss." "To gain access to," on the other hand, may indicate "acquire" or "obtain," raising the prospect of increasing diversions/withdrawals. If out-of-stream consumptive water use during uncontrolled spill (high Spring runoff when TDG limits are exceeded) was to increase, it should be examined very carefully to ensure that no harm to fish would occur. Also, "[State – Federal – Local]" indicates "lead or coordinating agencies"; "Tribes" should be included.

Bulletin 6, p. 30, says:

ACTION 6.C. FULLY INTEGRATE WATER INFORMATION INTO LAND-USE PLANNING (AND VICE VERSA)
Develop rules to implement Statewide Planning Goal 6. Although Goal 6 directs local governments to consider the effects of land-use on water quality, it does not contain details about how to address water quality concerns when making

land-use decisions. Build a coalition of non-governmental organizations, agencies, water providers and others to serve as a rule-making advisory group.

A rule-making advisory group that could provide "details about how to address water quality concerns when making land-use decisions" should also include tribal representation where appropriate.

Bulletin 7, deals with "Water-Related Infrastructure," primarily water and sewage treatment plants and dams. On p. 35, it says in part:

> **ACTION 7.B. DEVELOP AND UPGRADE WATER AND WASTEWATER INFRASTRUCTURE**
> - Use an "asset management" approach to rehabilitate or replace infrastructure that no longer serves it purpose.
> - Upgrade facilities to address emerging contaminants and growing populations.
> - Ensure that basic maintenance (fixing leaks, replacing wooden pipes, measuring, automating) are counted in the definition of "green infrastructure" so that these projects can continue to compete for grant and loan funding.
> - Recapitalize the state's Special Public Works Fund, to continue providing low interest loans and grants to partially offset capital costs.
>
> **ACTION 7.C. IMPROVE DAM SAFETY**
> - Encourage efforts to evaluate and retrofit Oregon's dams in anticipation of seismic events, aging, and other conditions. Resources are needed to conduct seismic evaluations that will identify deficient structures.

We suggest that some type of language should be added addressing situations like that recently encountered with a defunct hydro project on the Umatilla River, such as:

> "Infrastructure, dams and other facilities that have been abandoned or are otherwise non-operational and in derelict condition should be identified and removed/ decommissioned, and the sites occupied or affected by them should be restored to pre-project conditions. Necessary funding mechanisms should be identified and established to enable and facilitate such efforts."

The Columbia River Treaty (CRT) is noted on p. 47, in Bulletin 10, "Place-Based Approaches." The recommendation is on p. 50:

> **ACTION 10.B. PARTICIPATE IN TRANSBOUNDARY AGREEMENTS**
> Continue to participate in transboundary efforts related to water management and long-term planning. These include the Columbia River Treaty, the Klamath Basin Restoration Agreement and its related work groups, and Oregon's Territorial Sea Plan.

The current joint effort of 15 Columbia Basin tribes regarding the CRT renegotiation process can be summarized as encouraging development and adoption of a new Treaty that incorporates "ecosystem function" as a fundamental driving principle. Management of trans-boundary water would have to factor in protection and restoration of environmental values and benefits. The existing Treaty (adopted 1964) does not; the only issues it addresses are power production and flood control. We recommend that Oregon support and join with tribal efforts to obtain a new Treaty that considers and protects Basin ecosystems and the environment. The State's position should be informed by, and be consistent with, the joint statement developed by the "CRT tribes," "Common Views on the Future of the Columbia River Treaty" (Feb. 25, 2010), which states:

> The present Columbia River power and flood control system operations are negatively affecting tribal rights and cultural interests throughout the Columbia Basin. The Columbia River Treaty is foundational to these operations.
>
> The Columbia River Treaty –
>
> - Was negotiated and continues to be implemented without regard to the tribes' unique legal and political relationship with the federal government.
> - Is narrowly designed for the benefit of power and flood control.
> - Does not include ecological considerations for critical tribal natural resources.
> - Does not include considerations of critical tribal cultural resources.
> - Created a power and flood control system that degraded rivers, First Foods, natural resources, and tribal customs and identities.
> - Significantly affects tribal economies.
> - Excludes tribal participation in its governance and implementation.
> - Limits what can be accomplished with non-Treaty agreements to meet tribal resource priorities.
>
> The Columbia River Treaty is under review by the U.S. and Canadian governments for reconsideration in 2014. Reconsideration of the Treaty provides an opportunity for the tribes to seek benefits not realized in 50 years of Treaty implementation.
>
> The Columbia Basin tribes' interests must be represented in the implementation and reconsideration of the Columbia River Treaty. The Columbia River must be managed for multiple purposes, including –
>
> - Respect for the sovereignty of each tribal government - each tribe has a voice in governance and implementation of the Columbia River Treaty.
> - Tribal cultural and natural resources must be included in river management to protect and promote ecological processes - healthy and useable fish, wildlife, and plant communities.

- Integrate the tribes' expertise of cultural and natural resources in river management.
- Equitable benefits to each Tribe in priority to other sovereign parties in Columbia River management.
- Respecting and preserving the benefits of settlement agreements with tribes.
- Recognize tribal flood control benefits.
- Protecting tribal reserved rights to current and future beneficial uses, in a manner consistent with ecosystem-based management.

In order to realize these principles, the tribes' collective voices must be included in the implementation and reconsideration of the Columbia River Treaty.

Bulletin 11 correctly identifies funding as a fundamental (and unmet) need to manage Oregon's waters. The Bulletin, however, does not indicate what the funding needs are for the State. Funding levels for some other states are provided, but Oregon's funding needs are noticeably absent. Target funding amounts should be added to the Bulletin.

Bulletin 12, "Improving Water Quality" (p. 61), appropriately mentions elevated stream temperatures as a widespread problem. The discussion on solutions, however, needs to be expanded beyond "retention and restoration of riparian areas." Hyporeic flow is a critical factor in reducing elevated stream temperatures. Restoring the lateral and vertical hydraulic connection across the floodplain and identifying and protecting high flows are requirements for maintaining fish habitat and for developing the stream morphology that promotes hyporeic flow. We recommend that the discussion include these concepts because of their importance to reducing stream temperatures.

Under Action 12. B, consider adding a bullet that the State provide substantial funding to purchase existing out-of-stream water rights for conversion into instream rights that put water back into streams, where and when the flow is needed.

Bulletin 12, "Ecosystem Health & Public Health Needs," includes the following recommendation (p. 64):

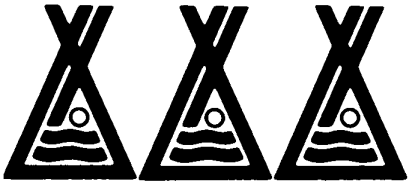
ACTION 12.C. IMPROVE POLLUTION PREVENTION

- Reduce the Use of Toxics
  ~ Establish an interagency toxics chemicals reduction team that is charged with developing a list of "toxic chemicals of concerns" and a toxics use reduction strategy. Identify specific actions the state can take to reduce releases of and exposures to listed chemicals.
- Sourcewater Protection
  ~ Establish "take back programs" for unused and outdated products, including pharmaceutical take-back programs for communities, pesticide collection programs for farmers and ranchers, and hazardous waste. [See Action 8.A]
  ~ Provide technical and funding assistance to clean-up contaminated aquifers.

~ Ensure consistent riparian buffers and restoration requirements for all land uses.
~ Encourage techniques that decrease turbidity and sedimentation (e.g., no till farming).
~ Promote consistent application of state water quality standards across land uses.
~ Encourage the Oregon Treasurer's Office and Department of Administrative Services to incorporate water quantity and water quality issues into investment and purchasing decisions. Use state and local purchasing power to demonstrate preference for products made without toxic or persistent pollutants, such as certain soaps or cleaners.
~ Continually improve water quality standards, including the Priority Persistent Pollution list (P3), Total Maximum Daily Loads (TMDLs), new water quality standards for toxics, non-point source pollution, and toxic reduction plans.

These are worthwhile approaches. However, again recalling problematic situations, the recent leaking World War II-era Liberty Ship in the Columbia River comes to mind. We suggest additional language such as:

> "Sites, facilities or structures may be in such condition, or such circumstances may exist, that they pose a serious and imminent hazard of emitting or discharging substantial amounts of toxics or other pollutants. Those sites, facilities or structures should be identified and all immediate legal means and enforcement mechanisms should be employed to prevent such emissions or discharges *before they occur*."



THE CONFEDERATED TRIBES OF THE WARM SPRINGS RESERVATION OF OREGON

DEPARTMENT OF NATURAL RESOURCES
Hood River Production Program
6030 Dee Hwy. Parkdale, Oregon
Phone (541) 352-3548
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August 31, 2011

To: Oregon Water Resources Department

From: CTWS Hood River Production Program

RE: Draft Integrated Water Resources Strategy

Dear OWRD,

We appreciate the opportunity to comment on the draft recommended actions for the Integrated Water Resources Strategy dated June 23, 2011. For the most part the strategies present a sound and fresh approach by the Department to balance the various competing demands placed upon our most vital natural resource – water.

Our mission is to restore fish and wildlife populations and natural habitats so Tribal members can exercise their treaty guaranteed rights to fish, hunt and gather in the Hood River Basin. Since 1991 the CTWS Hood River Program has been actively engaged with various Hood River basin stakeholders to support watershed restoration projects that restore stream flows and fish passage. Our approach is to work collaboratively with the major water users to achieve instream benefits while maintaining the water dependant economic vitality of the valley. During the course of our program we have employed many of the strategies proposed in this document.

For the purposes of this review our comments are focused specifically on the Hood River basin and the primary consumptive water use – irrigated agriculture.

Bulletin #2:

- We suggest the department conducts a comparison of existing water rights and actual consumptive use. The analysis may reveal unused rights that may be available for conversion to instream rights.
- An analysis of crop types in the valley and water demands to produce specific crops. The results could provide a valuable tool for long term crop planning that may help achieve instream objectives. Specifically irrigators may be encouraged to grow crops that do not require irrigation during critical low flow periods on portions of their marginal lands.

Bulletin #3:

- It is high time for the State of Oregon to adopt a new vision of water law and the concept of prior appropriation. This arcane legal concept is responsible much undue conflict. Time and resources would be better spent over balancing consumptive and instream demands instead of haggling over water rights if both existing uses and instream flows are understood and maintained..
- Similar to the previous comment the majority of instream water rights are "junior" to existing rights. This does not provide instream values with equal standing when water allocation and conservation is considered.
- The two actions in this strategy are contingent upon more research. We hope the Department recognizes the needs of fish and aquatic species in sufficient depth to be able protect and restore sufficient flows to meet those needs. While continue research is desirable there is sufficient scientific information to support instream flow decisions.

Bulletin #4:

- The Tribes have concerns with development on additional hydro-electric power generation along irrigation pipelines. Our concerns involve 1.) The reduction in flows from the point of diversion and the return flow, and 2.) The water diverted into the irrigation ditches for power generation outside of irrigation season and resulting year round dewatering of the Hood River. Finally the classification of in-line hydro as a non-consumption use is misleading from an instream values perspective.
- A portion of funds from current and additional hydro-electric development should be made available to the WRD or others to implement water conservation measures that result in increasing instream flows.

Bulletin #5:

- Summer stream flows in the Hood Basin are largely supported by glacial snow melt. The glaciers that feed the Hood River basin are receding. This is major concern for all basin stakeholders. We support the Departments strategies presented in this bulletin.

Bulletin #10:

- We strongly support sub-basin planning and stakeholder consensus approach to solving Hood River water challenges. However, until existing water law is amended to address contemporary water issues and gives instream uses an equal seat at the table with consumptive users we are reluctant to endorse placing sole water management decision making in the hand of basin stakeholders.

Bulletin #11:

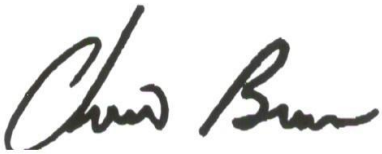
- Given the predicted reduction in summer flows the need to investigate the construction of off channel storage is becoming apparent in the Hood River basin. Built storage that captures a portion of winter flows for summer release seems to be a reasonable option to ensure both long term consumptive and instream demands are met. We are cautiously supportive of efforts to develop off channel storage as long as winter instream flows are met.

Bulletin # 12:

- We are supportive of all of these strategies. Since these strategies overlap the missions of other state agencies ie ODFW and DEQ, it may be a time to consolidate these agencies, along with WRD,into one state resource agency. By doing so communication and coordination would be improved. Given current budget challenges existing agency staff could be cross trained to share duties resulting in increased efficiencies through elimination of redundant duties.

We hope these comments will be useful as the Department finalizes the strategies. The HRPP has enjoyed a very positive working relationship with the State of Oregon, specifically WRD, FWS and DEQ as we fulfill our agencies respective missions. We look forward to assisting the Department with implementation of the proposed strategies as they relate to instream flow protections.

Sincerely,



CHRIS BRUN
HRPP Coordinator

Deschutes Reintroduction Network

August 29, 2011

The Integrated Water Resources Strategy Recommendations - Draft Report, prepared by the Oregon Department of Water Resources is excellent and informative. It covers numerous critical topics, it's thoughtfully prepared and presented in a brief and readable manner. Based on my 37 years of professional experience in the fields covered and another 10 years in related volunteer roles, boards and councils I'm sincere in my praise. With some expansion, as recommended in these comments, I believe it should be the basis of a required, advanced high school course and a college course for natural resource professionals. If ODEQ and ODFW would prepare similar summaries the coverage would be complete.

My comments fall into two categories – **report-text specific** and **additional coverage needed**.

Report-Text Specific

The report, in my opinion, overemphasizes the lack of comprehensive knowledge as a reason for not making decisions or taking action. This is illustrated by the sentence on page 7 *"Incomplete datasets and the inability to completely process and communicate data hinder our ability to make informed resource management decisions."* There's valid concern about not having "complete datasets" before making decisions, but in my 49 years in this field I've never seen datasets complete enough for some decision-makers. It's often used to justify inaction and the consequences can be serious and long-lasting. Complete datasets are seldom available and often not necessary to make good decisions. You don't have to know exactly where you'll land in the canyon to know to hit the brakes before going over the edge.

There are a number of such good decisions that must be made very soon regarding water resources and aquatic ecosystem health in the Upper Deschutes. These are covered under Additional Coverage Needed.

Sediment

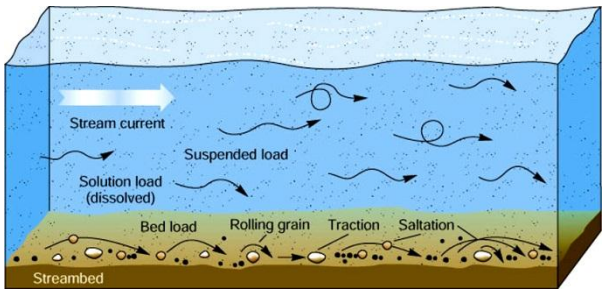
The report addresses sediment, but misses the most damaging aspect of eroded sediment transported and deposited on spawning and rearing gravel.

A common misconception is that for erosion to result in sedimentation problems the disturbance must occur close to the stream, but such problems originate throughout the watershed as **surface/sheet erosion, mass erosion or channel erosion**. The term "hydrologically connected" is often misunderstood and misused to imply that if a disturbance is not close to a perennial water body there will be little or no sediment delivery. However, many eroded soil particles move beyond the initial erosion plume and are deposited in rills, rivulets and gullies waiting for the next high flow. Sediment transport will usually be restored after the initial settlement in a few years or a few decades depending on storm frequency and intensity. The time needed for the soil particles to arrive at a water body, i.e. routing time, is the primary effect of disturbance location.

Erosion research specialists have completed studies that demonstrate that when there is a high degree of erosion in a watershed, from events like wildfire or logging practices many decades ago, much of the sediment is deposited during transport but later entrained and the transport and delivery continued. For

example, in Caspar Creek in Northern California the redwood forest was logged and the system still delivered sediment a century later, even though the forest had re-grown.

The spawning-rearing gravel impacts are usually severe from sediment caused by accelerated, or human-caused, erosion. The sediment is often transported as **bedload**. It is difficult to see, monitor or fit within a water quality regulatory framework, but it is a major threat to healthy salmonid populations. The water is often clear during bedload movement. The FS video "Viewing Bedload Movement in a Mountain Gravel-bed Stream" is at: http://www.stream.fs.fed.us/publications/videos.html#eastandwest



Natural amounts of fresh gravel moving down a stream are essential for the health and vitality of spawning and alevin-rearing beds, but accelerated soil erosion provides damaging sediment. Clay, silt and sand sized sediments are particularly damaging to eggs and alevins through deposition from suspension in the water column and bedload movement, i.e. the sliding and bouncing of soil particles along the gravel substrate.

The graphic and the following description regarding alevins are taken from the U.S. Fish and Wildlife Service brochure: *"Salmon of the Pacific Coast".*

"The eggs lie in the gravel through the winter, as the embryos within develop. In early spring, yolk-sac fry, or alevins, hatch. The tiny fish carry a food supply (a sac of egg yolk) attached to their bellies. They will not leave the protection of the gravel until the yolk is used up, 12 weeks or more. At that time, the young salmon, now called fry, swim up to the surface, gulp air to fill their swim bladders, and begin to feed." **NOTE** - Bull trout spawn in the fall and the eggs and alevins are in the gravel for up to eight months.

Nitrate

On page 6 nitrate in groundwater is mentioned as often exceeding drinking water standards. An April 11, 2007 letter from the Upper Deschutes Watershed Council to Deschutes County summarizes the eutrophication aspect of nitrate in groundwater very well. It states:

> *"Our concern is based on the fact that the Little and Upper Deschutes Rivers are nitrogen-limited systems. This means that additional inputs of nitrogen, even in extremely low quantities, can cause algal blooms, excessive plant growth, oxygen depletion, changes in pH, and other important changes that are detrimental to aquatic ecosystems. It is important to note that the guideline for nitrates in drinking water is 10 mg/L whereas the guideline for total nitrogen in freshwater (i.e., rivers) is 0.12 mg/L. The fact that the guideline for freshwater is 80 times lower than drinking water illustrates the extreme sensitivity of freshwater ecosystems to nitrogen inputs. In the Little and Upper Deschutes Rivers, even small inputs of nitrogen from septic systems or surface runoff could result in significant impacts to the fisheries and aquatic ecosystems"*

Economic Values

Restored and/or reintroduced native salmonids in the Upper Deschutes basin present exceptionally high potential for economic values to the local and Oregon economy. This is covered later under Crooked River

and Steelhead Reintroduction.

Instream Needs

On page 16 the report *states "We currently lack a comprehensive understanding of the base flows needed to support fish habitat."* As summarized under the Whychus and Crooked River, Additional Coverage Needed sections there is more than enough information available for Upper Deschutes basin streams to set adequate instream water rights for low flows. Adequate flows are essential for the aquatic health of stream and lake systems, which reflect the health of the watersheds.

Additional Coverage Needed

A set of early action recommendations in the report are essential for the Upper Deschutes basin at this key juncture for water management and aquatic health. The health of anadromous salmonids, which are key components of our history and our future are particularly important. In the Upper Deschutes that future can and should involve an improved economy, job growth, habitat expansion for the ESA listed steelhead, and the overall improvement of two high-profile aquatic ecosystems. A third ecosystem is also important but does not appear to involve anadromous salmonids. The Groundwater Mitigation Program also needs improvement.

The reintroduction of anadromous salmonids above Pelton Round Butte Dam at a total cost of over $300 million will be a world-class achievement, depending on how well it works. At this point optimism appears to be justified for Chinook salmon reintroduction and the reversion of the Lake Billy Chinook kokanee to ocean destined sockeye salmon. But it's a different picture for steelhead, which is listed as threatened under the Endangered Species Act.

Steelhead reintroduction can also work well but a lot of effort is essential to increase flows and reduce water temperatures in Whychus Creek and the Crooked River. Good intentions are abundant, but when the needs are outlined the Oregon and federal agencies that can contribute the most to steelhead reintroduction success are either not acting or moving too slowly.

Whychus and Steelhead Reintroduction

Below is the key paragraph from a current OSU MS thesis regarding recent research concerning the flow targets (33 cfs) in the lower Whychus (it's 20 cfs in the upper Whychus).

Emphasis (**bold**) added by me.

> *"The results of this analysis indicate **at the current target of 0.93 cms (33 cfs),** temperatures equal 20.8 ± 2.1 and do not meet the state criteria. An estimated 4,874 ±1013 steelhead trout juveniles may result and **an estimated four steelhead trout adults would be expected to return** to the upper Deschutes Basin. If the goal was to reduce temperatures for steelhead trout then, to achieve the state criterion of 18.0 °C, 1.90 cms (67 cfs) of instream flow may result in 21,869 ± 2022 steelhead trout juveniles may result and an estimated 344 steelhead trout adults would be expected to return to the upper Deschutes Basin. This would result in a more viable Deschutes above Pelton Dam MPG within the Middle-Columbia River Steelhead DPS. Further, this analysis indicates that at flows < 1.10 cms (< 39 cfs) and after the Pelton Round Butte Dam installation the carrying capacity of steelhead trout juvenile in Whychus Creek in the late 1950's would not have resulted in returning adults."*

Based on the wording, the Crooked River was apparently considered to be a separate basin.

The current instream rights (targets) were probably viewed as a good "compromise" when they were set, but it's unlikely that such flows will be adequate for steelhead.

The research paper can be found at:

Evaluation of Instream Flow Restoration Targets and the Carrying Capacity of Oncorhynchus mykiss according to Temperature, Whychus Creek, Deschutes Basin, Oregon (Click to access the research paper).

The 18 °C is for trout since DEQ hasn't set a steelhead standard for the upper Deschutes basin yet. For spawning the Oregon steelhead standard is 13° C. It's unclear what all the implications of the different temperature standards are since steelhead are flexible and not always predictable. But concluding that much higher flows are needed in Whychus than the current OWRD targets for reintroduction to be successful seems unavoidable. It follows that the Crooked River is essential for success, but it has similar problems, as discussed later.

Early OWRD Whychus Action Needed

- Adopt 50 to 70 cfs as the minimum flows required in Whychus Creek, depending on season and reach.

Crooked River and Steelhead Reintroduction

The Crooked River is essential for steelhead reintroduction into the Upper Deschutes to succeed. The likelihood of success appears to be poor unless Oregon and federal agencies act quickly to provide adequate flows from Bowman Dam to Lake Billy Chinook (LBC). OWRD is a key agency in the actions needed. River water temperatures are also a problem that can be mitigated by adequate flows. Passage at Opal Springs Dam is needed and negotiations are underway.

The minimum flows currently released from storage in Prineville Reservoir by the US Bureau of Reclamation (USBR) are inadequate regarding the flows needed during spawning and juvenile stages of steelhead and Chinook salmon. These anadromous salmonids may return for access to the Crooked River as early as 2012 and want to spawn in 2013. The Lower Crooked River and many tributaries are water quality limited, on the ODEQ 303d list for water temperature and require a TMDL analysis; so adult steelhead passage from LBC to Prineville could be poor or fail. The good news is that the problems appear to have **feasible solutions**.

In 2001 the fisheries consulting firm "Hardin-Davis" (no relation) performed a flow needs study on Crooked River for the USBR regarding steelhead and Chinook. The optimum, minimum steelhead flow needs below Bowman are 140 to 160 cfs for spawning and 160 to 180 cfs for juvenile habitat. For Chinook the flow needs are 180 to 200 cfs for spawning and 130 to 140 cfs for juvenile habitat. The firm completed a 1993 study for redbands below Bowman and the optimum, minimum flows are 200 to 250 cfs for spawning; 80 to 90 cfs for fry; 140 to 160 cfs for juveniles; and 250 to 350 cfs for adults.

Steelhead may return in late 2012, so interim flows based on the best available information should be provided in 2012. The instream water rights flows ODFW applied for in 1990 are based on the "Oregon Method", a methodology variation of IFIM. OWRD has failed to adopt these minimum flows for over two decades because of objections from, and concerns for, irrigation interests. The flows are:

- February 150 cfs,
- July – January 75 cfs,
- March – May 255 cfs,
- June 150 cfs,

The results from two IFIM flow needs studies by Hardin-Davis indicate that the following flows are needed:

For Upper Canyon redbands (USBR and ODFW) –

- Spawning = 200 to 250 cfs +/-
- Fry = 80 to 90 cfs +/-
- Juvenile = 140 to 160 cfs +/-
- Adult = 250 to 350 cfs

For steelhead & Chinook (USBR) -

- Steelhead spawning = 140 to 160 cfs
- Steelhead juvenile = 160 to 180 cfs
- Chinook spawning = 180 to 200 cfs
- Chinook juvenile = 130 to 140 cf

A reservoir sedimentation survey completed in 1998 estimated the total storage capacity of Prineville Reservoir at 150,200 acre-feet, with 148,600 acre-feet of active/usable space. Approximately **82,000 acre-feet of uncommitted space remains in the Reservoir** that can be used to maintain continuously adequate, minimum instream flows for steelhead, redband trout and Chinook salmon. The Reservoir storage and water released for steelhead should be based on the optimum, minimum flows from Bowman Dam to LBC. Such flows include, and are **not in addition to**, the 10 cfs base flow now specified in 70 Stat. 1058; and the releases for irrigation, City of Prineville groundwater mitigation and flood control.

Flow releases specifically for steelhead or Chinook are unnecessary for much of the year because of their critical life stages and the flows that are in the River for other reasons. Flow releases specifically for fish would usually be needed for less than one-half the year. If 82,000 acre-feet were released continuously for 6 months the river flows would be 227 cfs. This is more than the Hardin-Davis minimum needed for steelhead or Chinook. 90 to 100 days may be realistic in many years. 82,000 acre-feet released over three months would equal 459 cfs. Three- to six-months and 227 to 459 cfs conservatively bracket the realistic range of time and flow that augmentation would be needed. 70,000 acre-feet of allocated Prineville Reservoir storage for downstream salmonid releases should be adequate.

This suggests that Crooked River flows can be adequate for the ESA listed steelhead, Chinook and redbands without compromising irrigation or City of Prineville needs. In drought years some small and proportional reduction of flows for fish and irrigation may be needed. The actual flow augmentation releases would depend on credible flow targets and adaptive management decisions made on an as-needed basis by the responsible fish managers.

An improved tailwater fishery from Bowman to the Ochoco Irrigation District diversion is not just about fish. It's also about jobs and the local and Oregon economy.

No credible, economic study has been done for the Crooked River, but there are examples that indicate the range of possibilities. The four-mile San Juan River tailwater fishery below the USBR Navajo Dam brings $20 to $30 million annually to the local area and the State of New Mexico according to State sources. http://www.wildlife.state.nm.us/recreation/fishing/documents/SanJuanRiverWhitePaperFinal_11-20-08.pdf That's five to 7.5 million dollars per mile annually for a hatchery dependent fishery. A 12 to 14 mile Crooked River tailwater fishery for natural spawning native redbands from Bowman Dam to the main diversion would be created if adequate flows were available. Another example is the 13-mile tailwater reach of the Big Horn River in Montana below the USBR Yellowtail dam. The fishery is reported to bring $30 million in annual economic activity to local communities such as Fort Smith, Montana. http://patbarnestu.club.officelive.com/Documents/PBMRTU_winter09_web.pdf

In addition to the Crooked River fishery benefits the lower Deschutes fishery below PRB will benefit from more Chinook salmon and steelhead moving through that reach of the Deschutes River.

Early Crooked River Actions Needed by OWRD

- Establishment of Oregon minimum flow water rights below Bowman Dam that address the following:

  - For redbands, depending on season:
    - Spawning = 200 to 250 cfs +/-
    - Fry = 80 to 90 cfs +/-
    - Juvenile = 140 to 160 cfs +/-
    - Adult = 250 to 350 cfs
  - For steelhead & Chinook, season dependent and released at water temperatures and river mile locations that preclude temperature barriers to passage/migration:
    - Steelhead spawning = 140 to 160 cfs
    - Steelhead juvenile = 160 to 180 cfs
    - Chinook spawning = 180 to 200 cfs
    - Chinook juvenile = 130 to 140 cfs

- In conjunction with ODFW and ODEQ work with the US Bureau of Reclamation (USBR) and the National Marine Fisheries Service (NMFS) to ensure that the needed flows for steelhead are released from adequate, allocated Prineville Reservoir storage.

Main Deschutes from Wickiup Dam to Bend

This reach was once one of the best salmonid fisheries in the US. It is now badly degraded because of inadequate flows released by the USBR from Wickiup Dam. The natural spring fed system in the upper reach of the Deschutes prior to Wickiup and Crane Prairie dams was similar to the spring-fed Metolius River and ranged from 700 to 900 cfs. It was Nirvana for bull and redband trout. The minimum flow release by the USBR legislated in the Wickiup authorization is 20 cfs, and the actual release is sometimes zero.

Early Deschutes River Actions Needed by OWRD

- Initiate an "Action Team" with members from OWRD, USBR, USF&WS, ODEQ, DRC and the COID to prepare and implement a program for providing flows that facilitate bull trout reintroduction success and an improved 55 mile tailwater fishery from Wickiup to Bend. Water conservation and revision of the reservoir operation protocol would be keys to such a program. The economic and aquatic ecosystem improvements would likely be significant.

- The Action Team minimum flow release targets should be the 300 to 400 cfs minimum flow water rights now established. The team should also address the reduction of peak flow releases below Wickiup Dam. Studies by the Deschutes Water Alliance indicate that through water conservation and improved reservoir operation protocols the minimum flow improvements can be met without affecting irrigation use.

Groundwater Mitigation Program

The groundwater mitigation program implemented by OWRD is not working as well as it should for Upper Deschutes streams and salmonids.

Early Groundwater Mitigation Program Action Needed by OWRD

The implementation of the program should be amended to provide:

- Mitigation must not substitute warmer surface water for cooler groundwater, as addressed in a recent challenge regarding the proposed Thornburgh resort and discussed in interagency work sessions.
- Mitigation must be in the stream reach potentially affected.
- Mitigation must match the "timing" of the impact in the stream reach potentially affected.
- To ensure effectiveness and provide a safety factor, two acre-feet of mitigation water should be provided for each acre-foot of groundwater withdrawn from the groundwater flow systems.

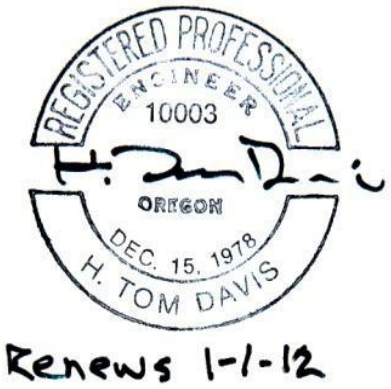
I appreciate the opportunity to comment. The report is an excellent draft. If I can supply additional information on the topics I've addressed, or if you'd like to meet to discuss my comments, please let me know.

Thank you,

Tom Davis

H Tom Davis, PE

Hydrologist and Water Resources Engineer
Deschutes Reintroduction Network
69217 Tapidero
Sisters, OR 97759
541 549 1222



The Freshwater Trust™ Changing the course of conservation.

65 SW Yamhill Street, Suite 200
Portland, Oregon 97204
503.222.9091 MAIN OFFICE
www.thefreshwatertrust.org

August 26, 2011

Dear Project Team,

Opportunities like developing Oregon's first Integrated Water Resources Strategy (IWRS) do not come along very often. The Freshwater Trust (TFT) is excited to play a role in developing a strategy to meet Oregon's in-stream and out-of-stream water needs. We believe we have a chance to profoundly influence the future of Oregon through this process. But we continue to believe this influence will only be as broad as the extent to which the IWRS advances strategies commensurate with the water challenges that lay ahead for Oregon.

Meeting both in-stream and out-of-stream water needs is an easy goal to write on paper, but a hugely difficult one to meet with traditional policies. TFT has serious questions about whether Oregon has a water management framework in place that can simply be adjusted to achieve that goal. We are not confident that Oregon can rise to the water supply challenges that climate change and population growth will throw at us without reexamining our basic water management structure. Luckily, the IWRS process gives us exactly that opportunity.

TFT believes the challenge of developing Oregon's first IWRS means seriously evaluating new and different water management tools and addressing existing barriers to managing water for ecosystems, communities, and economies. Keeping in mind the need to respect existing property rights, enhance the ability of water users to make a living, and provide for in-stream water needs all at the same time, TFT would like to challenge the IWRS project team, our fellow Policy Advisory Group members, the Water Resources Commission, and all of the participating agencies to set aside traditional notions of how we *have* managed water and think creatively about new ways we *could* manage water.

With that in mind, we submit the following specific comments on the June 23, 2011 Draft Bulletin Series.

Bulletin 1: Understanding Oregon's Water Resources and Supplies

On page 3 under the heading "Surface Water Quantity," the document states that "most of the surface water resources in Oregon are fully allocated. . . " While this is true, it should be noted that in many locations throughout the state, surface water resources are in fact *over allocated*. Though it varies depending on the specific system, some systems have more than double the amount of water rights (in cubic feet per second) than natural flow could provide.

Under Action 1.B on page 8, under the heading "Integrate Water Quality and Water Quantity Efforts," consider adding a bullet that says "Support creation of a protocol for ecosystem market development/ecosystem credit creation that links water quantity and instream flow restoration with water quality parameters such as temperature."

Bulletin 2: Understanding Oregon's Out-of-Stream Needs

In the first bullet under Action 2.A on page 13, in addition to what is written, add language stating the need for robust, statistically significant studies of out-of-stream water needs in addition to periodic survey-based methods.

In the third bullet under Action 2.A on page 13, remove the quotation marks around the words "economic value of water to Oregon." It is unclear why these words are in quotation marks and it is not grammatically correct.

In general, the recommendations under Action 2.B on Page 13 are excellent. However, the state's goal should be to measure, report, and analyze as much water use as technology, funding, and staffing allow. The IWRS should set an aspiration goal such as having more than 80% of all water use measured and reported by 2020. In a future where climate change and population growth stress water resources to a breaking point, comprehensive measurement will be a keystone of water management.

Bulletin 3: Understanding Oregon's Instream Needs

In the first paragraph on page 15, remove the quotation marks around the word instream. It is unclear why these quotation marks are there and it is also grammatically incorrect. No similar quotation marks were used in relation to out-of-stream economic needs and the presence of this unnecessary punctuation could be confusing. Instream economic factors are very real and the quotation marks could indicate that the strategy does not take instream economic factors seriously.

Bulletin 4: The Water and Energy Nexus

Under Action 4.A, add the following bullet: Examine ways to balance mainstem Columbia River hydropower with Oregon's other sustainable energy sources (wind, solar, etc) to optimize spill, reservoir operation and optimum power generation with the Columbia River instream needs listed anadromous fish species.

Bulletin 5: Climate Change

Action 5.C discusses climate change adaptation strategies including increasing natural storage, integrating water and land management to help prepare for disasters, and providing assistance to water users to increase storage, conservation, reuse, and efficiency. This list of adaptation strategies is a good beginning. However it does not address a vitally important issue: namely, if climate change predictions come true and mid to late summer water availability is decreased significantly from its current levels, both instream and out-of-stream water uses will be severely impacted. The IWRS is an opportunity for Oregon to develop innovative water management policies that will help ecosystems and water users better adapt to climate change. With this in mind, Action 5.C should include a bullet such as the following statement: Develop, pilot, and implement innovate water policies, laws, and regulations that will allow both senior and junior water users to better adapt to a more water-short future.

Bulletin 6: The Water and Land Use Nexus

Under Action 6.B, consider adding the following bullet: Study areas where development on current or previous agricultural land could result in a shift in water use from ag to municipal purposes. The

volume of water use in these areas (with Bend, OR being a prime example) could decline in the future, freeing up water for instream use and/or other new out-of-stream uses.

Bulletin 9: Funding for Oregon's Water

As a general comment, TFT strongly supports increased funding for all natural resource agencies with specific emphasis on funding OWRD. OWRD is underfunded, understaffed, and lacks capacity in vital subject and geographic areas. This lack of adequate funding severely restricts OWRD's ability to uphold its duty to the people of Oregon to manage the public water resource. The IWRS should explore a variety of creative new fundraising strategies for OWRD.

Bulletin 10: Place-Based Approaches

Oregon should look to Washington's Flow from Flexibility legislation (RCW 90.92.080) in the Walla Walla Basin as an example of one way use a place-based approach to encourage innovative new water management policies.

The IWRS should specifically encourage Oregon agencies and the Oregon legislature to authorize one or more pilot projects for development and implementation of voluntary, cooperative water management plans that increase management flexibility and provide multiple benefits to economic, environmental and social concerns. The purpose of these cooperative plans would be to optimize water use by promoting more effective and efficient water management and thereby (a) increase overall economic opportunities and benefits for agricultural, municipal, and community interests; and (b) enhance instream flows and water quality within priority sub-basins or stream reaches. Such an approach would need to consider legislative changes because the existing statutory and rule requirements for changing water management require individual applications, each subject to different time periods, approval standards, application fees, and procedural steps that make it difficult or impossible to promote cooperative water management efforts and efficiency gains needed to achieve the above objectives.

Bulletin 11: Water Management

Under Action 11.A add the following bullet: Convene a working group to analyze Oregon's Conserved Water statute. Since its inception, it has been under-utilized except in specific regions of the state. The working group should take an in depth look at what factors are preventing wider use of the statute and make a set of recommendations to OWRD and the legislature about law, policy, and rule changes that could increase adoption and use of this statute.

Expand on Action 11.D and elevate it to a key, high priority concept. Specifically, add the following bullet: Engage OWRD staff to assist with ongoing development of protocols and tools for translating flow restoration actions into ecosystem credits.

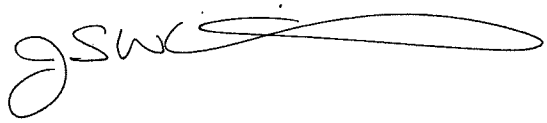
Bulletin 12: Ecosystem Health and Public Health Needs

Expand Action 12.B to suggest engaging a work group of experienced stakeholders and landowners to take a critical look at Oregon's existing flow restoration regulations and statutes and recommend improvements. Challenge this work group to recommend common-sense ways to streamline the application process for instream leases and transfers, recommend new flow restoration tools such as permanent split-season instream water rights, and recommend improvements in field enforcement on behalf of instream water rights.

Conclusion

TFT would like to thank the IWRS project team for the opportunity to submit comments on the IWRS Bulletin Series. We look forward to continuing engagement with the Policy Advisory Group to shape the IWRS into a dynamic and innovative strategy for Oregon.

Best,



Joe Whitworth
President, The Freshwater Trust

From: John Frewing
Sent: Thursday, August 25, 2011 7:48 PM
To: waterstrategy
Cc: 'Barnett, Margot'
Subject: Comment on Integrated Strategies

Dear team,

Your water management strategies (I guess it is also 'mine' as an Oregon citizen) is a wonderful accumulation of information and possible policies (many unfunded). I attended a Salem conference at the start of this process, but don't see several of my suggestions anywhere in the draft report – is this because someone made a conscious decision not to include them or is this because they are impossible or is this because you yielded to special (water) interests for whom they may represent costs or other limitations?

My comments:

1 Oregon should consider a change in laws and regulations which limit water rights to 30 years, to be opened for reassignment for priority uses at that time. This allows for amortization of infrastructure associated with a water right and allows society to have a continuing source of water for new important societal uses. For example, drinking water may become recognized as more important than flood irrigation for horse pasture at some future time.

2 While you have suggested the need for more measurement and funding for more WRD staff, you have been VERY SOFT on the word 'enforcement'. I believe that enforcement should be a high priority for the department – more field staff, associated permit requirements for more measurement, more legal staff if needed.

3 I can't find that you have addressed the issue of forfeiture of water rights for non-use. My opinion is that there are many water rights out there that have not been put to beneficial use for the required past five years and the department should clean up its records and close these water rights – more water available for new uses.

4 You discuss climate change in very general terms – less water for most uses. I suggest that the department (in conjunction with others) develop 'best management practices' for most water uses, particularly agriculture, the largest user segment. These bmps should be used in conjunction with the statutory requirement to avoid 'waste' to move towards more efficient water use over time. At the same time, the definition of 'available water' in a given stream (based on permitted withdrawals and 80 percent frequency of excedance, rather than actual flows and 50 percent excedance as at present) should be made more conservative, anticipating more demands for limited streamflow.

5 Department staff is short – your funding discussion illustrates this well. I suggest an annual permit fee to support department recordkeeping and enforcement. A use fee, properly designed to address capital needs in different segments, should be developed (and approved by legislature) to make Oregon's water infrastructure sustainable.

Governor Kitzhaber, in looking to the future for Oregon, has asked for 'transformational' changes. Don't be shy about suggesting same.

Thanks. I will take your response offline by email.

John Lewis Frewing

From: Marni Haley
Sent: Wednesday, August 24, 2011 8:52 PM
To: Alyssa Mucken
Subject: Re: [IWRS] Reminder: Comments due by Aug. 31 on Oregon's Integrated Water Res...

'Well done!

Two more suggestions: I believe it is in the best interest of the people of Oregon to have a periodic report widely published thru through press releases quarterly indicating by county the number of acres removed from farm/forest use including predictions and/or measurements of how this is or will affect our state water supply. I for one would like to be able to compare Yamhill County with other counties bordering metropolitan areas and to graphically view how the approval of residential/industrial developments are changing the water/air quantity and affecting our quality of our life.

Included in a comprehensive water strategy I think it is imperative that Oregon Law clearly protects water from becoming a commodity which can be shipped out of state in large quantities either by diverting flow or packaged in bottles and thereby becoming another commodity to be gambled with on the stock market. Water must never become privately owned by a corporation it must be a public resource for all.

Water wars just may be the end of civilization.

Thank you for including me and the public in your planning.

Marni Haley
Yamhill County

From: Larry Hammond
Sent: Wednesday, August 31, 2011 9:15 PM
To: waterstrategy
Subject: Oregon's Integrated Water Resources Strategy

IWRS Project Team:
Please accept my comments relating to Bulletin 5: CLIMATE CHANGE.

Action 5.a. and Action 5.b. - Any water management strategy that hinges its plan around climate change is problematic at best. It is not only courting technical disaster but wasting the public's money and the government's credibility while hobbling the private sector with more controls on resource development. It is a documented fact that mankind has thrived in times of global warming and declined in times of global cooling. The affects of either of these occur slowly enough to accommodate and adapt to when the tangible facts are upon us.

Continuing and improving long-term monitoring of surface and groundwater resources is an excellent and necessary management tool.

Planning for the unknowable and uncontrollable is sheer folly.

Action 5.c. - the strategies mentioned therein, while all meaningful and worthwhile, need not be tied to "climate change". Key strategies - YES; wise and prudent strategies YES; tie them to "climate change adaptation" - NO.

Thank you for your hard work and for considering my comments.

Larry G. Hammond
Hines, OR 97738

From: Susan Hammond
Sent: Wednesday, August 31, 2011 5:03 PM
To: waterstrategy
Cc: Inc. Water for Life
Subject: IWRS Comment

As a voice from the South-Eastern side of Oregon:

We would like to reiterate the Comments made by Kyle Marino of Water for Life of this Date.

It is most important to all the people and all the land of the state of Oregon for this critical element to be delegated and ruled on consistantly, throughout the State.

Mostly it is important to protect this resource from overachieving governmental agencies and conflicting beneficial uses.

Thank you.

Hammond Ranches, Inc.
Susan A. Hammond

From: Tim Jaskoski
Sent: Saturday, August 27, 2011 4:36 PM
To: waterstrategy
Subject: water strategy

Attn: Water Strategy
c/o Oregon Water Resources Department

Having been involved in groundwater issues for the last six years and working on a domestic water-well measuring program, and reading extensively about water issues world-wide, I am aware of the need for sound management of all water resources. Having lived in Oregon my 66 years, I have a desire to help assure that Oregon leads the nation in wise water management. This being the case, I urge you carefully consider the following in coming up with a water strategy for Oregon that will serve the state well into the future:

1. Assure through policy and adequate funding that water resources departments can carry out necessary tasks of measuring (wells, diversions, springs, rainfall, weather patterns, etc.), monitoring and record-keeping, reporting and recommending regarding all water resources.

This will surely, based on my observations, require more presence in the field by water resources, and adequate personnel to take care of the paperwork/computer tasks.

2. Keep decisions up to the state, not local governing bodies that may be subject to influence by developers or other special-interest groups.

3. Assure strong laws (permits, etc.) are strictly enforced. For example, there are adequate laws regarding ocean-fishing rights, but the seas are being overfished because of lax enforcement. A law without timely and strict enforcement is not worth having as it will not accomplish its intended end.

4. Monitor and penalize for wasting of water.

5. Ensure that water allocation and reallocation adequately protect in-stream values. Do not allow the streams of Oregon to become like the Colorado river or California's riparian habitat: "It has been estimated that 90% of California's riparian habitat has been lost or compromised already by development, damming, and commercial activities." There are hundreds of examples of states or counties allowing treasured water resources such as streams and lakes to be drained, overdeveloped and/or polluted. This should not be the fate for Oregon.

6. Determine in great detail the relationships between assorted aquifers throughout the state, such as sea sediment and basalt, between surface water and groundwater, and between weather (etc.) and recharge. Then, based on this data, effectively manage the various sources to assure an indefinite, diversified and adequate supply of water for all anticipated future needs (farming, recreation, industry, homes).

7. Arrange for update of the water resources department database and confirm its validity through periodic auditing. I know some work is being done on this now, but it looked to me like those involved do not have adequate time to make timely changes. More qualified help is needed.

Usable water worldwide is becoming short in supply. It is hard to conceive that Oregon might be having problems with water supplies. However, in my neighborhood, some wells have gone dry as properties have been subdivided beyond the originally planned development, and a stream that used to run year-round is dry be early summer. We have already had to fight a legal battle to protect our water rights. In Silverton, an aquifer had to be shut down due to over-drafting. All of

the measurement data I had to opportunity to observe at Water Resources showed declines in groundwater in places throughout the state. These serve as examples only.

Oregon needs a comprehensive, thorough, foresightful and enforced set of plans to assure our water uses are balanced and wisely managed. Therefore, I urge that you achieve this for the future of a livable Oregon.

Sincerely,
Tim Jaskoski

VIA ELECTRONIC MAIL August 31, 2011

Water Strategy, c/o the Oregon Water Resources Department
725 Summer Street N.E., Suite A, Salem,
Oregon 97301
waterstrategy@wrd.state.or.us

Re: Comments on the Integrated Water Resources Strategy (IWRS)—Draft Recommended Actions June 23, 2011.

The purpose of this letter is to comment upon the above-referenced IWRS Draft Recommended Actions. The Klamath Water Users Association (KWUA) is a non-profit organization whose members are primarily irrigation districts and similar entities that divert, deliver and use water in the Klamath Reclamation Project.

Thank you for the opportunity to provide these comments on the above-referenced report. If you have any questions please contact us.

Sincerely,

Tara Jane Campbell Miranda
Policy and Program Coordinator
Klamath Water Users Association
ph. 541-883-6100
tara@kwua.org
www.kwua.org

Integrated Water Resources Strategy- Draft Recommended Actions—June 23, 2011
Klamath Water Users Association's Comments and Concerns

Bulletin 1. *Understanding Oregon's Water Resources & Supplies*	*Surface Water Quality* – In addition to those listed as "typical pollutants (Pg.3)"- it should be noted that not all pollutants or problems are from anthropogenic sources. Historical and naturally occurring nutrients, sediments and other pollutants should be referenced.
Action 1.A	*"Map" – Oregon's water related institutions*— Should consider including neighboring state agencies, particularly where shared rivers or water bodies are present. Though State agencies have identified *statewide priorities*, coordination with neighboring states needs to occur in some capacity (i.e. groundwater use and monitoring study/TMDL regulation/fish and wildlife management etc.). A "basin wide approach" in some cases refers to water resources across state boundaries where coordination between neighboring states is essential when conducting resource management planning.
Action 1.B	KWUA opposes the recommendation to *"Fully incorporate water quantity requirements within DEQ's TMDL requirements"* (pg. 8). This is not a well thought out action and could have vast negative ramifications. Without significantly more thought and information about this bullet point, the credibility of this entire report will be suspect by many organizations and stakeholders in the state. We recommend deletion of this point.
Bulletin 2. *Understanding Oregon's Out of Stream Needs*	*Agricultural Use* (pg 11): With irrigated agriculture contributing billions of dollars to Oregon's economy, further emphasis needs to be giving to the importance of sustaining Oregon's agricultural industries. The continued loss of irrigated agriculture due to increased regulation and unbalanced instream water management is not discussed adequately. The report primarily focuses on detriment to fisheries and wildlife but gives no real weight to water challenges faced by agriculture. We fully support the recommendation to complete water right adjudications.

Bulletin 3. *Understanding Oregon's Instream Needs* Action 3.A & 3.B	In *Bulletin 3. Oregon's Instream Needs*—The statement is made that "Without adequate water within the system,...uses and benefits are threatened" (pg 15). For consistency a similar statement should have made in *Bulletin 2, Out of Stream Needs (referenced above)* regarding the negative repercussions that will affect agriculture, industry and municipal purposes if out-of-stream diversions are limited for other perceived or real needs. *Data Gaps (pg 16)* – Focusing on base flows is dangerous. Assumptions are often made regarding base flows vs. natural flows. Also, assumptions seem to be made regarding priority of beneficial uses. Any decision on this topic should involve the natural resource communities. All science should be peer-reviewed. Impacts to out-of-stream uses/users as well as regional economic impacts should be incorporated when identifying possible outcomes of the *Base Flow Needs Studies* and *Elevated Flow Needs Studies.* These studies, if used alone could have limiting factors for important consumptive uses. **Overall- Bulletins 2 & 3 cannot be addressed separately. One use obviously affects another. Equal weight must be given to social and economic values.
Bulletin 4. *The Water & Energy Nexus*	*Energy Needs for Using Water* (pg 19): The ability of producers and water managers in many parts of the state to conserve water and use it efficiently is tied directly to the cost of power. Higher energy costs can negatively affect efficiency and conservation. The recommendations do touch on this, but we believe the focus and importance of this issue must be elevated to policy makers and the general public. Include statistics on what agricultural producers spend on energy cost each year. Energy costs in different areas of the state or reported by watershed could provide useful information. Incentives for hydro-power and other generation opportunities in conjunction with increased statewide water storage must be stressed.
Bulletin 5. *Climate Change*	The statement that "Longer and drier growing seasons and drought will result in...increased consumption of water for irrigation,…(and) will have potential consequences for natural

Action 5.A	systems" (pg 24) could be stated differently. Some research shows that warmer and wetter climate could occur in the future. Regulatory issues in some parts of the state also dictate that "natural systems" will be the priority and increase their use, thus leaving the agricultural industry to face the bulk of consequences. This report fails to mention the loss of agricultural lands due to the inability to cope with the changes in hydrology and decreases in water supply. Loss of agricultural lands can also mean loss of open space and wildlife habitat. KWUA supports efforts to improve "real-time management of water forecasting and delivery projections" (pg 25). An additional resource that should be cited is a 2007 report, **Water Supply in a Changing Climate**, by the Family Farm Alliance, http://familyfarmalliance.clubwizard.com/IMUpload/FFA%20Report2.pdf Some recommendations from the report include: 1. Prioritize Research Needs and Quantify Projected Hydrologic Impacts 2. Implement a Balanced Suite of Conservation and Supply Enhancement Actions 3. Streamline the Regulatory Process to Facilitate the Development of New Infrastructure 4. Find Ways to Protect Farmland
Bulletin 6. ***The Water and Land Nexus***	Restricting agricultural development should not be the focal point of meeting the "planning goals relate(d) to protecting and maintaining water resources, both quantity and quality (pg 27)." Broader more holistic goals should be considered as increasing restrictions to agricultural development could have negative impacts for Oregon's agricultural communities and local economies. While "identify(ing) the effect of stricter requirements for land practices to protect water resource" (pg 30)—identify the potential social and economic repercussions to rural agricultural communities if restrictions are used to limit agricultural land use operations and actions.
Bulletin 8. ***Education and***	Along with population growth and climate change, other "looming

Outreach	pressures on our water resources (pg 37)" include conflicting state and federal regulations for multiple endangered species that inhabit various and connected water bodies (e.g. Upper Klamath Lake Suckers and Coho salmon in the Klamath River). The state can and should take on a more engaged role with federal agencies that manage aquatic species (and affect for better or worse, the state's water resources). Conflicting science and uncoordinated management between multiple federal agencies limits the efficiency in which water resources in the Klamath Basin could be managed. The need for cooperation and collaboration amongst agencies and stakeholder groups should be stressed. It is important when c*ommunicating the value of water (pg 37)* that education and outreach focus not only on the environment and public health and safety, but also the importance of sustaining the nation's food supply. Linking the "value of water" to the importance of agriculture is vital as the industry supports the majority of Oregon's rural communities (most of the state). To "prepare students for understanding and addressing the major environmental challenges facing Oregon and the rest of the Country" (pg 37), the continued loss of agricultural lands and thus the inability for the United Stated to produce its own food and export agricultural products should be addressed as a major concern.
Bulletin 10. *Place-based Approaches* Action 10.C.C. Regional tools and ideas	In regards to regional (sub-basin) water resources planning (pg. 50), regions should identify and conduct feasibility studies/cost-benefit analyses regarding the potential of environmentally sound storage projects for storing water during the off season for use when water demand increases throughout the year.
Bulletin 11. *Water Management*	*Water Conservation:* KWUA agrees that "agricultural operations can often convert to a more efficient irrigation system, including lining canals…*(p.g. 53-54)*" However, implementing more efficient systems and some conservation measures, like lining irrigation canals, can be detrimental as returns flows are reduced limiting groundwater recharge and available surface runoff vital to riparian ecosystems and wildlife. KWUA emphasizes the need for the IWRS to incorporate plans for building "*multipurpose* storage projects" (pg 54).

Bulletin 12. *Ecosystem health & Public Health --* *Action 12.B*	KWUA recommends removing or significantly re-wording Action 12.b. This should not be done either by regulation or statute. Cooperation and collaboration amongst affected parties must occur, including as it relates to Action 3.A. The potential for significant economic impact and fruitless litigation will be great if this recommendation is introduced and implemented without further review of potential effects. Without buy-in from those who would be most affective, the end product will be further acrimony amongst "stakeholders". The IWRS should not contribute to making the situation related to water management worse. Pursuing "additional instream protections" and the application of "new instream water rights" for base, peak, ecological and other flows (pg 64), without cooperation amongst stakeholders or via regulatory or statutory means should not be an action recommended by this report.

General Comments

- Primary concern over current/future water supply and demand issues focuses on impacts to fish and wildlife dependent on instream flows without adequate regard to the impacts on irrigated agriculture, and local rural economies.

- Continued loss of irrigated agricultural lands in Oregon, due to increased regulations, was not thoroughly discussed. Nor, were the impacts such regulations could have on Oregon's economy and interstate commerce.

- Discussion was inadequate on the disconnected and uncoordinated management approaches by various federal and state agencies regarding water resource management and resulting regulatory issues. Examples include federal regulations related to endangered species and state agency overlap with regard to water quality and TMDL development. The IWRS needs to incorporate improved communication forums for regulating agencies.

- Additional instream protections and “new” instream water rights in order to protect “base, peak and ecological flows” will result in further limitations on the sustainability of rural economies, and the potential for off stream storage and the overall agricultural industry.

- As Oregon and California must share and manage water resources, discussion on coordinating management plans and strategies should be focused on.

- Agriculture should not be the default water supply for municipal and ecological needs.

- Though increased conservation efforts by the agricultural sector could and should be evaluated, KWUA would highlight that that such measures can be cost prohibitive, and can “ result in reduced return flows on groundwater recharge and stream flows, and have unintended consequences…” (Bulletin 11. Water Management: pg 54). Further work evaluating other measures should be focused on. It is not probable that we can “conserve” our way out of the water problem, but it can be a tool.

- Integrated strategies should be developed basin- by- basin and take into account the unique circumstances of each region has

- Require water quality standards that are attainable, realistic and measurable.

- Throughout the IWRS report the symbiotic relationship between agriculture and wildlife was not adequately presented.

- More detail regarding the roles that both water and power have on sustaining the agriculture industry should be incorporated with the water/power nexus bulletin.

Oregon's Integrated Water Resources Strategy draft recommended actions Comments
August 31, 2011

To: Alyssa Mucken
Policy Coordinator
Integrated Water Resources Strategy
Oregon Water Resources Department
725 Summer St NE., Suite A,
Salem, OR 97301

From: Clair Klock
Owner - Klock Farm
931 NE Salzman Rd
Corbett, OR 97019
503.695.5882
klockfarm@cascadeaccess.com

Comments

After examining the recommended strategy and listed priorities I would recommend that rainwater harvesting systems references be included in all phases of the strategy.

1. It is a well-known fact that we cannot increase our usage or capacity from either groundwater or surface water without further environmental consequences.
2. Rainwater has less chance of pesticide, pharmaceutical and nutrient contamination.
3. If actively maintained and controlled, rainwater systems can be used as stormwater mitigation.
4. Rainwater systems, when use in conjunction with smart irrigation management in agricultural, can lead to decreased groundwater and surface water withdrawals.
5. Agricultural rainwater harvesting is viable in any location with large tanks or impermeable pond
6. Rainwater harvesting is a variable and cleaner supplement to municipal drinking water systems.
7. The technology is present for both passive and active use of rainwater harvesting systems.

8. Rainwater harvesting systems should be included in the education objectives of both school students and adult programs.
    a. Emphasize training of planners and inspectors to understanding implementation of rainwater systems.
9. Fund both municipal and agricultural rainwater harvesting infrastructure to increase water storage water capacity
10. Covered rainwater harvesting systems can decrease water loss thorough evaporation by up to 1/3.

Thank you for your attention. Please contact me with any question and I would be glad to help draft and review any change that you may develop.

LEAGUE of Oregon CITIES
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Dr. Brenda Bateman
Senior Policy Coordinator
Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301

August 31, 2011

Dr. Bateman,

Thank you for the opportunity to comment on Oregon's Integrated Water Resources Strategy (IWRS) Draft Recommended Actions. The League strongly supports the development of the IWRS and believes that the development of such a strategy is critical to state's future given the importance of water in economic development, population growth, public health and safety, emergency preparedness, ecosystem health, recreational opportunities and the overall quality of life for all Oregonians.

Below are our comments on the current draft:

- Throughout the bulletins, a disproportionate number of Recommended Actions are aimed at municipal water systems. Given that municipalities use only 6 percent of diverted water in the state, the primary focus of the Actions should be on the agricultural industry, which consumes 87 percent of the diverted water in the state.

- ***Bulletin 2, Understanding Oregon's Out-of-Stream Needs,*** should list the major uses of diverted water (in the first paragraph) in order of quantity used. Municipal use is currently listed first. As was just mentioned above, agricultural production accounts for 87 percent of diverted water use, or over fourteen times what is used by municipal systems.

- ***Bulletin 2, Understanding Oregon's Out-of-Stream Needs,*** should include (under municipal use) information on the importance of cities in the state's economy. According to Oregon Department of Revenue data, more than 84 percent of the state's income tax revenues are generated by city residents and the Oregon Employment Department reports that 4 out of 5 jobs in Oregon are located in cities.

- ***Bulletin 2,*** mischaracterizes "Industrial Use" (second page, first paragraph) as high tech manufacturers, like Intel, Sanyo and SolarWorld. In terms of water right holders, "industrial users" are generally forest product and food processing facilities that hold their own water rights. Most of the high tech industry in Oregon is supplied with municipal water, a point that could be made in the "Municipal Use" paragraph.

  This paragraph also implies that high tech manufacturers are discharging "highly toxic chemicals" into municipal wastewater treatment facilities. However, these discharges are highly regulated and treated through industrial pretreatment programs. The agricultural industry, on the other hand, is responsible for the release of pesticides and herbicides and is unregulated under the federal Clean Water Act. This sector poses a much bigger threat to water quality than does the high tech industry, a point that should be made in this bulletin.

- ***Action 2.A, bullet one,*** calls for the state to create standards to evaluate claims of demand and publish common standards for water demand forecasts. Municipal providers vary dramatically, with some providing to largely residential customers and others to large industrial users. Municipal providers also have different growth expectations, and already have many different standards for demand forecasting. A uniform approach would not take into account the large differences in systems and customer bases. The last sentence in this Action should be deleted.

- ***Action 2.A, Updating Long-Term Water Demand Forecasts,*** should include a statewide assessment of the potential for recycled, reclaimed and harvested stormwater to fulfill current and future water supply needs. This assessment should also attempt to link the water quality of these sources to their appropriate end use. These sources of water offer significant benefits, both in terms of reduced potable water needs and decreased wastewater treatment.

- ***Bulletin 4*** fails to mention the agricultural sector's energy use as it relates to water. The third paragraph in this bulletin mentions the energy needed to heat water and operate water and wastewater facilities, but fails to mention the energy used by agriculture, which often uses water pumped from groundwater sources – a process that consumes a large amount of energy.

- ***Action 4.C, bullet four***, recommends setting energy targets for water and wastewater treatment facilities. While this is a laudable goal, the specifics of most municipal systems make any comparison very difficult. For example, Medford gets most of its water from a source on Mt. McLaughlin, high up in the mountain south of town. It flows to city by gravity, so little energy is used in transmission. The situation in Portland is similar, as a gravity-fed system brings water from Bull Run Reservoir to the city's reservoirs. In contrast, most of Corvallis' water comes from the Willamette River where it has to be pumped from the river up to the treatment plant which is built above the 100 year floodplain. Similarly, some

cities in Oregon have multiple pressure zones, meaning they have to pump and re-pump water to higher elevation areas in their community to get the water where needed, so they use more energy.

While we strongly support improving energy efficiency at all levels of municipal water systems, the dramatically different situations facing water systems make comparisons and energy targets inappropriate and potentially misleading.

- ***Action 4.D, bullets one through three,*** recommend promoting and encouraging energy efficiency, the generation of on-site energy and the development of "green" infrastructure. The League strongly supports these goals and believes that the state should continue and expand its efforts to *incentivize* the aforementioned activities.

- ***Action 4.D, bullet four,*** recommends designing energy efficiency programs that capture and publicly report water and energy savings data. While this is an admirable goal, the time and cost requirements necessary to collect such information will likely fall primarily on municipal water providers and be of dubious value, given the large number of variables that effect water usage, such as weather, business climate, water conservation measures, population growth, etc. While broad trends may be identified by a specific utility that is familiar with the situation within its service area, further data aggregation and/or analysis on a state-wide level could lead to inaccurate conclusions.

- ***Action 5.C, bullet two,*** lists the natural disturbances that should be taken into account when integrating water resource and land management strategies in preparation for climate change. This list should include drought conditions, which can wreak havoc on water infrastructure and should be taken into account as municipalities and agricultural interests plan for the future.

- ***Bulletin 7,*** Water-Related Infrastructure, focuses largely on municipal water systems. Attention in this bulletin should also be paid to agricultural, industrial and water delivery infrastructure. This bulletin and its recommended actions should be broadened to include the infrastructure needs of all water users.

- ***Action 9.A, bullet one,*** refers to potential new fees to fund that state's natural resource agencies. The League supports fees for service programs, as our utilities provide services to customers and charge them for those services. But the League would not support a specific fee that is then applied to a program without a direct connection to that fee. We are, however, willing to work with the natural resource agencies and policymakers on alternative, equitable funding ideas.

- ***Action 11.B***, is broadly categorized as "Increase Built Storage," but the recommendations therein include capitalizing on existing built storage. Bullets one and two, in particular, deal with recharging natural aquifers and allocating water stored behind existing federal dams. More accurately describing this Action

as “Capitalizing on Existing and Increasing Built Storage” or something similar will make it clear to policymakers that large quantities of stored water or stored water capacity are present in the state and need to be allocated or recharged. While the process of allocating stored water and recharging aquifers may be challenging, both are likely less costly than what would be required to build new storage capacity.

- ***Action 12.C, bullets one and two*** discuss toxic chemical reductions and product “take-back” programs. The League strongly supports these efforts, but believes that the primary responsibility for reducing toxics must lie with the manufacturer of any product that includes toxic materials. While many municipal wastewater treatment facilities are able to rid the waste they receive of many toxic pollutants, the most effective and most equitable method of pollution reduction is to reduce the amount of toxics used in consumer products and/or require the producer to ensure that their products are properly recycled and/or disposed of. The costs of such efforts should be built into the cost of doing business for those companies, and should not be borne by municipalities and their residents. We believe the recommendations in Action 12.C should place the onus for toxics reductions on the producers of such products.

Again, thank you for the opportunity to comment on the proposed Recommended Actions. We look forward to continuing to work with you and the Water Resources Department on the development and eventual implementation of the IWRS.

Warm regards,

Chris Fick
Intergovernmental Relations Associate
League of Oregon Cities

From: Lind, Yancy A - BEND OR
Sent: Monday, August 29, 2011 8:58 AM
To: waterstrategy
Subject: Integrated Water Resources Strategy Draft Comments

Hello,

I was recently contacted by WaterWatch and asked to comment on the draft report. Rather than parrot their comments I just want to say that I support them and their analysis of water issues in Oregon.

I am an avid fly angler and river user in Oregon. I am on the board of Central Oregon Flyfishers as well as the Deschutes Basin Chapter of the Association of NW Steelheaders. WaterWatch is the single best resource and advocate for rivers I have found in Oregon and lend my voice to theirs.

Regards,

Yancy Lind

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Financial Advisor
Merrill Lynch Global Wealth Management
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NMLS # 590176

From: Lester Sasaki
Sent: Wednesday, August 31, 2011 2:46 PM
To: waterstrategy
Subject: comments on draft recommended actions for Integrated Water Resources Strategy (IWRS)

Alyssa Mucken, Policy Coordinator:

Marion County Planning appreciates the opportunity to review and comment on the draft set of recommended actions as part of the IWRS. Overall, the document is well laid out, informative and touches upon the critical and essential components/issues with regard to water resources. The County is supportive and appreciative of proposals for collecting new data that will be useful in determining where development should and should not occur in rural areas with regard to water availability and water quality. We are also supportive of proposals and actions that increase public awareness and knowledge of water issues and how these issues impact on every day and long-term decisions. If the public is aware of what the problems and issues are, it easier to get support and political backing for land use decisions and specific development actions/requirements that will protect and conserve water quantity and quality. It would also be beneficial if public educational programs would include information on "how stuff works" for people who may not be aware of how septic/sewage systems and private wells work, how to use them for optimum use and life, and how to properly maintain these systems. The implementation of Action 8.b would be ideal so that local governments could have access to a group of "experts" who could answer technical questions and provide input on local efforts to adopt and implement ordinances/provisions that protect water resources. Finally, coordination on both development of a strategy, actions to implement the strategy, and the enforcement/regulation need to be synchronized and clarified so that these essential water resource protection functions are not divided and frustrating for jurisdictions and the public.

Les Sasaki
Planning Director
Marion County PW/Planning

From: Marilyn McWilliams
Sent: Tuesday, August 30, 2011 5:37 PM
To: waterstrategy
Cc: Greg DiLoreto; Todd Heidgerken; Dick Schmidt
Subject: Integrated Water Resources Strategy

Thank you for this helpful and accessible document on water issues in Oregon. I enjoyed the fact that it was of a pleasing format, had color pictures and readable text. Many citizens will be happy that the lay person can benefit from reading this document. It was great to see the cooperation between many state, local, federal and private entities that gave a larger perspective of our challenges. I also enjoyed the scope of the report, offering glimpses of conditions in various parts of the state. The resources at the end of each bulletin were helpful and of diverse interest.

I remember the hearings at the beginning of the IWRS process, and the challenges to the state agencies to work more closely with one another, to share data, and to insure that regulations do not conflict. This looks like a refreshing step in that direction. Let's hope we can use the limitations of the recession to motivate further outreach between the various public, non profit and private sector stakeholders.

The mention of data gathering and analysis and sharing is a big step forward. Often the data that we have is not available to all who would like to use it, and in this age of computers, we need to use our technical tools to work together to solve the problems we all face as Oregonians. Scientific decisions require we have accurate data, and making it available not only to agencies, but also to universities, businesses and researchers can move the effort to preserve our ecosystem forward.

At this summer's national American Water Works Conference, many sessions approached water utilities in an integrated way, looking at the cycle of watersheds and groundwater, drinking water, waste water, and storm water, and how we need to see them as interconnected parts of the new focus on water as the key commodity for our future as a planet. We learned about water reuse, partnering for emergency response, facing infrastructure challenges as a region, and putting sustainability and asset management into our daily operations. I see many examples in this IWRS document of this same kind of thinking. I have often thought that there is room for added efficiency in consolidation of water utilities, and I enjoyed seeing the references in bulletin 7 in that direction.

This has been an enormous task, and the state is in a better place for your hard work. Thank you for all your wisdom and persistence.

--
Marilyn McWilliams
Tualatin Valley Water District Commissioner

From: Chief Greywolf
Sent: Tuesday, August 30, 2011 4:14 PM
To: waterstrategy
Subject: Water Strategy

Attn: Water Strategy
c/o Oregon Water Resources Department

The Modoc Nation would like to make the following comments to ensure that the Recommended
Actions that are adopted to implement the Strategy:

1) Meet instream needs,
2) Include balanced water policies, and
3) Include management actions that will protect and restore healthy waters across the state.
W**ater Management** – **Oregon's water future must include improved water management, including:**

- Measurement of diversions statewide increased field presence

- Enforcement of laws and permit conditions
- Enforcement against waste
- Conservation and efficiency
- Ensuring all water allocation and reallocation processes adequately protect instream values (i.e. institute a public interest test on transfers).
- Increase surface/groundwater management to account for the relationship between groundwater and surface water and to protect groundwater dependent ecosystems
- Work with Tribal Governments to assure their needs are being met.
- Ensure wild species populations are protected.
- Ensure that the WRD water right database is current

<u>We support the following fundamental water management strategies.</u>

Instream Values – agency efforts to identify, establish, protect and restore instream flows, including both minimum dry season flows and the higher flows needed to maintain river habitat and trigger biological responses in aquatic species.

Data Collection – funding needed to collect the data to support better management of Oregon's waters, including specifically, money for studies of the state's groundwater.

Regionalization- a **statewide** framework for water management, planning and allocation **<u>and object to</u>** efforts to delegate authority and decision making in these areas to local entities. Any incentives tied to "regionalizing" water should be provided only to regional projects that have a quantifiable benefit to river flows and that meet relevant state standards in all respects.

Funding – rough parity between out of stream and instream projects in future agency funding requests to the Legislature. We also support the establishment of a fund for improved water management that would help pay for increased measurement, replace lost agency water management capacity, increase field presence and provide agency capacity to understand Oregon's future instream needs and meet those needs.

Integration – notice and consultation between state agencies that would account for the water quality and fish and wildlife impacts of water allocation and management decisions. Currently, the agencies with responsibility for water allocation, fish and wildlife and water quality do not coordinate sufficiently to make integrated decisions about water.

Input- from Tribal entities effected by changes in water quantity and quality, changes that impact fish and wildlife.

Sincerely,
Greywolf, Jeff Kelley

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The Nature Conservancy
Protecting nature. Preserving life.™

The Nature Conservancy in Oregon
821 SE 14th Avenue
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tel 503 802-8100
fax 503 802-8199
nature.org/oregon

Phillip Ward
Oregon Water Resources Department
725 Summer St. NE, Suite "A"
Salem, OR. 97301-1271

Re: Comments and Suggestions on Draft Recommended Actions for Oregon's Integrated Water Resources Strategy

Dear Director Ward,

Thank you for the opportunity to comment on the draft recommended actions for the Integrated Water Resources Strategy. Overall, the document does a good job of describing both the instream and out-of-stream issues facing Oregon. There are a number of recommended actions that provide a good start to developing a long-range water management plan. However, the document appears to be heavily focused on describing the issues and identifying the need for further research, data collection, analysis and education. True action strategies are somewhat limited, and relatively general, and therefore it is difficult to assess whether they would help address the water resources problems facing Oregon.

We realize that there are many unknowns and data gaps, and more information is needed before we can describe the ideal scenario for water management in the future, or the type of actions that would result in sustainable water management. However, we feel that the document should be expanded to include: specific next steps and timelines for determining both instream and out-of-stream water needs that uses best available science; a description and assessment of specific actions that the state will undertake to address water needs and implement sustainable water management; and an analysis of technical and policy requirements to implement the identified strategies.

Below we provide specific comments and recommendations for changes to the content of the bulletins and the draft recommended actions.

Bulletin 1. Understanding Oregon's Water Resources and Supplies:

As a general comment, we feel that Bulletin 12 should be moved up and incorporated into Bulletin 1. Bulletin 12 sets the stage for why we care about and need water in Oregon, and provides a framework for the remainder of the issues and actions. Indeed, it seems impossible to "understand Oregon's water resources and supplies" without understanding the ecosystems that deliver and rely on that water.

Paragraph 4, Surface Water Quantity: Stating that "water is available during the winter months for new uses" provides an inaccurate picture of the situation related to water resources in Oregon. It is well known that winter flows are critical to supporting aquatic ecosystems,

particularly fish, and that there is a strong need to determine the balance between instream and out-of-stream use of winter water. While peak and ecological flows are referred to later in the document, we feel that it is important to be clear about the condition of our water resources. To that end, the sentence could be structured something like "Water is not fully allocated during the winter months, however new out-of-stream uses will need to be balanced with instream needs"

Page 6, Groundwater Quality: 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. We suggest adding something about understanding water quality impacts to ecosystems in this paragraph.

Action 1.A: While getting a better handle on which agencies have what responsibilities would be helpful, we feel that the strategy should have recommendations for how these agencies could and should work together. Simply mapping them will not result in any significant change. We need to integrate these agencies and create a clear and coordinated structure for managing water resources. The document should provide some recommended actions for the agencies to move in that direction.

Action 1.B: Under conjunctive management of surface and groundwater, we recommend adding "collect data on exempt well locations and water use". It appears later in the document, but we feel that it also fits here. We also recommend adding "increase our understanding of the effect of groundwater use on groundwater-dependent ecosystems". Under Integrate Water Quality and Quantity Efforts, we suggest adding a bullet about monitoring the effects of water quality degradation on ecosystem health, particularly GDEs.

Bulletin 2. Understanding Oregon's Out-of-Stream Needs:

Action 2A: We recommend that any analysis of the economic value of water to Oregon include an analysis of the economic value of ecosystem services.

Bulletin 3. Understanding Oregon's Instream Needs:

Paragraph 1: Add wetlands to the first sentence describing rivers, streams, lakes, etc.

Paragraph 4: Ecosystem Health: We appreciate the description of groundwater-dependent ecosystems under ecosystem health. We recommend that this paragraph also include a brief discussion of the relationships of ecosystems to surface water. After the first sentence, the paragraph could be changed to "Aquatic ecosystems such as rivers, lakes, wetlands and riparian areas depend on both surface water and groundwater for their long-term viability. The quantity, timing and duration of water availability to these systems are critical components of their water needs. The Nature Conservancy's 2007 report, Groundwater and Biodiversity Conservation describes groundwater-dependent ecosystems as aquatic ecosystems that depend on groundwater for some or all of their water supply. This includes springs and some rivers, lakes, wetlands and 'upland vegetation' that rely on either discharge of groundwater to the surface or water tables that lie close to the surface."

Paragraph 8: Data Gaps: We feel that more could be said about peak and ecological flows. Given that this is a critical and timely issue in Oregon, some further discussion in warranted. Much of that could probably be extracted from the White Paper.

Action 3.A: The strategy should be more specific about a process and timeline for determining peak and ecological flows statewide. It should describe how that work would be accomplished and how it would be incorporated into water management decisions.

Action 3.B: Along with categorizing groundwater-dependent ecosystems statewide, the state should determine the water needs for these ecosystems, similar to the surface water instream flow needs.

Online Resources: Please also include a reference to our 2009 report: Groundwater Dependent Biodiversity and Associated Threats: A statewide screening methodology and spatial assessment of Oregon. The URL for both reports is: http://tinyurl.com/GDE-Workspace

Bulletin 4. Water and Energy Nexus:

Action 4.A: Add "and on instream needs" to the end of the second sentence.

Action 4.B: Adding hydropower production to existing irrigation infrastructure may result in an extra incentive for keeping obsolete and inefficient infrastructure in place. We suggest modifying that sentence to reflect the idea that evaluation would take those issues into account.

Bulletin 9: Funding for Oregon's Water:

Action 9.A: Funding of state natural resource agencies should include staff dealing with instream needs and protection of groundwater-dependent ecosystems.

Action 9.B. If funds are allocated to provide grants and loans for water development projects, they should also be allocated to fund instream flow restoration and water right acquisitions.

Bulletin 10: Place-Based Approaches:

Action 10.C: We believe that the state should not only provide a framework for local basin planning, but very clear sideboards as well. In particular, state protections should be the "floor" for any local planning process. We also do not feel that it is wise to suggest that regions should "conduct an assessment, determining whether land-use laws, regulations, or ordinances are getting in the way of regionalization efforts". While the intention is to see if we need to make changes to facilitate regionalization, most laws are there for a reason, i.e. to protect the public interest, and this sentence sounds like laws are a mere nuisance. Finally, the bullet "Identify demands for water" should be changed to "identify instream and out-of-stream water needs"

Bulletin 11: Water Management:

Action 11.A: We would like to see this action expanded to include evaluation of potential instream benefits in association with increased efforts in irrigation efficiency. Efficiency alone will not result in ecological benefits, as water resources are already over-allocated. This seems to be a good place to put in an action related to increasing opportunities for water right transfers and water markets.

Action 11.B: Although titled "increase built storage", the recommendations include potential reallocation of water behind existing dams. We think reallocation is a very important strategy, and we recommend changing the title of the action to "improve management through storage", or something like that. In terms of ASR, 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, as well as potential negative effects to aquifer properties and conditions. For all of these actions, including expanding existing storage and developing new sites, the impacts on peak and ecological flows need to be included in the analysis.

Concluding Comments

The Nature Conservancy is pleased to see the state move forward on the concept of an Integrated Water Resources Strategy. We are particularly heartened by the strong emphasis on instream needs and the discussion of groundwater-dependent ecosystems. We feel that comprehensive, systematic, long-range planning is critical to realizing sustainable water management in the future, and to that end, would like to see more defined actions in the strategy. We welcome future opportunities to work with the Oregon Water Resources Department and the Oregon Water Resources Commission on further refinement of the actions and development of the Strategy.

Sincerely,

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

Northwest Sportfishing Industry Association
PO Box 4, Oregon City, OR 97045

August 31, 2011

Water Strategy
Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301
Via email: waterstrategy@wrd.state.or.us
alyssa.muckenam@wrd.state.or.us

Dear Project Team,

I am writing to offer our comments addressing the Integrated Water Resources Strategy draft document. We greatly appreciate this opportunity and I am writing on behalf of the Northwest Sport Fishing Association (NSIA). NSIA consists of over 300 business, association and individual members whose livelihoods are dependant on healthy fishery resources. A partial listing of our membership is included with this communication.

Bulletin 1. The wide variety of agencies and interested parties with management authority makes efficient coordination of actions and decisions a high priority. It would be helpful if the establishment of a formal coordinating body of members with management authority be established. This body should coordinate management decisions, provide support for change and improvements and should be the umbrella under which data standards for data bases and information systems that include geospatial capabilities are developed and maintained. The goal should be to provide transparent access to all water related information collected by the members in a manner that provides consistent analysis and results. Effective implementation of this concept will negate the necessity of consolidating authorities in fewer more powerful agencies and will allow the local governments to maintain their authorities while attaining state and national goals.

Bulletin 2. This section is silent on two important areas that should be included. They are: the application of improved irrigation technologies and water conservation methods and goals. Most water is obtained independent of market pricing which means its price does not match its value. Absent a price signal, this will lead to indifference to conservation if waste is cost effective. It would seem prudent to recommend a major study of conservation practices and market pricing of water use. We are aware that implementation of pricing will need legislation but like any other natural resource water should be used in ways that provides the highest value added.

Bulletin 3. Instream flows are essential to preserve and maintain the ecological integrity of these aquatic ecosystems. In view of the many species that are listed as threatened or endangered in Oregon waters it would

be appropriate to recommend a study of the institutional constraints and barriers to recovery of these species and to establishing necessary instream flows to aid in recovery, including base dry season stream flows and the higher flows that are necessary to maintain aquatic habitat and trigger biological responses in aquatic and riparian species. We know a lot about the resources at risk but progress toward recovery has been slow and difficult. It is likely that recovery efforts will take a very long time unless significant progress happens. Water use will impact recovery and any proposal for greater use of water will necessarily pass the gauntlet of approval that will largely be based on the need to recover endangered species. Restoration of ecological integrity will be best done sooner rather than later. We strongly support the recommendation to determine instream flow requirements for any streams that contain endangered species and efforts to protect restore and maintain those flows, including the base flows during the dry season the necessary higher flows for habitat and species health.

Bulletin 4. Any additional hydropower developments on existing water structures must be done with adequate provisions for fish passage, screening and bypass flows. We have many examples where fish passage was considered inadequately and corrections have proven to be costly and often ineffective. We are concerned that this discussion contains no caveats for the ecological impacts of additional hydro development that could have significant impacts due to power operations such as load following. In addition, hydropower development using existing water rights for irrigation should be conditioned to be removed if the underlying irrigation use ceases. Many urbanizing irrigation districts intend to use irrigation diversions to generate hydropower. However, the initial grant of authority to use water for irrigation did not include a hydropower use. Such a use constitutes an expansion of the water right if the district urbanizes and the agricultural use ceases.

Bulletin 5. We agree that climate change is extremely important and support the recommendations as written. Adaptations for climate change should be incorporated into all future permitting and management decisions of the Oregon Water Resources Department.

Bulletin 6. We agree with the recommended actions and suggest that it would be helpful if the land use permits were coordinated within each watershed or sub-basin. Joint powers boards that represent all of the organizations that have decision making authority have been used with good effect and should be explored for application in Oregon. Authorization of joint powers boards may need to be done by the legislature and the application of state standards will be essential. This would provide a governance model that will make the management of cumulative effects of development much easier. Any such local efforts must be subject to state standards and have protective ñsideboardsò to ensure the public interest in water and rivers is protected.

Bulletin 7. We concur with the recommended actions.

Bulletin 8. We concur with the recommended actions and refer you to our recommendations for the establishment of databases and information systems in our comments concerning Bulletin 1. This information center will have multiple applications and serving the education community would be an important contribution. Absent a centralized clearing house there will be a proliferation of duplicative information centers.

Bulletin 9. We concur that funding is a very important problem that needs resolution. We recommend the establishment of a water use fee that is applied to all water users. Funds

collected for this use could be a significant resource and it is appropriate that the use of water generates funds for its management since it is a valuable natural resource that is the property of the state.

Bulletin 10. We concur with the recommended actions.

Bulletin 11. We concur with the recommended actions. Note our comments under Bulletin 2 were we identify conservation and improved technologies as part of the effort to improve water supplies. We feel that water conservation represents the greatest opportunity for enhancement of water availability in the future.

Bulletin 12. We concur with the recommended actions. The benefits from protecting the long term health of Oregonôs ecosystems will be reflected in many ways, including human health. Healthy ecosystems are more productive and are capable of producing the full range of ecosystem services we are all depend on. This is a wide ranging strategy that should be the basis for natural resource management programs of all kinds.

We greatly appreciate the opportunity to comment and stand ready to continue to participate in this process.

Yours in Service,

Liz Hamilton,
Executive Director

Northwest Sportfishing Industry Association

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Acme Tackle
Active Marketing NW
Assn. of NW Steelheaders
Aqua Scent Inc.
Bob Rees Fishing Guide
Bob's Merchandise, Inc
Brockman, Ron
Buzz Ramsey Promotions
Clackacraft River Boats
L.H. French Co.
Gamefishing.com
Grutbo, Steve
Innovative Textiles
Maxima Fishing Lines
Mepp's/Mister Twister
Miller Marine Products
NW Guides & Anglers Association
NW Fishing Guides
Pearson, Bruce
Poulsen Cascade
Pro Cure
Seasonal Marketing Inc.
Smokehouse Products
Total Fisherman Guide Service
VMC, Inc.
Western Filament
Willapa Marine Products
Wright McGill Co.

Small Business Members

Alten Sakai/Nelson Rutherford
Adventure Bound
Albert, Larry
All American Fishing
All Rivers & Saltwater Charter
Allen Marine Center
Anderson's Oregon OutdoorAdv.
Angler's Rendezvous
Atlas Mike's
Beamers
BestFishingInAmerica.com
Big Al's Tackle Co.
Blackbird Shopping Center
Blaine, Mick
Brown, Jerry
Burch, Dan
Calcagno, Howard
Campbell, Robert
Catcher Co.
Chinook Outdoor Gear
David Johnson Guide Service
Deet's Guide Service
Don Kinsey Guide Service
Eagle Cap Fishing
Fin Reaper Guide Service
Fish Hawk Adventures
Fish Reaper Guide Service
Flemming, Steve
Flying Pencil Publications
Folbe Products
Fuller, Jim
Gilbert Company, The
Giles, Mike & Patti
Greg Frogner Prof. Fishing Guide
Hahn, Brent (Rapid Cash)
Hall, Kyle
Hamilton, Richard
Harry Bresnahan Guide Service
Holdzit Products
Holthe Ward Associates
Hook-up Guide Service
Howard Calcagno Farms
John B. Merfield Co. Inc.
John's Sporting Goods
Kains Fishing Adventures
Larson, Virgil
Linde, Eric
Low, Russ
Lutz, Brion
Mah-Hah Outfitters
Manns, Hobart
McDaniel's Do It Center
McGovern, Walt
MMW LLC
Mid-Willamette Valley Angling
Mosley, Kevin
Munson, Jerre
Narrows Tackle & Marine
Norrie Johnson Guide Service
North Marion Charters LLC
Northwest Angling Experience
Northwest River Guides, Inc.
OHarrow, Conan
Ollie Damon's
Oregon Tackle
Packer, Stephen
Phillip, Rob
Posey, Wm (Tom)
Rainbow Tackle
Ranger Products
Robillard, Robert
S. H. Smith Fisheries Consulting
Saltchucker Charters
Schaefers Guide Service
Schwartzhoff, Gary
Self, Len -Oregon Outfitters
Silver Horde
Sky's Guide Service
Smith Phillips & DiPietro
Sportfishing Guides of WA
Sports Sales
Sports Services
Steve Neverick River Guide
Stewart, Jim
Strahan, Dave
Sundin Realty Inc.
T C's Guide Service
Tempress, Inc.
The Gilbert Company
The Guide's Forecast
The Reel News
Thomas Spinning Lures
Titeline Fishing Products
Triangle Shell Food Mart
TruTurn/T.T.I. Enterprise
Uncle Walt's Tackle
V. F. Grace, Inc.
Washington Tree Service
Westcoast Sales
Westside Marine
Western Fishing Adventures
Willapa Fishing Gang
Zak Tackle MFG Co.

Individual Membership

Al's Landing
Ande Monofilament
Anglers Guide Service
Aquilla, Louis
Arbrogast, Darrell
B.A.S.S. Of Oregon
Bass Menu Pro Tackle Distrib.
Bailey, David
Bailey, Duskin & Duffle
BDC Advertising
Beck, Wallace
Big Wally's
Boggs Mfg.
Boggs, Harry
Bridwell, Jim
Brink & Sadler, CPA's
Burgi, John
Burnside, John
Cash, Ltd, Jon B.
Casne Engineering Inc
Chambers, Ken
Cheney Sports
Claunch, Julie
Conroy, Rocky
Crane, Kenneth
Currigan, Barney
Daly, John
Dave Maroon's Fishing
Dorans Guide Service
Fenk, Steve
Fight Club Guided Fishing
Finsport-Johns Jigs
Five C's Guide Service
Fisher, Robert
Fountain, Ted
Four Rivers Press
Grindy, Kevin
Haak, David
Sherri Hanni
Hanson, Steven
Harden, Scott
Heinz, Kurt
Hublou, Greg
Junkin, Dave
Keith Co., J. D
Kish, Gary
Karbowski, Michael
Lanahan Sales
Larson, Jeff
Larson, Jeanice
Lebson, Janet
LNJ Associates
Marshall, Dan
Marshall's Guide Services
Mellor, Kevin
Neverick, Steve
Oregon Guides & Packers
Overby, Don
Pacific Crest Marketing
Patel, Janek
Paysinger, Nancy
Phillips, Jerry
Ponciano, Dan
Schwartzhoff, Gary
Seim, Chuck
Shipley, Tom
Singley, Bob
Smith, Diana
Sports Sales, Inc.
Stern, Richard
Stuart, Tom
Tall Tails Guide Service
Teeny, Jim
The Last Word
Tillamook Guides Association
Vanderhoek Sports Inc.
Westcoast Sales
Workman, Gerald
Young, Bob

OAK LODGE WATER DISTRICT

14496 S.E. River Road • Milwaukie, OR 97267 • 503-654-7765

July 19, 2011

Water Strategy, c/o Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301

Project Team:

I have reviewed the Draft Integrated Water Resources Strategy (IWRS) and in general think it is a good document.

I found it interesting in Bulletin 2 that agricultural uses account for 87% of the water used in the State and that municipal use only accounts for 6% of the use. Considering this many of the bulletins require municipal water providers to perform a majority of the actions. It seems to be that much more would be gained by placing the majority of requirements on the largest consumer as opposed to a rather miniscule user such as municipal drinking water suppliers.

Bulletins 2, 4, 6, 7, 8, and 10 all have requirements for drinking water suppliers. The only real mention of agricultural uses requirements appears in Bulletin 11. This seems extremely inequitable to me and probably to many other municipal drinking water suppliers.

I also suggest adding a new symbol of "$= Funding" as was suggested at the Oregon Water Utility Council. Many of the actions will require funding and not all are legislative.

I offer the following comments on several bulletins and identify a few typographical corrections.

Bulletin 1/12 Understanding Oregon Water Resources and Supply
On page 4 in the first full paragraph discusses the impacts of toxic pollutants, in particular pharmaceuticals and personal care products. I do not feel it is the role of a State agency to require or suggest costly monitoring for toxins that have not been determined by the Environmental Protection Agency (EPA) to be promulgated by rule. The quantities of the chemicals that have been found are in levels detectable in parts per billion and may pose absolutely no threat to humans or aquatic life. I think that entire paragraph should be stricken from the IWRS until EPA determines action is required.

Bulletin 2/12 Understanding Oregon's out-of stream needs
Action 2.A, Bullet 1, I feel the last sentence regarding a call for a state standard for demand forecasting should be deleted. In terms of municipal drinking water suppliers each entities demands will be different. Some drinking water providers serve large

industrial users while others are dominantly residential. Obviously, the types of demands are going to be dramatically different and a "one size fits all" approach is completely unacceptable.

In Bullet 2 the plan calls for additional annual water usage reporting. While I do not disagree with annual reporting, drinking water suppliers have been required to do this for years, I question what the WRD will actually do with the data considering the current staffing levels. Unless some portion of an FTE is assigned to review and analyze the annual reports it seems there is little benefit in reporting.

Bulletin 4 The Water & Energy Nexus

In the opening discussion in paragraph 3 there again is much reference to municipal drinking water suppliers but no reference to the energy requirements that irrigation imposes. Many irrigators use groundwater for irrigating crops which requires a substantial amount of power for pumping water but no mention of that is included in the discussion. Once again singling out municipal uses for a fraction gained.

Action 4.C Is directly targeted at municipal drinking water suppliers for items the vast majority already do. Again, no mention of agricultural or industrial users which is totally inequitable. I feel this total action should be removed.

If the WRD chooses to retain Action 4.c then the fourth bullet absolutely needs to be stricken. Drinking water suppliers are extremely over-regulated and adding an "energy target" requirement is totally unacceptable.

On page 23 in the last sentence of the fourth paragraph the word "the" should be added following "the focus of".

Bulletin 6 The Water and Land Use Nexus

Action 6.B This action requires the development of additional rules and stricter requirements of land use. I would suggest that land use requirements are already quite stringent and additional requirements are not necessary.

Action 6.C This is again pointed directly at municipal drinking water suppliers and refers to actions that are currently either in statute or rule. All municipalities are required to conform to the State Planning rules so this reference is not necessary.

Bulletin 7 Water-Related Infrastructure

I suggest adding "some" or "many" to the opening sentence. Most medium and large utilities are meeting their infrastructure needs and many of these municipal providers are currently using or are implementing an asset management plan.

There is much discussion in this Bulletin referring to regionalization of municipal drinking water suppliers. This is a local decision that as stated in the Bulletin is not only a very local political decision but also a rather contentious issue that the State should not be

involved with or even necessarily promote. The State should not interfere with local decision making.

Bulletin 8 Education and Outreach
This is a continuation of the singling out of municipal drinking water suppliers. I would argue that municipal drinking water suppliers have done and continue to do an excellent job of educating and outreaching to their customers. In the Clackamas River Basin the Clackamas River Water Providers have jointly funded a full time employee to promote water conservation and watershed protection. I know many other individual municipal users do similar projects.

The Regional Water Providers Consortium spends a very large amount of funds promoting water conservation and participating in education and outreach. I suggest adding the Consortium website to many of the reference areas throughout the bulletins.

On Page 47 in the third paragraph "kydroelectric" should be "hydroelectric".

Bulletin 10 Place-Based Approaches
This is yet another example of municipal drinking water suppliers being identified as a problem to the State water supply while the Department acknowledges that municipal providers only account for 6% of the water used. This is completely inequitable.

Bulletin 11 Water Management
Action 11.A in the second bullet for the first time clearly requires some action from agricultural users, almost refreshing!

Page 60 needs the word "as" placed in front of Sand Lake towards the end of the first paragraph.

This concludes my comments on the IWRS. I strongly suggest that consideration be given by the Policy Advisory Group and the department to make this document far more equitable amongst all water users and not directed primarily at municipal drinking water suppliers. In my mind without question municipal water providers have done far more in protecting the State waters than any of the other users combined.

Regards,

Dan Bradley, General Manager
Oak Lodge Water District and North Clackamas County Water Commission

Working with more than 90 community wastewater treatment agencies to protect Oregon's water
107 SE Washington Street, Suite 242
Portland, Oregon 97214
(503) 236-6722 www.oracwa.org Fax (503) 236-6719

31 August 2011

Water Strategy
Oregon Water Resources Department
725 Summer Street, NE Suite A
Salem, OR 97301

e-mailed to: waterstrategy@state.or.us

The Oregon Association of Clean Water Agencies (ACWA) is a statewide organization of wastewater treatment and stormwater management utilities, along with associated professionals. Our 125 members are dedicated to protecting and enhancing Oregon's water quality.

The work done so far has been impressive, given the limited resources available to the agencies involved. We appreciate the focus on integrating water quantity and quality into a larger framework. With the limited budgets and resources available to the various agencies, it will be important to choose very carefully which recommendations will be priorities for implementation.

We support many of the recommendations, but have concerns about three key areas, including:

- Setting energy targets for water and wastewater treatment facilities (Action 4.d). The differences between water and wastewater utilities are too great to set energy targets across the sector. Issues such as geography, size of utility, level and type of treatment system, DEQ permit requirements, and discharge location all effect energy targets.
- Establishing a water management fund for the State through use of wastewater fees (Action 9A). Funding state natural resource agencies is a state responsibility, not a local government or wastewater rate payer obligation.
- Establishing an interagency toxics chemical reduction team (Action 12C). The Oregon DEQ has developed an inventory of Priority Persistent Pollutants for Oregon. The actions needed to address reductions of these chemicals through pollution prevention are known and need to be implemented, not studied further. DEQ is presently adopting a comprehensive toxic reduction strategy for the state, and the implementation efforts associated with that plan should be incorporated into this strategy.

Our specific comments on the action items are detailed below:

Action 1B – Fill Data Gaps on Specific Issue Areas: Regarding data gaps, the focus should be to synthesize and evaluate the extensive amount of ecological and water quality information

collected to date to prioritize sensitive waterways/water bodies for restoration and/or regulatory measures; and to prioritize actions based on sector (i.e. agriculture, forest, industry, municipal) impacts to water quality and watershed health.

The State Agencies responsible for various aspects of water resources management in Oregon need to find operational efficiencies available from integration and coordination of agency data, missions, staff, and resources.

Increased use of electronic tools and data sharing is critical. Substantial improvements are needed in the use of electronic forms of data and information management to aid in the synthesis and analysis of this information.

Additional monitoring is needed to ensure that the pollution control efforts of nonpoint sources in agriculture and forestry are adequate to meet Oregon water quality standards.

With the funding shortfalls in the state budget, it is not likely that DEQ monitoring efforts can extend to other pollutants of interest that have no link to water quality standards. DEQ's monitoring efforts must remain focused on critical items, such as those with associated water quality standards. Oregon has a water quality standard for *chlorophyll A* as a nutrient surrogate.

Action 2A – Update Long Term Water Demand Forecasts: This long term water demand forecast should include a statewide assessment of the potential for recycled/reclaimed water to fulfill current and future supply needs and should be conducted appropriately matching reclaimed water quality to end uses. The assessment should address recycled wastewater and harvested stormwater. A specific target should be set for incrementally increasing recycled water use in Oregon and that target should be integrated into DEQ and Water Resources Department respective performance goals.

Action 2B – Improve Water Use Measurement: ACWA supports the actions that are outlined, and recommends that water measurement of withdrawals be added to the action inventory.

Action 4.B.: Take Advantage of Water Infrastructure to Develop Hydroelectric Power: Installation of small hydroelectric power generation facilities on existing infrastructure, including wastewater piping, should be encouraged.

Action 4.C.: Increase Energy Efficiency and Renewable Power Production at Water and Wastewater Treatment Facilities: ACWA continues to partner with others to provide training and technical assistance to our members on energy efficiency and renewable energy management. An attached fact sheet *Energy Focus Yields Savings* reviews a recent ACWA project, in partnership with EPA, Oregon DEQ, Energy Trust of Oregon, and Bonneville Power Administration, to focus on energy efficiency and renewable power at select treatment plants.

Regarding natural treatment systems, we recommend revising the recommendation to read:

> *"Promote development of natural treatment ~~and green infrastructure~~ facilities, to reduce ~~alleviate water and~~ power loads at wastewater treatment facilities and expand the environmental performance of wastewater treatment systems, along with*

promoting green infrastructure systems for stormwater. Natural treatment system examples include ~~natural wastewater and stormwater treatment systems~~, constructed wetlands, poplar plantations, recycled water programs, hyproheic reinjection systems, and habitat restoration.

We **do not** support setting energy targets for water and wastewater facilities. Each facility is unique, and a single energy target cannot be meaningfully developed for the variety of wastewater systems in use in Oregon. Variables include:

- Geography of the system related to the amount of pumping needed to bring wastewater to the treatment plant,
- Type of treatment plant including low energy users such as trickling filters to high energy users that treat for nutrient removal,
- DEQ permit requirements, and
- Other factors.

Action 6.C., Fully Integrate Water Information into Land Use Planning: Improving UIC location information is a worthy goal. However, it should be expanded to address the conflict between well siting and UIC location. Under current law and regulations, new wells may be drilled within the UIC setback, forcing the UIC owner to close, retrofit, or prove that the UIC is not a problem. There are no provisions for well drillers to consider UICs when locating a well or for UIC owners to be notified (in fact, the information about a new well site is confidential for a year after drilling). The recommendation should also include a reexamination of both UIC and well regulations to ensure consistency and prevent conflicts.

Action 7.B., Develop and Upgrade Water and Wastewater Infrastructure: Upgrading of wastewater facilities may be needed to meet the demands of growing populations, or revised water quality criteria, such as nutrients. However, the issue of emerging containments is not a driver for wastewater treatment plant upgrades, based on the sampling data collected and analyzed by Oregon's largest 52 municipalities as part of their toxic reduction efforts under SB 737 (2007 Session).

Under SB 737, passed by the 2007 Oregon Legislature, the 52 largest treatment plants in Oregon (over 1 MGD) screened their effluent for 117 of the 118[1] Oregon Priority Persistent Pollutants in sampling events held in the summer of 2010 (dry weather) and the winter of 2010 (wet weather). Both sampling events had very similar results. DEQ concluded that the results show that the pollution reduction measures currently in place are working to keep the majority of persistent pollutants out of municipal wastewater effluent, and that wastewater from municipal treatment plants is not a significant source of most persistent pollutants. A DEQ fact sheet on the study results is available at http://www.deq.state.or.us/wq/SB737/.

Regarding the expansion of the term 'green infrastructure', according to the EPA website[2], the definition of green infrastructure is:

[1] DEQ concluded that one chemical – bis(tributyltin)oxide was not likely to be found in wastewater effluent
[2] *http://cfpub.epa.gov/npdes/greeninfrastructure/information.cfm#glossary*

An adaptable term used to describe an array of products, technologies, and practices that use natural systems – or engineered systems that mimic natural processes – to enhance overall environmental quality and provide utility services. As a general principal, Green Infrastructure techniques use soils and vegetation to infiltrate, evapotranspirate, and/or recycle stormwater runoff. When used as components of a stormwater management system, Green Infrastructure practices such as green roofs, porous pavement, rain gardens, and vegetated swales can produce a variety of environmental benefits. In addition to effectively retaining and infiltrating rainfall, these technologies can simultaneously help filter air pollutants, reduce energy demands, mitigate urban heat islands, and sequester carbon while also providing communities with aesthetic and natural resource benefits.

Incorporating basic maintenance practices (fixing leaks, replacing wooden pipes, etc.) is not '*green infrastructure'* and the definition should not be modified to include these basic maintenance activities, diluting the incentives in existing grant and loan funding for '*green infrastructure*. We do not support this recommendation.

Action 9.A. Establish a Water Management Fund for the State of Oregon: ACWA members do not support transferring state general fund obligations to fund natural resource agencies to local governments and ratepayers through wastewater fees.

Action 10.C. Facilitate Regional (sub-basin) Water Resource Planning: ACWA supports this concept.

Action 11.C. Encourage Additional Water Reuse: ACWA strongly supports this recommendation. Matching water quality to the needed purpose of the water through reuse programs is a key area for expanding the available water supply for Oregon.

Action 11.D. Assist in the Development of EcoSystem Credits and Markets: ACWA supports the development of ecosystem credits and markets and we suggest that the concept be expanded to specifically include water quality trading.

Action 12.C. Improve Pollution Prevention. ACWA strongly supports improvements to pollution prevention. However, an additional interagency toxic chemical reduction team is not needed. The efforts by DEQ to develop the Priority Persistent Pollutant inventory should be the 'emerging contaminant' inventory used by the entire state**.**

Efforts to improve water quality standards are in place though the Triennial Review process in place under the federal Clean Water Act. Additional funding and support to DEQ is needed to support this process.

It is important to recognize that the Oregon Priority Persistent Pollutant inventory are NOT - - by definition - - water quality standards.

Specific programs to reduce the use of these Priority Persistent Pollutants are already in place including:

- Oregon Clean and Safe – see www.oregoncleanandsafe.org. Use this web site tool to buy and use products that do not include any of Oregon's Priority Persistent Pollutants. All State agencies should revise their purchasing practices for soaps, cleaners and electronic devices to provide preference for manufacturers that commit to reducing toxic chemicals. School districts, county and federal governments should be encouraged to adopt the same practices.
- Fund and promote legacy pesticide collection events.
- Fund and promote household hazardous waste collection programs accessible to all Oregon communities.
- A commitment to Integrated Pest Management by all state agencies
- Promoting Eco-Logical business certification for landscape services and automotive services.
- Developing programs to work with schools to remove mercury-containing devices use greener cleaners, purchase environmentally-certified electronic devices, cleanout of outdated and unused lab chemicals, ensuring the proper disposal of unused medicines left at the end of the year and ensuring properly recycling of fluorescent tubes.
- Encourage Oregon law enforcement agencies to participate in unused drug collection events, and to provide convienent drop boxes for unwanted and unused drugs.

As an additional item, Oregon should support efforts to reform the nation's chemical policy to restrict or regulate chemicals at the federal level that may cause environmental or public health problems. Under the current regulatory scheme, chemicals are 'innocent until proven guilty'.

Conclusion

We appreciate the effort of the many people involved in the development of the Integrated Water Resources Strategy. Please let me know if you have any questions regarding our comments. I can be reached in Portland at 503/236-6722 or by e-mail at gillaspie@oracwa.org

Very Truly Yours,

Janet Gillaspie

Janet Gillaspie
Executive Director

Attachment – *Energy Focus Yields Savings*

cc: ACWA Board + Susie Smith
Neil Mullane/Karen Tarnow, Oregon DEQ
Kevin Masterson, Oregon DEQ
Matt Krumenauer, ODOE
Chris Fick, LOC
Mark Landauer, SDAO

Comments on the Integrated Water Resources Strategy
June 23, 2011 Draft Recommended Actions

Submitted by Patrick Capper, Government Relations Director
Oregon Association of Nurseries
August 31, 2011

Background on the Oregon Association of Nurseries and the Oregon nursery industry. The Oregon Association of Nurseries (OAN) is a trade association representing over 1,100 member entities. OAN members include owners of wholesale nurseries, Christmas tree growers, retailers and greenhouse operators. The nursery industry is the state's largest agricultural sector with wholesale sales of over $640 million annually. We rank as the second largest nursery state in the country and the largest exporter of nursery stock. More than 74% of Oregon's nursery products are exported to buyers outside the state, and more than half of those exported products are shipped east of the Mississippi.

Economic impact of agriculture. Despite a declining agricultural land base, agriculture has grown steadily over the past two decades to become a major contributor to Oregon's economy. As noted in the Draft Recommended Actions Document (the "Recommended Actions"), "fifteen percent of all economic activity in Oregon is tied to agriculture, accounting for more than 22 billion dollars in Oregon's net state product." *See p.11.* Agriculture is integral to the Oregon way of life and it provides 1 in every 12 jobs in the state.

Cultural impact of agriculture. People have been farming and ranching in Oregon since well before statehood in the mid-1800s. Agriculture is part of Oregon's pioneer heritage. Today, Oregon agriculture, and our land use system that protects it, provides our urban areas with locally sourced food and fiber as well as nearby green spaces. It is the critical supply line to our world-famous restaurants. It is a draw for tourism and wine connoisseurs. It is part of who we are as Oregonians.

Integral role of irrigation. Since the first settlers arrived in Oregon, irrigation has been an integral part of our agricultural heritage. As an arid western state it would be impossible to grow the majority of Oregon's farm and ranch products without irrigation. The Recommended Actions acknowledge that "irrigated farms produce over 80 percent of the total value of Oregon's harvested crops." *See p.11.*

Change that honors our cultural and legal institutions. The OAN and its members understand that we live in an evolving world. As proud stewards of Oregon's natural resources, our growers have been leading the way in innovative and forward-looking conservation actions for decades. Examples of our pioneering efforts include leadership in the development the SB

1010 agricultural water quality management program in 1993, the voluntary container nursery runoff management program in the mid 1990s, and in recent years the Climate Friendly Nursery Program. The majority of our growers use highly efficient irrigation delivery systems, and many recapture and reuse their water many times over.

This leadership and stewardship, however, is based on a solid legal foundation that establishes and protects growers' legal rights to use their land and water in innovative ways. Our industry members have had the courage to try new production methods and ideas in large part because they have the certainty of legal protections.

This is critically important in the water rights arena. Regardless of whether we are discussing water supply for agricultural or municipal use, stability and planning for the future depend on legal certainty developed over the last 150 years in Oregon. We are a prior appropriation state. Oregon's citizens have relied on that fact in their investment, development, and growth decisions for the majority of our history. The vested legal rights created and protected by the prior appropriation doctrine must be a critical centerpiece to any water resource strategy planning effort.

General Comments on the Recommended Actions

The OAN appreciates that the Water Resources Department has been given a broad mandate under HB 3369 to produce an integrated water resources strategy. This creates the very real challenge of producing a strategy document that accomplishes the broad legislative mandate while simultaneously containing focused, concrete, and implementable strategies. In order to have practical value, the strategy document must strike the proper balance between the aspirational goals developed through the public comment process and the legal, economic, physiographic, and climatic realities in which the strategy will be deployed. Moreover, the strategy must be structured to recognize the *entire* legislative mandate contained in ORS 536.220, including the centerpiece of the state water resources policy contained in ORS 536.220(2)(a), "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."

We are concerned that the Recommended Actions do not reflect the development of an overall strategy that will ultimately be of practical value to the citizens of Oregon. As WRD moves forward, it is our hope that it keeps this "practical value" goal in mind, so that this very significant commitment of Department resources ultimately results in a strategy document that is actually useful in the future management of the state's water resources.

We have several general comments on the Recommended Actions that we hope will explain our concerns about the direction the IWRS is heading.

1. Statutory Mandate. The Recommended Actions do not reflect the entire mandate of ORS 536.220 as opposed to the new portions of the statute added by HB 3369 in 2009. In particular, there is minimal discussion about the statutory mandate to plan and develop programs for the

development and enlargement of the water resources of the state. From our perspective, this means the development of additional storage capacity and the development of additional water from the Columbia River. We believe the Recommended Actions should contain an additional bulletin dedicated to the development and enlargement of the state's water resources.

2. Existing Vested Rights. The Recommended Actions do not give sufficient consideration to vested legal rights that now exist and control the majority of the state's water resources. To the contrary, the document appears to intentionally avoid raising existing cultural, legal, and institutional conflicts. We feel that this approach merely delays discussion of these difficult realities to a future time, and risks the creation of a document that is aspirational rather than practical. Instead, we would strongly suggest that the Recommended Actions and the larger strategy place such conflicts and constraints on the table in a clear and upfront manner. In particular, the strategy must recognize the value that a vested rights system offers to our state's citizens and its economy. Likewise, it needs to contain an analysis of how any proposed changes to the prior appropriation system would impact the institutions that have developed around this legal system.

3. Funding. In order to have practical value, the IWRS will ultimately need to assign priorities to proposed actions. These priorities should reflect, among other things, a cost/benefit analysis. This requires a comprehensive understanding of the cost of those proposed actions and a gap analysis between the costs and available resources. With respect to the Recommended Actions, we suggest that each individual action include a relative cost assessment. This could be accomplished by adding another symbol such as the "$" sign used to designate the relative costs of hotels and restaurants in travel guide books.

4. Efficiencies. In our view, a good IWRS will provide guidance on how to best and most efficiently accomplish the state water policy outlined in ORS 536.220. As outlined in the policy, the legislature has called for a single state agency to manage the state's water resources.

> A proper utilization and control of the water resources of this state can be achieved only through a coordinated, integrated state water resources policy, through plans and programs for the development of such water resources and through other activities designed to encourage, promote and secure the maximum beneficial use and control of such water resources, all carried out by a single state agency. ORS 536.220(1)(b).

We are concerned that this policy mandate for control of the resource by a single agency would be compromised by several of the recommended actions. For example, the blurring of the lines between water quantity and water quality raises the question of how WRD and DEQ would manage these possibly conflicting programs in an integrated manner where they have overlapping jurisdiction. The OAN strongly encourages WRD to resist recommending actions that could lead to the diminishment of its statutory obligation to control and manage the state's water resources.

Issues Facing the OAN Community

The nursery industry is a water intensive agricultural industry. Our members are concerned about water availability, water quality, and energy costs associated with the use of water. While our growers hold surface rights, many are also heavily dependent on groundwater as an abundant and pure source of water. Two of our key issues are the development of future storage solutions and the management and development of Oregon's groundwater resources—especially in the Willamette Valley. The OAN believes that the Recommended Actions fail to adequately address these issues as stand-alone topics. We therefore believe the Recommended Actions should include separate bulletins for both storage development and groundwater.

Comments on Specific Recommended Actions

In addition to our general comments, we offer the following specific comments on individual bulletins and recommended actions.

Bulletin 1, page 4: Discusses "a complete understanding of Oregon's surface water resources," including flow, quantity, and habitat. We question whether this is too broad a goal for the IWRS, both from a legal and practical standpoint.

Action 1.B., first bullet: Same comment as prior item.

Action 1.B., second bullet: "Fully incorporate water quantity into DEQ's TMDL requirements." We do not understand what this really means, but we are extremely concerned that this unlawfully blurs the line between water quantity and water quality. Virtually every stream in Oregon is on DEQ's 303d impaired stream list for some pollutant. If dilution is viewed as the solution for these problems, it could very well mean the end of further appropriations in the state of Oregon. Moreover, it could become a barrier to water right transfers if TMDL flows are elevated to the status of a protected water right. We feel this has the potential to impermissibly erode vested water rights and the prior appropriation doctrine.

Bulletin 2, page 16: This section appears to have been written with a preconceived notion about the impact of water use and the need/value of a variety of flows. We feel that it should be rewritten to acknowledge the ongoing need to *study* and *better understand* the impact (or benefit) that water storage, use, and return flows may have on natural systems. We also suggest that the Department avoid the use of vague euphemisms such as "elevated streamflows" in favor of the more accurate terms: peak, ecological, flushing, and base flows. Finally, we question the apparent default to the use of salmonids as the indicator species for ecosystem health in our freshwater streams. These species have complicated life cycles, much of which is determined by ocean conditions and factors outside of the condition of individual stream systems throughout the state. At a minimum, the Recommended Actions should explain why these species are being used to determine ecosystem health in freshwater streams.

Action 4.B., first bullet: This alternative energy development goal benefits both water users and the environment. The action should also include the pursuit of funding for such projects and regulatory streamlining to make the development of such projects more feasible.

Action 5.B., third bullet: This bullet about increased assistance to water users to increase storage capacity, pursue conservation, reuse, and efficiency is important and needs more detail. Specifically, we would like to see proposals for how this could be accomplished from both a programmatic and fiscal perspective.

Bulletin 6: In general, we are concerned that the Recommended Actions promote changes to the land use system that further restrict the existing rights of landowners to use and manage their lands in a responsible manner.

Action 6.B., first and second bullets: We are concerned that this sourcewater protection concept could result in defacto buffer zones or riparian protection zones in rural areas that prevent our growers from making economic use of their lands. This kind of top-down regulation is anathema to the Oregon approach to watershed-based water quality management and the SB 1010 program. Instead we would suggest an approach that encourages landowners to enter into voluntary riparian enhancement and restoration projects (similar to what several of our members have done), together with the use of conservation easements to protect key watershed areas.

Bulletin 9: In general, we believe that the funding topic deserves additional detail and development. In addition to looking at additional funding options, we believe the bulletin should consider institutional and legal barriers to access funding sources for water development projects such as those created by HB 3369.

Action 9.A, first bullet: As we have testified before the legislature in the past, the OAN opposes the imposition of a statewide water management fee. We feel our members already pay a significant amount of money to the Department in the form of application fees.

Action 10.B: Whether in this action or elsewhere, the Recommended Actions should reflect a commitment to pursue additional appropriations from the Columbia River.

Action 11.B, generally: As indicated, we strongly support the development of additional storage options to deal with increasing demand and changing precipitation patterns. This action should be further developed to include an analysis of funding needs and institutional barriers.

Action 11.B., second bullet: Any discussion on reallocation of existing storage must recognize existing water rights and contractual commitments to irrigation storage.

Action 12.A, third bullet: See comment to Action 6.B. for more detail, but the OAN strongly opposes a top-down regulatory approach to riparian protection.

Action 12.C: All discussions about pollution prevention that implicate agricultural return flows should contain a discussion about the existence of the SB 1010 agricultural water quality management program. Moreover, any proposed actions must be consistent with this program.

Conclusion

We realize that the IWRS process is now moving from an information gathering phase to an information synthesis phase. We believe this is an appropriate point for the Department to begin engaging the agricultural community on a specific and substantive level. The OAN is ready and willing to work with the Department as necessary to help develop a strategy document that recognizes the current legal and fiscal realities, while simultaneously planning for the future.

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August 31, 2011

To: IWRS Project Team
Attn: Water Strategy
c/o the Oregon Water Resources Department
725 Summer Street N.E., Suite A
Salem, Oregon 97301

From: Oregon Cattlemen's Association

Subject: IWRS Draft Recommended Actions

1. Understanding Oregon's Water Resources / Supplies

ACTION 1.A: "MAP" OREGON'S WATER-RELATED INSTITUTIONS

- There are more than 15 state agencies whose responsibilities touch upon some aspect of water management and data collection, as well as dozens of federal agencies and hundreds more private and local entities. Document the major agencies involved in water management and supply in Oregon, describing their areas of responsibility and available datasets to further integrate across jurisdictions and improve coordination. [State - Universities]

ACTION 1.B: FILL IN DATA GAPS IN SPECIFIC ISSUE AREAS

- Collect and process data, and share more information related to the state's water resources, in order to determine how best to meet Oregon's water needs. This is a long-term funding commitment in the area of surface water and groundwater data collection, monitoring, and studies. Basin-led efforts could help prioritize the funding of water quality and quantity data collection [See Action 10.c]. Generally, agencies have identified the following statewide priorities. [State – Federal – Local]

OCA Response: We would agree with Action 1:A. We agree with the premise of Action 1:B, but are concerned whether or not there will be legislative policy and budget support beyond what is occurring presently basin by basin. Existing state statute and rule have included planning and management direction for OWRD for most of these listed considerations in the past and they have only incrementally been completed as the projected and funding allowed.

2. Understanding Oregon's Out-of-Stream Needs

ACTION 2.A. UPDATE LONG-TERM WATER DEMAND FORECASTS

- Update the Statewide Demand Forecast. Update the Department's fifty-year forecast of water needs across sectors and locations (state, basin, and county levels). Identify trends in economic development, irrigated agriculture, urban-rural population growth/shift, future industrial and energy needs, and more. Survey planners and economic recruitment officers as

part of this process. Some stakeholders take this recommendation further, calling for the state to create standards to evaluate claims of demand and publish common standards for water demand forecasts.

- Improve the long-term water demand forecast by enhancing the state's water-use reporting program and coordinating with the U.S. Geologic Survey to compile consistent water-use information. [WRD – USGS]
- Develop models / studies on the "economic value of water to Oregon." This information is of critical importance to the U.S. Bureau of Reclamation and other major funding agencies, where economic information is needed to assess the cost-benefit of potential water resource projects or proposals.
- Establish Legislative requirements and funding for five-year updates to these comprehensive forecasts.

ACTION 2.B. IMPROVE WATER-USE MEASUREMENT

- Increase investments and partnerships in qualified staff, measuring equipment, and real-time access to data in order to measure significant diversions in high priority watersheds. Partner with the Bureau of Reclamation, Bonneville Power Administration, and the USDA-Natural Resources Conservation Service to help fund the purchase and installation of measurement devices. Conduct follow-up inspections to ensure that measurement devices are properly installed and maintained. [State – Federal – Local]
- Conduct studies to determine the average demands of exempt well use. [See Land-Use Action 6B]
- Determine how remote sensing technologies could help to better define water use in data-limited or problem areas. [WRD – Federal – Local]
- Encourage corporations in Oregon to participate in the Carbon Disclosure Project's (CDP) Water Disclosure Project

ACTION 2.C. COMPLETE WATER RIGHT ADJUDICATIONS

- Complete areas of the state that have not undergone the adjudication process, including reserved water right claims that still exist for tribal or federal lands.

OCA Response: Generally we would agree with Action 2.A., 2.B., and 2.C. We agree with the premise of the Action points, but are concerned whether or not there will be legislative policy and budget support beyond what is occurring presently basin by basin. Existing state statute and rule have included planning and management direction for OWRD for most of these listed considerations in the past and they have only been incrementally completed as the projected and funding allowed. Although, we would not agree with the inclusion of "Encourage corporations in Oregon to participate in the Carbon Disclosure Project's (CDP) Water Disclosure Project" in 2.B.

3. UNDERSTANDING OREGON'S INSTREAM NEEDS

ACTION 3.A. COMPLETE OUR UNDERSTANDING OF FLOWS NEEDED TO SUPPORT STREAM FUNCTIONS

- Base Flow Needs Studies. Identify which streams already have these studies, then prioritize and complete those that are still needed and those that need updates. Base flows are the instream flows needed to sustain basic life stage functions and are important for maintaining habitat, scenic waterways, water quality, and recreational needs.
- Elevated Flow Needs Studies. Conduct studies on a basin-by-basin or on a project-by-project basis to collect information about the elevated flows needed to maintain and restore stream channel complexity and ecological functions. [ODFW – WRD]

ACTION 3.B. IMPROVE OUR UNDERSTANDING OF THE RELATIONSHIP BETWEEN GROUNDWATER & ECOSYSTEM NEEDS

- Prioritize springs for further analysis, using U.S. Fish and Wildlife Service's 2011 inventory as a basis. Evaluate the cooling and water quality effects they have on spawning, downstream areas, and surrounding ecosystems. [WRD –USGS — ODFW]
- Categorize groundwater-dependent ecosystems statewide. [public and private sector]
- Complete WRD / USGS Groundwater Studies [See Action 1.B.]
- Build upon the work of ODFW's Conservation Strategy, ODF's Forestry Plan for Oregon, WRD/USGS Groundwater Studies, and the Oregon Plan for Salmon and Watersheds.

OCA Response: Generally we would agree with Action 3.A.and 3.B. We agree with the premise of the action points, but are concerned whether or not there will be legislative policy and budget support beyond what is occurring presently basin by basin. Base flow information must be historically and scientifically generated with the realization that flow augmentation can be legislatively achieved to protect the full slate of state recognized beneficial uses.

4. The Water-Energy Nexus

ACTION 4.A. ANALYZE THE EFFECTS ON WATER DEMAND FROM ENERGY DEVELOPMENT POLICIES

- A variety of policy drivers, including the Renewable Portfolio Standard, encourage the development of renewable energy sources in Oregon. Compare the effect these energy development policies have on water demand. [Universities]

ACTION 4.B. TAKE ADVANTAGE OF WATER INFRASTRUCTURE TO DEVELOP HYDROELECTRIC POWER

- Encourage the addition of power generation facilities to already-existing infrastructure (dams, pipes, canals, wells). This includes encouraging water right holders with certificated water rights to add hydroelectric capacity onto existing, durable, infrastructure. [State – Federal – Local]
- Engage with Bonneville Power Administration to gain access to unallocated water in the Columbia River when high flow events have exceeded spill maximums. [State – Federal – Local]

ACTION 4.C. INCREASE ENERGY EFFICIENCY AND RENEWABLE POWER PRODUCTION AT WATER AND WASTEWATER TREATMENT FACILITIES

- Encourage greater energy efficiencies and water efficient management practices at water and wastewater facilities, providing targeted training on Energy Management Best Practices to operators and supervisors. [State – Local]
- Promote Installation of biogas, solar, wind, and hydropower projects at water and wastewater facilities to offset power demands and utility costs on site. [State – Local]
- Promote development of "green" infrastructure facilities, to alleviate water and power loads at wastewater treatment facilities. Examples include natural wastewater and stormwater treatment systems, constructed wetlands, and habitat restoration. [State – Local]
- Set energy targets for water and wastewater treatment facilities. Start by developing a baseline of total energy use by water and wastewater utilities, which would include water transmission and treatment; treated water distribution; and wastewater collection, treatment, and disposal energies (not just energy use at the plant level). [ODOE – Universities]

ACTION 4.D. PROMOTE STRATEGIES THAT CONSERVE BOTH ENERGY AND WATER

- Partner with Oregon's 10-Year Energy Plan to promote these strategies.
- Continue to implement and evaluate building codes that improve water and energy efficiency. In Oregon, these are the Statewide Mandatory Building Codes, the 2011 REACH Code, and the Statewide Alternate Method to Oregon building codes. * [DCBS – Local]
- Partner with water users to find and promote combinations of on-site water savings and energy production that can result in overall conservation savings. [State – Federal –- Universities]
- Design energy efficiency programs that capture and publicly report water savings data, along with energy savings data. [Oregon Department of Energy — Energy Trust of Oregon— Bonneville Power Administration — Oregon Department of Agriculture — Infrastructure Finance Authority]

OCA Response: Generally we would agree with Action 4.A. through 4.D. Specifically however, we question the validity of the premise by which the Renewable Portfolio Standards were developed, and are concerned whether or not there will be legislative policy and budget support beyond what is occurring presently basin by basin. We would support promoting and developing energy conservation where practicable.

5. Climate Change

ACTION 5.A. SUPPORT CONTINUED CLIMATE CHANGE RESEARCH EFFORTS

- The state of Oregon should continue to collaborate with existing organizations, institutions, and researchers to improve climate change data and tools. [Federal – State — Local—Tribes]
- Continue and improve long-term monitoring of surface and groundwater resources (See Action 1.B).
- Improve real-time forecasting of water delivery, basin yields, monthly streamflow, flood frequency projections, and drought frequency projections.
- Downscale climate data (work largely residing with Oregon's Climate Change Research Institute). Finer resolution will enable agencies to prepare to respond to climate changes on a more local scale.
- Collaborate with the Oregon Climate Change Research Institute and Pacific Northwest Climate Decision Support Consortium on basin-specific studies.

ACTION 5.B. DEVELOP CLIMATE CHANGE SCENARIOS/MODELS

- Climate Ready Water Utilities (CRWU). Support and promote the U.S. Environmental Protection Agency's CRWU program, a resource for water providers to develop and implement long-range plans that account for climate change impacts. See http://water.epa.gov/infrastructure/watersecurity/climate/index.cfm.
- Analyze crops needs and water rights. Determine the likely evolution of crops under various climate change scenarios in Oregon. Determine changes in growing seasons and water needs, by updating Oregon's 1999 Crop Water-Use and Irrigation Requirements report (See http://extension.oregonstate.edu/catalog/pdf/em/em8530.pdf). Compare how those results do or do not match with existing water rights and junior water users. [ODA – OUS - WRD]
- Develop basin-specific scenarios, illustrating the impact of climate change on future water use and water availability. Show how climate change could affect the ability to access water when it's needed, and sketch out alternatives.

ACTION 5.C. ASSIST WITH CLIMATE CHANGE ADAPTATION STRATEGIES

- Help restore and protect wetlands, uplands, forests, and riparian zones to increase the capacity for natural water storage.
- Integrate water resource and land management in a way that helps Oregon prepare for natural disturbances, particularly sea-level rise, storm surges, flooding, landslides, wildland fires, etc. Include sensitivity analyses and riskbased planning in city and county comprehensive plans for consideration in state and local permitting processes. Partner with emergency preparedness community and potential funders, including public health and safety interests. [State – Federal - Local]
- Provide assistance to water users to increase storage capacity, water conservation, reuse, and efficiency.

OCA Response: Generally we would agree with the bullet points established in Action 5.A. through5.C. Specifically however, we question the validity of the premise by which the Climate Change policy was developed, and are concerned whether or not there will be legislative policy and budget support beyond what is occurring presently basin by basin.

6. The Water and Land Use Nexus

ACTION 6.A. ENSURE THAT LOCAL GOVERNMENTS HAVE ACCESS TO DATA NEEDED FOR DECISION-MAKING

- Develop and share information regarding the location and available quantity and quality of water resources, particularly groundwater. Provide this information to land-use planners. Fund the collection and dissemination of such data. [State – Federal – Local—Tribes]

ACTION 6.B. DEVELOP LAND-USE SCENARIOS / MODELS

- Sourcewater Protection Scenarios. Identify land critical to the long-term management of Oregon's drinking water resources. Develop rules associated with land development that could impinge on the ability of that land to protect sourcewater.
- Identify the potential effect of stricter requirements for land practices to protect water resources (protecting wetlands, forestlands, floodplains, etc.,) on the available stock of developable land.
- Identify water-related ecosystem services; determine the economic benefits and market value of these services. [See Action 11.D].
- Conduct studies to determine the number and location of historic exempt use wells and average water usage per well. Use this information to help inform local land-use decisions [see Action 2.B].

ACTION 6.C. FULLY INTEGRATE WATER INFORMATION INTO LAND-USE PLANNING (AND VICE VERSA)

- Help local governments integrate information about water availability into land-use decisions and plans, including Capital Improvement Plans, Water Management and Conservation Plans, and other local water provider plans that may help inform land-use decisions. [WRD – Local]
- Recognize the role of forest land in protecting watersheds and drinking water supplies; strengthen the limits on forest land conversion in Statewide Planning Goal 4. [DLCD]

- Help local governments integrate water quality information into land-use decisions. More specifically, emphasize Oregon's Statewide Planning Goal 5 to protect public drinking water sources, wetland, and riparian corridors, by completing land-use planning at the local level. [DLCD-OHA-DEQ-DSL]
- Develop rules to implement Statewide Planning Goal 6. Although Goal 6 directs local governments to consider the effects of land-use on water quality, it does not contain details about how to address water quality concerns when making land-use decisions. Build a coalition of non-governmental organizations, agencies, water providers and others to serve as a rule-making advisory group. [DLCD - DEQ]
- Ensure that State Agency Coordination Agreements with the Department of Land Conservation Development are up to- date.
- Improve location information of Underground Injection Control Systems (UICs) to prevent conflicts with future well development. Improve existing UICs to protect groundwater quality. [DEQ-WRD]

OCA Response: We would agree with the 6.A. and bullet points. We could not support 6.B. until after knowledge of proposed rules, furthermore, increased or stricter requirements for land practices to protect water resources would need very critical scrutiny. Although, we would agree that providing good information to counties is important as outlined in 6.C. , further rule making for land-use considerations for Goal 4, 5 and 6 would need critical scrutiny.

7. Water-Related Infrastructure

ACTION 7.A. ENCOURAGE REGIONAL (SUB-BASIN) APPROACHES TO WATER AND WASTEWATER SYSTEMS

- Evaluate land-use goals, regulatory and funding programs, to identify and remove barriers that prevent the development of regional water and wastewater systems. Regional systems could include physical consolidation, or shared contracts, services, purchases, etc. [State - Local]
- Provide incentives for "regionalizing" water and wastewater infrastructure, by ranking grant and loan applications more favorably when applicants are part of a regional effort. Provide grants and loans specifically for the purpose of regionalizing. [State – Federal]

ACTION 7.B. DEVELOP AND UPGRADE WATER AND WASTEWATER INFRASTRUCTURE

- Use an "asset management" approach to rehabilitate or replace infrastructure that no longer serves it purpose.
- Upgrade facilities to address emerging contaminants and growing populations.
- Ensure that basic maintenance (fixing leaks, replacing wooden pipes, measuring, automating) are counted in the definition of "green infrastructure" so that these projects can continue to compete for grant and loan funding.
- Recapitalize the state's Special Public Works Fund, to continue providing low interest loans and grants to partially offset capital costs.

ACTION 7.C. IMPROVE DAM SAFETY

- Evaluate the impact of potential dam failure on water supply systems.
- Encourage efforts to evaluate and retrofit Oregon's dams in anticipation of seismic events, aging, and other conditions. Resources are needed to conduct seismic evaluations that will identify deficient structures.
- Consider anticipated changes in low-frequency flood events, due to climate change predictions, in the design of spillways for existing dams. Resources are needed to conduct a statewide evaluation of problematic structures.
- Encourage the development of emergency action plans (EAP) for all high hazard dams in Oregon. Thirty-two percent of high hazard dams in Oregon have no emergency action plan, which is a predetermined plan of action to be taken, including roles, responsibilities and procedures for surveillance, notification and evacuation, to reduce the potential for loss of life /property damage in an area affected by a failure or mis-operation of a dam. Partner with emergency preparedness community.

OCA Response: Generally we would agree with the issue headings and bullet points established in Action 7.A. through7.C but, funding water treatment facilities is now difficult with limited help from the federal government. This is issue will most likely be delayed until the economy improves.

8. Education and Outreach

ACTION 8.A. PROVIDE IMPROVED PUBLIC ACCESS TO INFORMATION

- Water Education and Training Program. Develop a statewide "Water Education and Training" Program, providing free, water quality and water quantity information to the public in a variety of formats. Partner with the private sector, OSU extension, universities, tribes, watershed councils, soil and water conservation districts, watershed councils, all levels of government, non-governmental organizations, and industry associations. This would constitute a broader effort, with more real-time data and policy information than K-12 curricula produced at the national level. [State – Local — Tribal — Private Sector Partners]
- On-Line Water Information Center. Under a "Water Education and Training Program," launch an on-line water information center with links to local, state, and federal water resources. Make databases searchable and extractable. Scan and post public documents. Translate "raw data" to "useful information" for the public and for decision-makers. Include information about best management practices, available grants and basic water curricula(i.e., the water cycle and the importance of conservation), as well as "ongoing research needs," with questions that students in K-12, college, and graduate levels could assist with.
- Marketing the Value of Water. Under a "Water Education and Training Program," reach audiences through public broadcasting, newspapers, advertisements, community meetings, and electronic media. Start with a baseline survey of public knowledge. Use simple terminology. Encourage local journalists to write water articles. Conduct a "Celebrate Oregon's Waters!" campaign. Use the Water Trails Program at Oregon Parks and Recreation Department to increase access to water-related recreational opportunities and promote interest in protection of water resources.
- Focus on issues where individuals can do something to make a difference: pharmaceutical take-back, non-point source pollution prevention, water conservation, etc.
- Provide domestic well and septic system owners with information about testing / monitoring, treating for contamination, technical resources, and funding.

ACTION 8.B. ENCOURAGE THE NEXT GENERATION OF WATER EXPERTS

- Build a corps of experts in engineering, hydrology, hydrogeology, water law, farming and irrigation techniques, and other technical specialties. Smaller communities have a growing need for water and wastewater treatment facility operators, and other expertise.
- Provide technical training to soil and water conservation district staff, watershed councils, public agency employees, irrigation district managers, etc.
- Offer internships, fellowships, and other opportunities for exposure to careers in water.

OCA Response: Generally we would agree with the issue headings and bullet points established in Action 8.A. through8.B.

9. Funding for Oregon's Water

ACTION 9.A. ESTABLISH A WATER MANAGEMENT FUND FOR THE STATE OF OREGON

- Establish a water management fund with public and private funding sources. Use this to fund state natural resource agencies at a level to ensure state oversight, management, and technical assistance related to water resources. Funding sources could include the General Fund, lottery dollars, federal funds, a water rights management fee, wastewater fee, or other sources.
- Dedicate monies to state water management (including data collection and applied research, operational costs, and funding reserves for drought or other emergencies).

ACTION 9.B. CAPITALIZE FUNDS FOR LOCAL WATER PROJECTS

- Capitalize a number of already-existing water related grant funds ("OWSCI Planning Grants," "SB 1069 Feasibility Study Grants for Water Conservation, Reuse and Storage," "HB 3369 Implementation Grants," and "OWEB Grants") that encourage public benefits.
- Capitalize loan programs that provide low interest loans for water development projects.

ACTION 9.C. COORDINATE STATE AND FEDERAL FUNDING PROGRAMS

- The state and its partners should make investments in water resource planning, data, protection, and restoration using a more strategic and coordinated watershed approach. The Bureau of Reclamation has competitive basin studies grants available for these activities. [see Action 10.C].
- Show applicants, at-a-glance, various funding programs available for water-related projects.
- Agencies should review the schedules and application criteria for state grants to determine if dates, forms, or criteria could be modified to facilitate a streamlined approach through reduction of duplicative efforts. Communities are spending too much time chasing water and energy-related dollars with slightly different criteria and requirements.

OCA Response: We recommend continuing efforts to appropriate funds from the General Fund due to the high priority public benefit. We would not be in support of past efforts to increase water associated fees or establishing new fees. Any effort to increase funds for OWRD needs to include all water users in Oregon.

10. Placed-Based Approaches

ACTION 10.A. ENCOURAGE A REGIONAL (SUB-BASIN) APPROACH TO WATER AND WASTEWATER SYSTEMS (SEE ACTION 7.A)

ACTION 10.B. PARTICIPATE IN TRANSBOUNDARY AGREEMENTS

- Continue to participate in transboundary efforts related to water management and long-term planning. These include the Columbia River Treaty, the Klamath Basin Restoration Agreement and its related work groups, and Oregon'sTerritorial Sea Plan.

ACTION 10.C. FACILITATE REGIONAL (SUB-BASIN) WATER RESOURCE PLANNING

- This Strategy provides an opportunity to pursue a more integrated approach, when it comes to protecting, sharing, or developing water resources at the basin and sub-basin level. Recognizing the value of both "bottom up" and "top down" approaches, developing water resource plans with local, state, and federal partners at the table will ensure that the best of both processes are utilized. These plans should integrate water quantity, water quality, and ecosystem issues.
- Ways the State can help:
    - Provide a framework for local basin planning.
    - Help coordinate each basin or sub-basin that wants to take this approach.
    - Share basin-level data gathered by local, state, and federal partners in an on-line format.
    - Establish incentives, including grants, for communities to conduct this planning at the basin or sub-basin level. (The Bureau of Reclamation also has competitive basin-studies grants available for these types of activities.)
    - Identify permitting, funding, or other management issues that would be ripe for simplifying or streamlining.
    - Conduct a pilot project at the basin-level that clearly identifies a water resource need, and then brings together partners, funding, and technical assistance / programs to address this need.
    - Regions should use the following tools and ideas:
        - Conduct an assessment, determining whether land-use laws, regulations, or ordinances are getting in the way of regionalization efforts.
        - Determine needed improvements in water-use efficiency, water quality, public health, and ecosystem protections.
        - Use scenario planning as part of the decision-making process.
        - Consider data modeling to facilitate decision-making at the local level.
        - Use adaptive management; re-visit assumptions periodically.
        - Account for economic values and impacts of intact/healthy watersheds. Provide incentives for protection.
        - Identify sources of water (freshwater, recycled water, stormwater, etc.). Conduct assessments, matching reclaimed water quality to end uses (e.g., flushing or irrigating with non-potable water).
        - Identify demands for water.
        - Consider conservation pricing (define and charge "full cost," not flat rates for water). – Consider water sharing between communities.
        - Commit to implementation as part of this process.
        - Document and publicize best water management practices in the basin.
    - Regions and localities may want to ask themselves the following questions to jumpstart planning:
        - Define your water needs and water quality levels of those needs. Whose wastewater could you use?
        - Define your wastewater streams and their water quality levels. To whom could you deliver your wastewater?
        - How many times could you use water before returning it to the environment?
        - Identify the most critical wetlands in your region. Prioritizing their protection creates a market / credits system.
        - What ecosystem services could this community provide? What revenue would such an ecosystem service need to generate in order to help it stay in place?

OCA Response: Generally we would agree with the issue headings and most of the bullet points established in Action 10.A. through10.C, however, "conservation pricing" would need further scrutiny. We would recommend the suggested "incentives approach" to regional and sub-basin watershed planning.

11. Water Management

ACTION 11.A. INCREASE WATER CONSERVATION & WATER EFFICIENCY

- Establish and fund an on-line water conservation clearinghouse that documents water conservation's "best practices." The clearinghouse could include information on existing state and federal conservation programs, grant opportunities, and technical resources. State agencies with water conservation programs include OWRD, ODA, Building Codes' REACH Program, and ODOE. Provide "on-the-ground" resources to help explain the benefits of water conservation, best management practices, and to provide technical information, and resources.
- Focus on agricultural water efficiency. Using more than 80 percent of Oregon's diverted water, agriculture is the largest consumer of water in Oregon, and increased efforts in water efficiency in this sector could result in significant water savings statewide. To begin the process, encourage more irrigators to develop Agricultural Water Management and Conservation Plans. Provide grant funding for this purpose through the Water Resources Dept. and make use of Oregon Dept. of Energy tax incentive credits or Oregon Dept. of Agriculture efficiency grants.
- Engage industrial users to see if any regulations currently stand in the way of greater water efficiency.
- Publicize and clarify existing conservation programs at the local, state, and federal level, particularly the Allocation of Conserved Water Program and the Water Management and Conservation Planning Program to help with water conservation. Look for ways to expand the Conserved Water Program to reward more types of efficiency efforts. Partner with the Alliance for Water Efficiency and EPA's Water Sense Program.

ACTION 11.B. INCREASE BUILT STORAGE

- Encourage greater use of Artificial Recharge as a water treatment technique to help meet water quality standards for Aquifer Storage and Recovery, as demonstrated in the Umatilla Basin Aquifer Restoration Project. Areas of the State designated as 'groundwater limited' or 'critical groundwater areas' may be especially good candidates. Continue to make planning and feasibility study grants available for these projects. [WRD – DEQ – local communities]
- Allocate and reauthorize existing storage projects [Corps – BOR – WRD – local communities]. Seek funding to facilitate work between the state and federal agencies for allocating water stored behind federal dams, particularly in the Willamette, Columbia, and Crooked River Basins. Authorize a full range of beneficial uses, including anadromous fish and water quality needs, municipal, agricultural and industrial water supply, and recreation.
- Expand or improve existing storage projects [DSL – WRD – Federal Agencies – local communities]. Increase the storage capacity of existing storage projects, using various methods including raising dam height or dredging.
- Develop new off-channel storage sites [ODFW – DEQ – WRD – Federal Agencies - local communities—Tribes]. This alternative includes storing water behind dams constructed on side channels to the main stem and tributaries where no known fish habitat may exist. Natural runoff can be stored during the wet season and released during the dry season.

ACTION 11.C. ENCOURAGE ADDITIONAL WATER RE-USE

- Ensure that Oregon has the right policies and regulations in place to facilitate municipal and industrial water re-use.
- Conduct a statewide assessment of the potential for water re-use to fulfill current and future water supply needs, matching the water quality of reclaimed water to appropriate end uses.
- Maintain funding for the Water Resources Department's grant program for conducting water conservation, re-use, and storage feasibility studies.
- Encourage and incentivize increased industrial water re-use.

ACTION 11.D. ASSIST IN THE DEVELOPMENT OF ECOSYSTEM CREDITS AND MARKETS

- Value and invest in ecosystem markets. Build upon Senate Bill 513 (2009), which sets the stage for ecosystem markets in Oregon. Specifically identify ecosystem service benefits or credits that can be sold outside of Oregon.

OCA Response: We would agree with the issue headings and bullet points established in Action 11.A. through11.C., but there needs to be more information and scrutiny established around 11.D. We would recommend the suggested "incentives approach" to all headings in this section.

12. ECOSYSTEM HEALTH & PUBLIC HEALTH NEEDS

ACTION 12.A. RESTORE NATURAL STORAGE AREAS

- The function of these natural storage features has been lost over time due to stream channeling, land grading, and other activities. Do more to protect these systems during land-use planning.
- Maintain forested areas. Promote the maintenance of forestland in forest uses and promote the establishment of new forests as key elements in promoting high quality water and protection of soil productivity. (Oregon Department of Forestry's Draft 2011 "Forestry Program for Oregon")

- Develop a rapid assessment methodology, to determine storage capacity and system health of wetlands and streams. Local governments could use these assessments to make permitting decisions, evaluate the effectiveness of mitigation and restoration practices, and bolster their efforts under Statewide Planning Goal 5. [DSL – USACE – US EPA]
- Develop a statewide riparian policy, building upon language that exists in executive order. Draw upon already existing authorities at ODA, DSL, DEQ, ODF, and local governments to protect riparian areas.
- Develop a statewide floodplain policy, to set the framework for regulation and permitting work. [DSL, State, Federal, Local] Restore floodplain functions (Action 3.8 in ODFW's Conservation Strategy). Reconnect rivers and streams to their floodplains; restore stream channel location and complexity; remove dikes and revetments; allow seasonal flooding; restore wetland and riparian habitats; and/or remove priority high-risk structures within floodplains.

ACTION 12.B. PURSUE ADDITIONAL INSTREAM PROTECTIONS [contingent upon implementing Action 3.A]

- Recommend the designation of additional scenic waterways. [OPRD]
- Apply for new instream water rights, including those that protect a suite of flows (base, peak, ecological and other flows). [DEQ, ODFW,OPRD]
- Expand programs to restore streamflows, such as instream transfers and related OWEB grant programs.
- Private sector funders could acquire water from willing sellers to restore and protect water instream. Evaluate the pricing of such efforts; ensure they are economically competitive with other uses of water.

ACTION 12.C. IMPROVE POLLUTION PREVENTION

- Reduce the Use of Toxics:
    - Establish an interagency toxics chemicals reduction team that is charged with developing a list of "toxic chemicals of concerns" and a toxics use reduction strategy. Identify specific actions the state can take to reduce releases of and exposures to listed chemicals.
- Sourcewater Protection:
    - Establish "take back programs" for unused and outdated products, including pharmaceutical take-back programs for communities, pesticide collection programs for farmers and ranchers, and hazardous waste. [See Action 8.A]
    - Provide technical and funding assistance to clean-up contaminated aquifers
    - Ensure consistent riparian buffers and restoration requirements for all land uses.
    - Encourage techniques that decrease turbidity and sedimentation (e.g., no till farming).
    - Promote consistent application of state water quality standards across land uses.
    - Encourage the Oregon Treasurer's Office and Department of Administrative Services to incorporate water quantity and water quality issues into investment and purchasing decisions. Use state and local purchasing power to demonstrate preference for products made without toxic or persistent pollutants, such as certain soaps or cleaners.
    - Continually improve water quality standards, including the Priority Persistent Pollution list (P3), Total Maximum
    - Daily Loads (TMDLs), new water quality standards for toxics, non-point source pollution, and toxic reduction plans.
    - Prevent and Eradicate Invasive Species
    - Support efforts by state and federal agencies, including the use of boat inspections stations, to prevent the spread of invasive species. More specifically, support the Oregon Conservation Strategy's six statewide actions aimed at preventing new introductions, and the scale and spread of infestations.

ACTION 12.D. IMPROVE HABITAT AND HABITAT ACCESS FOR FISH

- Build on the successes of habitat improvement, including large wood placement or riparian improvement.
- Build on the successes of the Oregon Plan for Salmon and Watersheds by removing fish passage barriers (e.g., replacing culverts with bridges, installing larger culverts, construction of fish ways, and stabilization of road fill material, installing fish screens, and retiring push-up dams).

OCA Response: We are concerned with Action 12.A. bullet point referring to development of "statewide riparian policy" and "statewide floodplain" which always insinuates private property takings as does "designation of additional scenic waterways" in 12.B. We have advocated for ensuring local control of riparian areas with related policy being based on statistically valid science. We oppose a one size fits all, state wide approach, to riparian management. Furthermore, 12.B. includes applying " for new instream water rights, including those that protect a suite of flows (base, peak, ecological and other flows)" which have not been fully vetted and accepted. The smorgasboard of recommendations in 12.C. for "toxic reduction" and "sourcewater protection" are a list that strikes fear into the hearts of most business owners in Oregon because these are the priority issues used by the environmental groups to reduce land and water use all in the name of protecting the environment, although we would be and have been supportive of efforts for establishing "take back programs" for unused and outdated products, including pharmaceutical take-back programs for communities, pesticide collection programs for farmers and ranchers, and hazardous waste," and "providing technical and funding assistance to clean-up contaminated aquifers," and "prevent and eradicate Invasive Species." We have been supportive of 12.D. as long as we can remove naturally occurring large woody debris without excessive time delays or cost.

From: Weber, Jeff
Sent: Tuesday, July 05, 2011 9:17 AM
To: Alyssa Mucken
Cc: NORRIS Barry F; BATEMAN Brenda O
Subject: RE: Policy Advisory Group Meeting: July 19, 2011

Alyssa – I have been well outside the sphere of the work on the IWRS, and thus this note might be considered somewhat late. For much of last year, I coordinated the development of the Climate Change Adaptation Framework for Oregon, available at http://www.oregon.gov/ENERGY/GBLWRM/docs/Framework_Final_DLCD.pdf?ga=t

I appreciate the reference to the Framework in Bulletin 5 of the Draft IWRS. However, I suggest that the reference to DLCD and the Framework be revised. The present reference makes it sound like the Framework was DLCD's initiative, when in fact our effort originated in the Governor's office. (We—and others--just happened to do the work!) Let me know if you're willing to revise that reference (I can help).

I also suggest that Bulletin 5 at least provide the URL to the framework, if not include the Framework as one of the items in the list of "Online Resources for More Information."

Best regards - Jeff

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Oregon Ground Water association

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August 31, 2011

Water Strategy
c/o Oregon Water Resources Department
725 Summer Street NE Suite A
Salem, OR 97301

Re: Oregon's Integrated Water Resources Strategy
Comments on Draft Recommended Actions

The Oregon Ground Water Association has long been an active participant in the planning, protection, and utilization of our state's ground water. It might be helpful to view and recognize some historical information before developing a final draft of your report. One document that might be helpful in your review is the "*Proposal: A Watershed Management Strategy for Oregon"* which was completed for the Strategic Water Management Group in August of 1992.

Specifically, we noticed that in Bulletin 6 of the IWRS Draft Recommended Actions a recommendation was made to "fully integrate water information into land-use planning & vice versa." This seems to be in direct conflict to earlier information gathered by decision makers (see the attachment from the Water Resources Department). Our organization has long supported efforts to obtain more field data so that decision makers could have better information from which to make accurate projections. Therefore, we would strongly suggest that decision makers need additional data, but at this point a fully integrated approach is not practical. As mentioned in the final sentence of the attached Water Resources Department document … "Because of these types of issues, there is potential for incompatibility between basin planning and land use planning." They point out that interaction between local plans and water uses is complex but "Seldom is the tie between the two so direct that Commission action precludes or would necessitate changes of the overlying land use category."

Considering funding challenges discussed in Bulletin 9, we note that one of the proposed actions mentioned in Bulletin 9 for establishing a "water management fund" is to adopt a water rights management fee. The Oregon Ground Water Association is strongly opposed to the proposed water rights management fee. These types of "user fees" are especially burdensome on farmers, because they generally do not have the ability to pass on these costs to their customers (i.e., the farmers usually have little control on the prices they are paid for their crops). Products and services that are made possible through permitted water uses benefit everyone who lives in this State. Therefore, it is not right to impose ever increasing costs on water right holders. We believe our State government officials do not fully appreciate the importance of managing this State's water resources.

The amount of general funds dedicated to funding the activities of the OWRD is appallingly small. The protection and management of the State's water resources benefits everyone who lives and works in Oregon. Therefore, the costs to manage these valuable resources should be borne by all who benefit from them. Redistributions of even tiny fractions of the budgets dedicated to education, public safety, and/or human services, to the OWRD, would drastically improve the Department's ability to manage our water resources and eliminate the need for ever increasing and burdensome "user fees."

Recommended Action 12b includes the proposal to establish additional scenic waterways. We believe this would make sense only if the current scenic waterways act could be revised to remove the one cfs limitation in the definition of "measurably reduce." There is no scientific or technical basis in limiting impacts to a scenic waterway to the "cumulative total of one percent of the average daily flow or one cubic foot per second, whichever is less." For most, if not all, of the existing designated scenic waterways, one cfs is considerably less than the error inherent in measuring the stream flow. Therefore, before the designation of any additional scenic waterways, the definition for "measurably reduce" in the Scenic Waterways Act should be changed to allow for a sound scientific and technical evaluation based on the individual characteristics of a given stream.

Finally, as a general comment, we wish to emphasize that all beneficial uses must be given equal consideration in the IWRS. While there are separate discussions in the Draft Recommended Actions concerning ecological uses and other, competing beneficial uses, there seems to be little discussion about how to actually integrate these competing uses. The IWRS should be developed so that we end up with a program that allows for balanced and optimal integration of all beneficial uses.

These comments are based on a limited review by the OGWA of the IWRS Draft Recommended Actions. The lack of comments on parts or elements of the Recommended Actions not discussed above does not constitute an endorsement by the OGWA of those parts or elements.

We thank you for the opportunity to comment and hope you incorporate some changes to the final draft.

Sincerely,

Gregory E. Kupillas
Vice President
Oregon Ground Water Association

Attachment: Page from OWRD Basin Planning Document

Goal 5 requires local governments to inventory "water areas" as part of their comprehensive plans. Goal 5 also recommends that reservoir sites be protected from irreversible loss and that streamflows be protected for instream uses. However, there is no reference to Water Resources Commission programs or state water policy statements -- in contrast to specific references to the Oregon Wildlife Commission, the State Natural Area Preserves Advisory Committee, and the State Advisory Committee on Historic Preservation. The only explicit reference to the Water Resources Commission (or the Water Policy Review Board at the time of Goal adoption) or the Water Resources Department is under Goal 16 (Estuarine Resources) -- and then only in terms of appropriation and minimum perennial streamflows, not planning. In short, although the Goals do not prevent local governments from coordinating with Commission planning programs and adhering to state water policy, this coordination is not encouraged or required.

The lack of understanding of the relationship between basin planning and land use planning on the part of WRD staff also stems from the complicated nature of that relationship. One of the complicating factors is how land uses identified in local plans and water uses interact. Seldom is the tie between the two so direct that Commission action precludes or would necessitate changes of the overlying land use category.

For example, the Commission may withdraw a stream in an agricultural zone from future use for irrigation. This could affect, but not necessarily preclude, the future development of irrigable lands. Alternative sources of irrigation water could include ground water, savings from conservation, purchase or lease of nearby water rights, service from existing irrigation districts, or use of water from storage. Thus, customary land uses in the area could continue. Zoning ordinances normally do not distinguish between types of agriculture. Therefore even if alternative irrigation sources are not available, agricultural uses of the land, such as dryland farming or grazing, frequently remain. Thus, in one sense, the Commission withdrawal would have no effect on the local plan designations. On the other hand, if an area relies heavily on irrigated agriculture and alternative sources are few, the withdrawal is likely to affect the local pattern and intensity of land use, even if it does not directly affect a local plan.

Conversely, the Commission might allow industrial use of a stream in a zone where industrial land uses are not allowed. This does not necessarily represent a land use / water use conflict. Water is not always used on lands immediately adjacent to a stream. For example, a potential industrial user could occupy an industrially-zoned parcel and yet need to divert water from a distant stream outside the zone. Thus, allowing a water use for a land use precluded by an overlying zone is not necessarily inconsistent. In this case, matching a stream's classification to the surrounding zoning could frustrate a local government's goal of economic development. Because of these types of issues, there is a potential for incompatibility between basin planning and land use planning.

Oregon Water Resources Congress
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August 31, 2011

Water Strategy
Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301

Subject: Comments on the Draft Recommended Actions for the Integrated Water Resources Strategy

On behalf of the members of the Oregon Water Resources Congress (OWRC), thank you for the opportunity to provide comments on the Draft Recommended Actions for the Integrated Water Resources Strategy. These comments are offered with the understanding that this document is still being developed and the Water Resources Department is requesting comments suggesting additions and changes to improve the document and that these comments apply only to this draft of this document.

General Comments on the Document

While we understand that the development of the Integrated Water Resources Strategy requires a series of steps and the draft recommended actions are one of those steps, we struggled in developing comments as we do not have the full context for this document. The document lacks the overarching strategy for the state's water resources that can be used to develop locally driven plans and projects.

There have been various discussions about the use of the Strategy, but as far as we know, there has never been a clear, definitive statement of its use in both the short-term and the long-term. How will these recommended actions be used? Will the prioritized for implementation? If so, what criteria will be used and what information is needed for those criteria to be applied to evaluate and rank each action? The document suffers from the lack of clarity about the intended audience and use resulting in something that appears to be trying to be everything for everyone. That in turn results in a document that is less usable than it would be if it is properly targeted.

There is no statement of goals or objectives in this document which means we have no context in which to understand why these actions are being recommended. In other words, we are missing that piece that fully describes the Integrated Water Resources Strategy. Such a statement does exist but without it specifically incorporated into a document, that for now is a stand-alone document, there is not connection back to those goals and objectives.

We recognize that the resources for the development of the Strategy are severely limited. That limiting factor begs for the Water Resources Department staff to take time to evaluate the charge from the Legislature and evaluate this document and other documents that have been developed to date for the Strategy to ensure that the work is being focused specifically as directed by the Legislature and to set aside the pieces that have surfaced in this document that

do not meet that test. It is, after all, intended to be an iterative process that evolves over time, not a one-time document.

We also understand the efforts by the drafters of this document to, in some manner, acknowledge the comments and suggestions they have received from their outreach efforts, but in doing so some of the recommended actions are highly conceptual and are more statements of desired outcomes or beliefs than actions. A recommended action must be just that – an action not a concept. It has to be clearly defined and capable of being implemented as it stands. The decision to include a recommended action must be based on sound science or clear policy, not be a restatement of a policy. If additional research is needed for a concept, the concept is not the action; the conduct of the research becomes the action.

How will the bullets under an action be treated or evaluated? Will they be prioritized on their own or are they to be treated as explanatory information for the action and will be incorporated as one piece with the action? If they will be prioritize on their own, should they be separate actions?

Is there another part of the Strategy that will include a discussion of the goals including a statement to explain the importance to Oregon, the interrelationship among the goals, and basically lays the groundwork for the draft recommended actions? The text of the Bulletins is a start for this work, but they do not tie back to the goals and they are incomplete (which the staff has acknowledged).

The document makes several implicit and express conclusions about water-related “problems” that are not supported by scientific evidence. In some places, it recommends additional research to develop data, but in other places, the conclusions are simply presented as fact, leaving the reader to speculate if the conclusions are supportable. At points it touches on issues like land use consistency and ocean/tidal waters, but has very little substance, specifics, or discussion about interagency coordination. It also seems that the drafters have chosen wording designed to provoke as little controversy as possible but in doing so, are failing to use plain language and common terms of water parlance which is confusing and raises questions about the intent of certain statements.

We believe the document should incorporate some indication of potential costs into the recommended actions. We recognize that may be beyond the scope of this stage of the strategy (which is one of the problems of not having a full context for the draft recommended actions) and that in may be very difficult to truly estimate the costs of some of the recommended actions, but we recommended at least the use of a gross indication of costs for each recommended action. This could be something as simple as using a system of symbols such as the dollar sign ($) that is used by different guides for restaurants and hotels. The absence of cost information results in the inability of the users of the document to understand the financial realities of what is being proposed.

There are several topics that we think deserve individual Bulletins to reflect their importance to Oregon’s water supply. This would allow for a more full discussion of the issues related to these topics and for the development of recommended actions specifically intended to address these issues.

- Groundwater. As is a critical element of Oregon's water supply, groundwater deserves to be discussed separately from surface water while still recognizing the interrelationship between surface and ground water.

- Water storage. If climate change alters precipitation patterns as projected, this is the single biggest issue the state will face in the future, with all the water stakeholders feeling the impact of the state's continued failure to plan for the future. Water storage is not just for consumptive uses of the water. It provides a means to regulate stream flow for fish; it provides flood control which may become more important as the precipitation patterns change.

  The document report as a whole, and particularly Bulletin 5, completely underemphasizes the future need for above ground storage in the future. If climate change occurs, resulting in less snowpack, we must replace that lost natural storage with reservoirs. If a gallon of water falls as rain instead of snow or melts earlier than it used to, we have to capture that gallon in reservoirs. We will also need reservoirs to replace the flood protection function of the snowpack.

  Given the scenarios for changes in timing and availability of water, it is crucial that the State provide assistance to build storage and to assess and assist with increasing existing storage (including working with Army Corps of Engineers (ACOE) and Bureau of Reclamation BOR)) to capture high flows during winter/spring, for both flood control and to store water for use during dry months when water is needed most

- Water institutions and structural regimes. A major part of a successful statewide strategy will be to identify the roles and functions or what the various state and federal agencies and other entities in managing and regulating water in Oregon; identify the redundancy, gaps, and inefficiencies among those agencies and entities; and determine how to move to a more effective and efficient streamlined system. An example of an action item for the bullet would be to identify and implement efforts to streamline permitting, transfers, water development projects, etc. to help meet facilitate the process for meeting demands in a more expedited and direct manner. This is already mentioned in several Bulletins and we think it would be better handled by bringing all of those actions into this Bulletin.

The phrase "adaptive management" does not appear anywhere in this document. A state water strategy needs to be a set of guidelines that promote adaptive management to meet identified priorities that are reevaluated along the way. Otherwise the strategy will quickly become stale and outdated.

Finally, we believe this document should include a clear statement that the State of Oregon and the Water Resources Department recognize that this Strategy and any future strategy must be built on the existing foundation of vested water rights and all the related investment, history, and culture that comes with them. Without such a statement, this document (and presumably the full Strategy of which this document will be a part) represents a road map for departing from the prior appropriation doctrine in Oregon some of the recommended actions sound strongly like the public trust doctrine's application to water allocation is a foregone conclusion – a significant shift in policy that seems outside the reach of the Strategy.

Comments on Specific Bulletins

BULLETIN 1

P. 4: "Monitoring Surface Water." The second paragraph jumps into "habitat-limiting factors" without laying any foundation. Presumably there is some reason for the first statements, but as written it seems to just pull that statement out of the air. The section needs to explain this concept and why it is necessary in the context of the IWRS effort. It also needs to explain habitat for what species and just generally provide more explanation. As written, it could be easily interpreted that the single reason for monitoring surface water is to collect data on habitat-limiting factors.

P. 5 The document notes that the Water Resources Department lacks sufficient financial resources to maintain gages. This is the first of a number of places in the document identifying an action item and then noting that the major limitation is funding. As noted in comments above, it would be helpful if the report actually attempted to identify the costs as some gross level. Otherwise, it all seems like a hollow effort to identify needs and action items and then set them aside simply stating that the state lacks the funding to get it done. If it is important enough to identify as a recommended action, then it should be identified as needing funding and be prioritized among all the actions to be implemented (which can include finding funding for the action). As a side note, the Strategy should prioritize for funding unfunded action items across all of the various Bulletins. When OWRD, DEQ, ODFW or other agencies ask the legislature for funding, the Strategy will already identify which action items should receive money first.

P. 6 Discussion of Groundwater Quality. (Note that we think Groundwater deserves its own Bulletin as stated above.) The contamination conclusions are an example of information that is presented in a matter of fact manner with no citation to actual studies. In the resources section for this Bulletin, we could not identify a citation for the DEQ groundwater surveys. That raises concerns if the studies acknowledge that some of the conditions are actually influenced by natural background levels of certain contaminants.

Action 1.A.

This action would be part of our recommended stand-alone Bulletin on water institutions and structural regimes to address overlapping agency jurisdictions improve coordination and streamline processes.

Action 1.B.

First bullet: While basin-led efforts can help prioritize funding of data collection as suggested, these are statewide needs and the State cannot rely on the basins to fill the funding needs. Data collection needs should be included in the overall priority setting for the recommended actions

Second bullet: This proposal to fully incorporate water quantity into DEQ's TMDL requirements appears to be tantamount to creating a new super-priority water right for water quality management that would over-ride the prior appropriation doctrine. This is entirely unacceptable if this is what is being proposed. At a minimum, this bullet requires more explanatory detail.

BULLETIN 2:

p. 11 This section lacks any discussion of evolving population trends (other than in the statement in the second paragraph about the expected population growth), societal needs, etc. that may influence future water needs and use. The document underemphasizes the need to

ensure adequate future water supplies for the human species in the form of water for food and drink.

P. 12 Rather than just stating that all unadjudicated areas must be completed, we suggest including a recommendation that the state look at alternatives to adjudication where possible before diving into an adjudication (especially given the recent budget reductions that have hampered the completion of the Klamath River Basin adjudication.). For example, for the Willamette Basin, OWRD could probably identify all of the claims where the use has been discontinued or forfeited and find that there is probably plenty of flow left over to satisfy all the rights and more.

There is no mention of the adjudication of groundwater in the state either as something the state needs to pursue or that the state thinks need not be done. (This would be an appropriate discussion in our suggested Bulletin on groundwater.)

BULLETIN 3
P. 15 We question the scientific basis to support the statement that ecosystem heath is in disrepair based only one species (salmonids). While salmonids are listed as endangered species in Oregon, the conduct of one species is not an indicator of the overall river health in a particular area, especially when that species' survival may rest in ocean conditions with no certainty that freshwater conditions are the culprit. While it may be convenient to use salmonids as the the main criteria, given the data available and the long-term use of The Oregon Plan, it ignores other indicators, creates a constant crisis mentality, and ignores ocean factors important to salmonid survival.
P.16 Data Gaps. What does the statement "(n)or have we fully quantified the ecological degradation that occurs with differing qualities and quantities of water" mean?

The second and third paragraphs clearly are referring to peak and ecological flows without saying the words. These paragraphs also discuss the need for baseflows to "overcome the potential for threats to aquatic life from pollutants or increased water temperature." OWRC cannot agree with this as written as this section appears to be the start toward the creation of another super-priority right or obligation for water quality protection. Our members have been active in improving streamflows through water conservation efforts, but we cannot support language that could result in the imposition of new requirements for stream flows that would hamper their ability to deliver water to their patrons.

Action 3.A.
Second bullet: Base flow studies for what species?
Second bullet: Elevated Flow Needs Studies. The term "elevated flows" indicates a foregone conclusion that elevated flows are needed to "restore" stream channel complexity and ecological functions without allowing for findings that reduced flows may be as important to elevate flows or that there may be other options to protect fish and habitat. Such a broad conclusion is inappropriate given the diversity of the streams and streambeds in the state and findings in some on the ground studies that elevated flows may not be a good solution or the only solution. There should be an estimate of cost for this action (as for many others) and recognition of the need for state funding for this action item in order to establish the priorities for the work.

BULLETIN 4
Action 4.B.
First bullet How does the state intend to encourage the addition of power generation facilities to existing infrastructure? We recommend adding a statement that this effort includes reducing permitting hurdles, coordination among agencies in implementing this action, focus on the policy behind the action. Include efforts by the state to secure funding for projects and to identify sources of funding that can be used by others for in conduit hydropower projects.

Second bullet: What does this mean? How will the state engage with BPA to gain access to water during high flow events and to what end? If the intent is to develop additional hydropower production in high flow years than that concept needs to be explained further. If the intent is to develop additional storage for water in high flows events, that idea seems to better fit under water-related infrastructure. Given the complexity and number of players involved in the Columbia River Basin, this concept may not be ripe for a recommended action.

Action 4.C. Add water supply facilities to this action as irrigation water delivery systems are exploring way to increase their energy efficiency. Also add a bullet that the state needs to evaluate current rules and regulations to identify barriers to renewable energy development

BULLETIN 5
P. 23 While it may be fortunate to have many institutions at the local, state, and federal governments involved in climate change research, it will take state resources to collect, compare, and compile that work into something that is useful for planning and managing the state's water resources. How will that work be done, by whom, and with what resources?

P. 24, While water rights that protect water instream "may no longer be adequate" due to changes in precipitation and snowpack, as stated in this document, there is also the possibility that those water rights may no longer be necessary. This document should recognize the different possible scenarios predicted as a result of climate change and not just state one possibility. Similarly, if climate change is such that it causes increases in stream temperatures, then we may need to adjust the water quality standards to reflect the changes.

The draft action items need to acknowledge and incorporate attainability as a factor.

Action 5.C.
First bullet: Who is going to implement a strategy for the restoration of wetlands, uplands, forests and riparian zones? Where are we drawing the line of responsibility for the Strategy? Many things can be tied back to water if you try, e.g., urban land use planning, but this Strategy is not intended to cover all of them. At some point, there is a limit to how far afield this strategy supposed to go. The broader it is, the less likely it is that it will ever do anything other than end up on a shelf collecting dust.

Third bullet Some explanation of how this will be accomplished would be helpful with this action. Does "assistance" include only financial assistance or does it include technical assistance as well?

We suggest the addition of a bullet that recognizes the need to evaluate whether existing infrastructure can handle predicted climate changes and develop plan to repair/replace as needed with federal, state, and local entities.

BULLETIN 6
P. 27 The statistics at the bottom of the page talk about agriculture lands, but don't speak in terms of irrigated agriculture lands. That information should be available from the Department of Agriculture.

Action 6.B.
(See earlier comments about the extent of the Strategy.)
While we do not disagree that there is a direct connection between land use and water use, we are very leery of efforts to directly tie land use to water resources decisions as a part of this Strategy. Land use is a function of local governments and the decisions about land use should be left at that level. OWRD's role is to determine if there is water available for a proposed use and evaluate injury to other water rights; local governments should be responsible for determining if a land use is compatible with that areas water availability. Land use decisions should not be used to directly influence OWRD decisions or to thwart a water right application. The Strategy must be careful to not overstep the state's role or to create a new state role in land use and it should not imply in any way that local governments are not capable of making land use decisions that reflect water availability.

There is a presumption here (as elsewhere in the report) that we need new and stricter requirements, whether for wetland protection, streamflow protection, more scenic waterway designations, etc. Why? Oregon is already a "leader" in these areas. We need to recognize what we have done for these protections. We need to evaluate proposals for new regulations in the context of the state's economic well-being and other statewide criteria. For example, what is the trade-off between protecting floodplains and the use of what is some of the most fertile ground for production of food (and jobs)?

Action 6.C.
Bullet 4 We believe this action is over reaching. The use of Goal 5 as described can be viewed as an indirect means to control decisions about the use of water by imposing one more layer of red tape on water projects. How is it within the charge to the agencies to develop the strategy for water resources that includes an action to ensure State Agency Coordination Agreements with DLCD are up to date?

BULLETIN 7
Estimates about the number of dams and respective ages, miles of pipe and canal that need to be replaced, as well as upgrades to drinking, wastewater, and storm water treatment systems would be beneficial to this section. Also, it would make a stronger point if there was information about potential impacts and risks when various types of infrastructure fail, such as flooding, loss of drinking water supply, economic and environmental impacts, etc.

This Bulletin should include a discussion that acknowledges the roles dams play in flood control (an example from this year is Willow Dam protecting the City of Heppner) and include an action that addresses the need to plan for flood control to protect property and lives in the State.

Action 7.A.
Does this action apply only to domestic water (and wastewater) infrastructure? We request it include irrigation infrastructure as well.

Add a bullet to identify and remove barriers that prevent development of regional water and wastewater systems.

There is no discussion of providing incentives for regionalizing water infrastructure. Was this deliberate?

Add a statement that infrastructure upgrades will not trigger new requirements beyond those that existed when the infrastructure was built.

Action 7.C.
Add a bullet to develop funding assistance for dam repair, retrofits, and replacement.

BULLETIN 8
There is no question that there is a benefit to providing education about the use of and conservation of the state's water resources. The important question for this document and the Strategy overall is whether the state can justify the use of very scarce resources for an activity that we think falls outside the Legislature's directions give the many other demands for those resources for actions that do fall within the charge from the Legislature. This is a topic that can be deferred for later iterations of the Strategy.

If this Bulletin remains as part of this document, we offer our comment about a component that is missing in the draft. The discussion in this bullet is primarily (and almost exclusively) about domestic water use and supply. There is very little about water's importance to agriculture in Oregon and agriculture's contribution to the state's economy. There is information available about the amount of water use to grow certain types of food and to manufacture and process the things we consume. There is also no mention of the amount of conservation work (and resources applied to water conservation) by irrigators and irrigation water delivery systems. Water for agriculture is key not only to daily sustenance but also as an integral part of Oregon's economy, part of food security for state and nation.

BULLETIN 9
This Bulletin addresses funding only for planning and day-to-day operations; there is not recognition of the need for funding for project implementation or for activities that fall outside day-to-day operations.

P.43 The discussion of California's annual water user fee does not include anything about the challenges, successes, and failures of such a fee in California or other states. Did Alaska implement a similar fee? If so, that should be included here.

The discussion about other states' funding programs is too limited. States other than those mentioned have developed innovative funding strategies to support project development. As an example, Texas has a bond funded revolving loan program

As a general statement about a water development fund and the use of those funds, we believe that water is something every single Oregonian benefits from, and as such, the management of water should be funded primarily by general fund dollars. Fees are, and will need to continue to be, a part of funding the various natural resources agencies involved with water resources.

However, the burden of ensuring that we all have abundant water for drinking, growing food, recreating, and sustaining fish and wildlife should not be unduly placed on individuals.

Action 9.A.
There needs to be more description of the purpose of the Water Management Fund including how the Fund will be administered and the process and criteria that will be used to determine how to spend the funds. Is this simply a fund for functions that have traditionally been funded through General Fund allocations but have been de-funded as part of the recent budget cuts? Or is it intended to target some specific actions identified in the Strategy as high priority?

The agency that will be responsible for the Water Management Fund should be identified to avoid funding multiple agencies to do the same tasks.

(These comments should not be interpreted as an endorsement of such a fund or of the suggested ways to fund it. OWRC is not prepared to support or not support these ideas at this time.)

Action 9.C.
Second bullet This is more of an ideal rather than an action items. No one disagrees that certain parties should make investments in water resources activities of various kinds but there is no statement of action here. If it is intended to be an action, it should be reworded. Otherwise it is a comment that belongs elsewhere.

Third bullet We suggest an addition to this bullet that the agencies' review will also include an effort to reduce the number of individual state staff members involved in grant applications for one project. This would ensure that there are no misunderstandings among agencies about the project and considerably reduce the confusion for the project sponsors.

We suggest a bullet be added providing for a review of the criteria for state funding from HB 3369 (2009) to determine whether existing law makes it impossible for citizens to access state funding to implement or construct water development projects. The review should include the identification of the barriers and what should be changed.

BULLETIN 10
P. 49 The Basin Planning at the State Level insert explains the different structure of the various agencies' planning efforts without any consideration of a way to do this work that would better integrate their planning efforts. We suggest an activity that would charge all of the agencies involved in planning that is related to this Strategy to evaluate their planning efforts seeking to streamline their planning and recommendations and being able to develop plans that are more easily integrated with each other. For those of us looking in, it seems redundant to have DEQ and OWRD maintain separate basin planning efforts, and then comment on each other's work plans, etc.

This Bulletin advocates for regionalization, but there is no foundation for that support – it just kind of appears. There needs to be some groundwork laid for regionalization.

As written, this Bulletin addresses only domestic water suppliers. If that is intentional, there needs to be a statement acknowledging that intent. We suggest that is not the intent and the absence of any mention of agriculture water delivery systems or agricultural water users in the

discussion of basin planning or other regional efforts was not intended to exclude the major water use and water users in many of the basins from the basin planning process.

Action 10.B.
We agree Oregon needs to be active participants in transboundary agreements. How does OR plan to participate differently than it has to date in Columbia River treaty discussions?

This document lacks any significant recognition that Oregon has failed to access available Columbia River water, and that the State needs to evaluate whether that is the right policy to continue. Washington has an ongoing work group focusing on how to maximize withdrawals and storage from the Columbia. Idaho knows this is front and center. Water from the Columbia must be part of an Integrated Water Resources Strategy for Oregon if the Strategy is to be viable and accepted by a large segment of the state. At a minimum, the document should contain a discussion about additional Columbia River diversions and the importance of that water source in meeting Oregon's water needs, if for no other reason than to head off efforts to sell the water to interests outside Oregon. It should also include the criteria to be used in evaluating whether to go forward with accessing water from the Columbia River.

Action 10.C.
Several Federal agencies (BOR, ACOE at the least) have recently adopted policies related to water resource planning, some of which may have money available (depending, of course, on the budget cuts currently required). These should be identified as potential sources of funding.

We support the concept of "bottom up" basin or sub-basin planning with the state providing a framework for the planning so long as the framework does not become mandatory requirements for the plan, including the list under "regions should use the following tools and ideas."

We suggest that the sharing of information among partners not be limited to an on-line format as it is possible that not all partners have the type of on-line capability that will allow them to access that information.

We fully support the identification of permitting, funding, or other management issues ripe for simplifying or streamlining, especially in light of the reduced budgets for the natural resources agencies.

Second bullet Similar to earlier comments, we are concerned that the first item, "(c)onduct an assessment, determining whether land-use laws, regulations, or ordinances are getting in the way of regionalization efforts" extends beyond the scope of the Strategy into land use that may have little or no relationship to water planning. If it retained, it should be clear about what kind of regionalization efforts are being addressed – presumably water planning and should be expanded to indentify similar barriers to "getting projects done" in addition to regionalization efforts.

BULLETIN 11
The section on Water Conservation focuses on domestic use with no recognition of the efforts irrigators and irrigation water suppliers have undertaken to conserve water and improve efficiencies for many years. Agriculture Water Management and Conservation Plans (WMCPs) were included as part of the conserve water statutes long before Municipal WMCPs came into existence. The conserved water statutes themselves recognized agriculture's interest in

conserving water but need funding for the projects. Some Ag WMCPS document completed projects. The Bureau of Reclamation, NRCS, and OWEB have records of grants made for water efficiency and conservation in Oregon with the reports related to those grants. OWRC is willing to work with OWRD to identify district projects as well.

As with almost any action related to water, conservation activities need to be considered based on a broad look at the impacts an activity can have adverse impacts on other parties. As an example, a water conservation project can reduce the return flow from one district's irrigators, reducing the water available for the downstream water user, thereby impacting that water users' water right.

P. 54 The discussion about Built Storage recites the basis for why we think this the document should contain much more discussion about stored water options including a Bulletin specifically for storage (see above).

Action 11.A.
Second bullet This bullet implies that agriculture is not active in water efficiency and conservation, something that is simply not true for individual irrigators or for agriculture water delivery systems. It also fails to recognize the long standing use of Agriculture WMCPs by districts, and by some individual irrigators. Instead of the draft language, we recommend a revision that includes (1) a focus on expanding existing efforts, (2) the development of incentives so that more entities can install new efficient technologies, methods, etc. and (3) greater incentives for WMCP participation. It is imperative that OWRD take action to ensure that Ag WMCPs are recognized as planning tools to make improvements in order to overcome some entities' reluctance to submit WMCPs because of fears that others will interpret the Plans as commitments to undertake certain actions and then institute different forms of legal action on the basis that the agricultural entity has not complete the projects identified in its plan.

Action 11.B.
As noted above, we recommend a separate Bulletin for water storage which would include this Action.

Whether a separate Bulletin is developed or this Action remains in this Bulletin, the discussion in this Bulletin and the Action needs to be expanded. Water storage is the most important long-term strategic task that is before the state and as such we think it should be a cornerstone piece of the entire document. We recognize this is a controversial topic in some quarters, but the conversation must shift from how new projects will negatively impact fish recovery, and instead consider how the lack of storage in the future will mean the certain extinction of those species. OWRD and the Water Resources Commission must be prepared to take the lead in this discussion.

Action 11.C.
This action should include support for agriculture water reuse such as is being developed between the City of Hermiston and the West Extension Irrigation District.

We recommend a new action that commits the state to helping identify funding for water efficiency and water conservation projects including working with federal agencies to include funding in their budget requests.

Action 11.D.
What does it mean to focus on the identification of ecosystem service benefits or credits for sale outside the state? Without more information about this action including its impact on the value of water and water rights through additional requirements or revaluation of the water rights and the impact on districts' abilities to serve their patrons, we are not prepared to support this action.

BULLETIN 12
P. 63 The discussion about project investments completely ignores investments made by local governments which are paid for by their rate payers or patrons with some having assistance from OWEB. These are equally important as investments by the private sector and should be recognized.

Action 12.A.
This Action should include the identification of the means by which the restoration of natural storage areas can be evaluated with the other actions in the document to establish priorities.

Third bullet Is this a proposal to be a call for buffers along streams across the state? If so, that should be clearly stated so that everyone understands this intent. This is an issue that needs to be fairly and fully vetted for its impact on the agricultural community, something and that can be accomplished only if the intent is clear.

Fifth bullet This item needs to be fully evaluated for its impact on the state's ability to protect communities from flooding, the impact on land owners, the state's ability to compensate those land owners for the loss of their lands or the flood damage to their property, the value of the lost production of that land weighed against the environmental benefit of the concept, and other cost-benefit relationships.

Action 12.B.
OWRC is not prepared to support this Action. All of the bullets could have adverse impacts on existing water rights and on our members' ability to delivery water to their patrons in compliance with the water rights serving the lands within the districts. Collectively these are a Herculean leap to protect instream water needs over existing water rights or even future needs for water by including an effort to appropriate all winter flows for instream uses, an action that seems directly contrary to the purpose of the Strategy to ensure that water is available for all of Oregon's water needs.

Action 12.C.
This Action does not include any mention of efforts by agriculture to manage water quality through the 1010 Planning program administered by the Department of Agriculture, through the Agriculture Water Management and Conservation Plans, as participants in the implementation of TMDLs, and by individual actions. This is very unbalanced and needs to be rewritten to acknowledge and capitalize on existing programs and resources designed to manage agricultural water quality.

OWRC appreciates the size of the task to refine all the comments received during the outreach efforts for the Strategy. We urge the agencies preparing the Strategy to be mindful that the breadth of the Strategy is necessarily limited by the funding provided by the Legislature for this work and focus on the meeting those requirements for the Strategy as outlined by the

Legislature and an evaluation of what is most critical to ensuring the state's long term water supply and water quality needs will be met.

Again, thank you for the opportunity to provide comments on this draft document. If you need additional information about any of our comments, please contact all us.

Sincerely,

Anita Winkler
Executive Director

OREGON WATER UTILITY COUNCIL
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August 31, 2011

Brenda Bateman, Project Manager
Integrated Water Resources Strategy
Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301

Dear Ms. Bateman,

The following are comments from the Oregon Water Utility Council (OWUC) on the Draft Water Resources Strategy Bulletins. OWUC is a subcommittee of the American Water Works Association and represents over 40 Oregon municipal water suppliers representing over 80% of the municipal water supplied in Oregon.

General Comments

As bulletin 2 notes, 87% of the allocated water in the state is used for agricultural purposes while 6% is used for municipal purposes. However, a number of the bulletins propose actions on municipal suppliers while only one bulletin (11) proposes an action directly on agricultural use. From a water quantity perspective we would suggest reassessing all of the bulletins considering the vast majority of consumptively used water is for agricultural purposes.

The bulletins use symbols to signify which actions will require research, legislative action or are a high priority. We suggest adding a funding symbol ($) given the large amount of resources that would be required to implement this strategy.

From an economic development perspective, it is important to recognize that the vast majority of Oregon's non-agricultural industries and businesses rely on municipalities to provide them high quality water through the municipal water system. In many cases, water is a key resource for the ability of businesses and industries to be successful.

Lastly, we suggest the Policy Advisory Group consider viewing the recommended actions through the lens of whether they solve or address a specific problem versus just speculating or merely making a statement.

Specific Comments

<u>Bulletin 1</u>

Page 4, 1st full paragraph: This paragraph implies the existence of harmful toxins in water bodies that go without monitoring. To the contrary, the Safe Drinking Water Act requires monitoring and treatment of over 90 contaminants. Likewise, the Clean Water Act requires monitoring and treatment of many more contaminants. Additionally, in Oregon, SB 737 and DEQ's toxics monitoring program require monitoring of many more unregulated potential

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contaminants proving the state already goes well beyond the federal standards today (i.e. Fish Consumption Standard). This paragraph implies an assumed risk from unidentified contaminants which may or may not exist. In the drinking water area there is a very well defined and thought out process to identify emerging contaminants (Unregulated Contaminant Rule), determine appropriate treatment, and establish a Maximum Contaminant Level. We suggest the paragraph be modified to include existing monitoring and regulatory efforts or be stricken entirely.

Action 1B, bullet 2, "Fully incorporate water quantity into DEQ's TMDL requirements": As a matter of federal law, existing water rights are outside the consideration of TMDL's. We question the goal of this Recommended Action. If the intention is to regulate existing water rights through the TMDL process, we would suggest this bullet be stricken entirely.

Bulletin 2

Page 12, 1st paragraph: This example is highly misleading. Most industrial customers in Oregon are in fact served by municipalities including the vast majority of the high tech manufacturing sector. "Industrial use" as used in this context should refer to individual water right holders who hold rights for industrial purposes. These users are far more likely to fall into the forest products or food processing sectors. In addition, this paragraph calls out the high tech sector for toxic discharges when these discharges are highly regulated and treated through industrial pretreatment programs. The agricultural industry poses a much bigger threat to water bodies through the release of pesticides and herbicides which are unregulated under the Clean Water Act. We suggest the Bulletin clarify that most industries, other than agriculture, are served by a municipality under a municipal water right although, some industries (pick a more accurate example, sawmill, cannery, etc.) have their own water rights to meet their water supply needs.

Action 2A, bullet 1: We suggest the last sentence be deleted. The municipal drinking water industry has many different standards for demand forecasting which suppliers use given their unique situations and customer characteristics. Some suppliers serve large industrial users while others are dominantly residential. Some suppliers are prominently urban while others are rural. The types of demands various utilities will have are going to vary dramatically and a uniform approach is untenable.

Action 2B: This Action calls for water measurement and water use reporting. While we support these concepts, as municipalities must do both today, we caution the Department to break out the three areas of water measurement and prioritize when and where these techniques would be the most helpful. We agree that there should be a high priority on stream gaging. This information provides the base data to understand the functions of a river and a firm basis for regulation of rights. Again, all municipalities are required to meter so we support this concept, however, given current resources, it might be prudent to determine priority areas where metering/measurement makes sense and the information collected will be used productively. Water use reporting could have limited benefits but we question the ability of the Department to use this data as it is little used today with municipal water use reports. Without the ability to analyze this information it is rendered useless.

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Action 2B: We suggest defining the Carbon Disclosure Project's Water Disclosure Project" and correcting the web link.

Bulletin 4

Page 19, 3rd paragraph: This paragraph mentions energy use by municipal facilities but no mention of the energy costs required to put water to use in the agricultural or industrial sectors. We suggest this paragraph be amended to include all water use sectors.

Action 4B, bullet 1: We suggest this recommendation be broadened to include permits as well as certificates. Many municipalities have infrastructure which uses water held as a permit that could achieve the same energy gains.

Action 4C: We suggest this action be deleted. This action is solely focused on municipal users (which already implement a vast majority of these concepts) while ignoring all other sectors. A water treatment plant is a public health facility that's operated on a cost-benefit ratio that's acceptable to the public. While municipal suppliers are constantly looking for ways to decrease costs and reduce emissions, this type of heavy handed approach is not acceptable.

Bulletin 6

Action 6B: The goals and requirements under this action seem quite vague, onerous, and expensive. Given current stringent land use requirements we suggest this action be significantly clarified.

Action 6C: This action largely refers to implementing existing statute and rules and is largely focused on municipalities (CIPs, WMCPs, Goal 6, UICs, etc.). The need for this action is questionable and may confuse policy makers. We suggest this Action be removed.

Bulletin 7

General: The introduction to this bulletin solely mentions infrastructure related to municipalities and dam safety. It neglects agricultural, industrial and pollution abatement/instream treatment and delivery infrastructure. Supply infrastructure is also ignored. We suggest broadening the introduction to include all water related infrastructure.

Action 7A: While municipalities support the concept of "removing barriers" and "providing incentives" to regionalization, water supply is one of the most (if not the most) critical decisions local communities make. Local control over this issue must be retained.

Action 7A: The term "regionalization" can mean many things to many different people and is often misconstrued when taken out of context. The terms "consolidation", "restructuring", "integrating", "cooperation", and "coordinating" can all be interpreted as forms of regionalization. We suggest some effort be put into this Recommended Action to better define regionalization. The American Water Works Association has done some work in this area.

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Action 7B, bullet 2: As discussed in the comments to Bulletin 1, this is an unfunded mandate with no clearly stated goal or benefit outside the state and federal regulatory structure. It also ignores the large contributions of non-point sources and focuses on municipal infrastructure. We suggest this bullet be deleted.

General: We suggest an action item be added providing support for developing water supply infrastructure or refer to action 11B in the context of infrastructure development.

Bulletin 9

Action 9A, bullet 1: This bullet refers to potential new fees to fund general service activities. In general, municipalities support fee for service types of programs but will not support a specific fee which is then applied to a general statewide benefit. Certain services (i.e. general health protections in the state Drinking Water Program) provide an intangible benefit to all Oregonians and should rightly be funded by all Oregonians through the income tax (general fund). However, transactions conducted by state agencies on behalf of a customer or permittee (i.e. water right transfers) should rightly be funded through a fee to cover the costs of that transaction. Likewise, services conducted by the state that provide benefits to the customers (i.e. sanitary surveys) also should have cost recovery for that benefit. Municipalities are open to the consideration of full cost recovery for transactional costs and for benefits provided by the state but not to a general fee to subsidize general program elements.

Bulletin 10

General: OWUC strongly supports the concept of developing a regionally based approach to water resource management. In certain basins, this type of approach could serve to facilitate unique approaches to meeting both consumptive and non-consumptive uses.

General: For the last twenty years, the state along with the federal government, local governments, and other interests have been working to determine the future allocation of the 13 Army Corps of Engineers projects in the Willamette Basin. These projects hold 1.64 million acre feet of water and that water is needed to meet future environmental, recreational, agricultural, industrial, and municipal needs. As the state's most populous basin, planning for the future water needs of the Willamette basin provides an excellent opportunity to showcase how the goals of the IWRS can be put to use on the ground. What is required in the Willamette is a comprehensive, state and stakeholder driven process to reallocate the stored water in the Willamette to meet all of our future needs. We strongly suggest that the development of a Willamette Reallocation Plan be added to this section as a recommendation under Action 10A.

Bulletin 11

Actions 11A – 11D: In general, OWUC supports the concepts included in all of these Actions.

Bulletin 12

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General: The primary mission of municipal drinking water providers is to protect the public health. We believe this mission is critical to any statewide strategy regarding water. We suggest adding an additional action (12E) titled "Protecting the Public's Health". Bullets could include:

1) Conduct oversight of domestic well testing.
2) Regulate and oversee public water systems not required to be regulated under EPA guidelines.
3) Maintain and implement a statewide emergency response system and respond to drinking water emergencies.
4) Increase the ability of the Oregon Health Authority to consult with and educate water suppliers on safe drinking water regulations, contaminant standards, source water treatment options and best practices to prevent drinking water contamination.

Thank you for the opportunity to provide comments on this critical work. OWUC remains committed to working collaboratively with the department on the implementation of this strategy. If you have any questions regarding any of the suggestions above please feel free to contact me.

Sincerely,

Niki Iverson
Chair, Oregon Water Utility Council
Phone: 503-615-6770
Email: nikii@ci.hillsboro.or.us

FROM: Doug Heiken, Oregon Wild | PO Box 11648, Eugene, OR 97440 | 541-344-0675 | dh@oregonwild.org
TO: waterstrategy@wrd.state.or.us
DATE: 30 Aug 2011
RE: Integrated Water Resources Strategy - draft recommended actions - comment

Please accept the following comments from Oregon Wild regarding the proposed Integrated Water Resources Strategy, draft recommended actions. Oregon Wild represents about 7,000 members and supporters who share our mission to protect and restore Oregon's wildlands, wildlife, and water as an enduring legacy. Our goal is to protect areas that remain intact while striving to restore areas that have been degraded.

In reviewing the Recommended Actions "At a Glance" we make the following observations/suggestions:

1. Water Management and Ecosystem Health (Actions 11 and 12) are fundamental to everything else and should be moved to the top of the list.
2. Instream flows and fish habitat should be recognized as "key, high priority, concepts."
3. To fulfill the vision for an "integrated" water resources strategy there must be a mechanism for resolving conflicts between competing values such as increasing water storage and increasing power generation, on the one hand, and instream flows and ecological health and habitat on the other hand. he strategy seems to give high priority to consumptive and ecologically harmful uses of water, while giving lip service to ecological values.
4. The IWRS must address climate mitigation as well as adaptation. This means recognizing the need to maintain carbon storage and minimize GHG emissions in every water-related decision. Some farming practices will accelerate the loss of carbon stored in soil, while others may help increase soil carbon storage. Water storage in reservoirs often causes increased carbon emissions, while water storage in healthy watersheds with cool, structurally complex streams can store carbon and transport carbon for storage in the ocean. The IWRS must consider these factors in decision-making. Water management decisions should shift water use over time from activities that are more likely to emit GHG to those more likely to sequester GHG.
5. "Placed-based approaches" raise serious concerns because local control of natural resources often leads to unsustainable resource use driven by the profit motives of a few people who are likely to benefit the most.

We would also like to reiterate our earlier comments from July 6, 2010:

> Some of Oregon's water use laws are outdated and need to be updated and improved in order to better protect the public interest. For instance:
>
> A. Water use based on the principle of "prior appropriation" encourages wasteful water use and the WRD should adopt a program of periodic (~ every 20 years) review of water use to ensure that water permit holders are using the best available technology to conserve water, the point of diversion and method of diversion cause minimal impacts, and to ensure that the beneficial uses are still in the public interest.
>
> B. Dams modify hydrologic function, fluvial function, and impeded movement of fish and wildlife. All dams should be subject periodic review by the state to ensure that they are not

only safe but also serve an important purpose that justifies the hydrologic and ecological harms caused by the dam..

C. The CWA [Clean Water Act] has become reasonably effective at controlling point sources of pollution, but non-point source pollution from roads, logging, agriculture are still poorly regulated by "BMPs" that rarely work as well as we need them to. The state needs to take a much more aggressive approach to controlling non-point source pollution by permitting and conditioning road construction and use, forestry, and agriculture activities.

D. Adopt instream water rights on all streams across the state. Over 1400 stream reaches in Oregon are protected by "instream water rights," but hundreds of others are not.

E. Protect peak and ecological flows before allowing new storage projects. In recent years Oregon has seen a land rush mentality with regard to building new water storage projects. These storage projects which would grab the last of Oregon's unallocated winter water. Currently the state does not protect "peak and ecological flows" when issuing new storage permits. Urge the state to both identify peak and ecological flows needed by fish and rivers, and to protect those flows before allowing new storage.

F. Protect more of Oregon's beloved streams though scenic waterway designation. State scenic waterway designation protects rivers and streams from being drained dry and also from the building of new dams. The state has not issued any new scenic waterways in nearly two decades.

G. Require measurement of all diversions in the state. Unless the state knows how much water is being diverted, and when, it cannot adequately manage our water resources.

H. Require water use efficiency standards for municipal and irrigation uses. Oregon's water rules call on the state to establish basin efficiency standards for water use, but the state has never done so. Oregon's streams and rivers are already over-tapped; requiring efficient water use is one step to meeting new demand without putting further strain on our rivers.

I. Protect the groundwater resources that feed Oregon's rivers and streams. The state should place a priority on the designation of new groundwater limited areas to help manage groundwater use in areas where groundwater declines are hurting water users and streams.

J. Urge the state to aggressively analyze demand forecasts for new water right permits. Municipal and other water right applicants often times apply for far more water than they could possibly use in a reasonable planning period. Urge the state to take a closer look at applications and stop issuing speculative water rights.

K. Require permitting of "exempt wells" in groundwater limited areas and areas where groundwater feeds river flows. Currently exempt wells, even in areas where groundwater and river flow shortages are rampant, do not have to go through a permitting process or environmental review.

L. Require the state to do a "public interest review" of a transfer of a water right to ensure that when a water right holder is changing it's place of use or type of use, that the state considers the effect of that change on Oregon's rivers and fish.

M. Require periodic review of each beneficial use category. The public costs of some activities almost always exceed the public benefits, so they should be subject to a higher level of scrutiny.

Water Management – Oregon's water future must include improved water management, including:

- Ensuring all water allocation and reallocation processes adequately protect instream values (i.e. institute a public interest test on transfers).
- Measurement of diversions statewide
- Increased field presence
- Enforcement of laws and permit conditions
- Enforcement against of waste
- Conservation and efficiency
- Increase surface/groundwater management to account for the relationship between groundwater and surface water and to protect groundwater dependent ecosystems
- Ensure that the WRD water right database is current

Instream Values – We strongly support agency efforts to identify, establish, protect and restore instream flows, including both minimum dry season flows and the higher "channel-forming" flows needed to maintain river habitat and trigger biological responses in aquatic species.

Data Collection – We strongly support ongoing collection of data necessary to support better management of Oregon's waters, including specifically, money for studies of the state's groundwaters and connections to surface waters.

Regionalization- We strongly support a statewide framework for water management, planning and allocation and we object to efforts to delegate authority and decision making in these areas to local entities. Any incentives tied to "regionalizing" water should be provided only to regional projects that have a quantifiable benefit to river flows and that meet relevant state standards in all respects.

Funding – We strongly support enhanced funding and parity between out of stream and instream projects in future agency funding requests to the Legislature. Please establish a fund for improved water management that would help pay for increased measurement, replace lost agency capacity for water management , increase field presence and provide agency capacity to understand and meet Oregon's future instream needs.

Integration – We strongly support notice and consultation between state agencies that would account for the water quality and fish and wildlife impacts of water allocation and management decisions. Currently, the agencies with responsibility for water allocation, fish and wildlife and water quality do not coordinate sufficiently to make integrated decisions about water.

Respectfully,
/s/

_____

Doug Heiken, Oregon Wild
PO Box 11648, Eugene OR 97440
dh@oregonwild.org, 541.344.0675

From: Ousterhout Vineyards
Sent: Saturday, August 27, 2011 7:04 AM
To: waterstrategy
Subject: Comments: Oregon's water future

Thank you for the opportunity to comment on Oregon's water future. As fourth-generation farmers and grapegrowers here in the arid Rogue Valley, we are very concerned that we as a state are using more water, and using it inefficiently. The evidence of climate change is inescapable, and if agriculture (and thus, the people dependent on it) is to survive, we must improve water management. Sensible measures that are critical to implement include:

- Measurement of diversions statewide: when our neighbors get their weekly allotment of irrigation district water, much of it runs down our driveway and out to the road. If it was measured, they'd pay more attention to where it's going and would take actions to control the waste. If it was at least measured where the irrigation district initially diverts it, the district could be held accountable for over-delivering and would be motivated to encourage end-users to manage it. This is adding up all over the state - do we have any idea how much?

- Conservation and efficiency: WRD should provide information and motivation for all of us - farmers, homeowners, recreators - to conserve and improve efficiency.

- Enforcement of laws and permits, including increased field presence: how can existing regulations be of any use if they aren't enforced?

- Enforcement against waste: do we even have an estimate of how much water is wasted? Since water as it is put to use by agriculture is virtually free to most of us (i.e., we pay the annual assessment but that has nothing to do with how much we actually use), where is the motivation to use this finite critical resource efficiently? The least-efficient method (flood irrigation) is cheapest, whereas the more-efficient methods require paying for electricity for pumps. At least power bills motivate more thoughtful use, but there must be a disincentive for wasting extremely inefficient flood irrigation.

- Ensuring all water allocation and reallocation processes adequately protect instream values. All transfers should include a public interest test. We strongly support agency efforts to identify, establish, protect and restore instream flows, including both minimum dry season flows and the higher flows needed to maintain river habitat and trigger biological responses in aquatic species

- Better accounting for the relationship between groundwater and surface water and emphasize protecting groundwater-dependent ecosystems.

- Ensuring that the WRD water right database is current.
We strongly support a statewide framework for water management, planning and allocation. We strongly object to efforts to delegate authority and decision making in these areas to local entities. Any incentives tied to “regionalizing” water should be provided only to regional projects that have a quantifiable benefit to river flows and that meet relevant state standards in all respects. We strongly support notice and consultation between state agencies that would account

for the water quality and fish and wildlife impacts of water allocation and management decisions.

Quoted by Tom Rush: The first day of spring is one thing, and the first spring day is another. The difference between them is sometimes as great as a month. ~Henry Van Dyke

Gretchen Hunter
Ousterhout Vineyards
142 W. Dutton Rd.
Eagle Point, OR 97524

PACIFIC RIVERS COUNCIL

Protect the best, Restore the rest

Main office
Portland, Oregon

Satellite office
Polson, Montana

http://pacificrivers.org

August 31, 2011

Oregon Water Resources Department
725 Summer Street N.E., Suite A
Salem, OR 97301

Attention Oregon Water Resources Department:

The Pacific Rivers Council would like to respectfully submit the following comments for your review in regard to the Draft Recommended Actions for development of a statewide Integrated Water Resources Strategy. We hope the following comments will be helpful in developing the strategy.

PRC's mission is to protect and restore rivers, their watersheds and the native species that depend on them. We do this for the benefits that healthy watersheds provide to present and future generations, and for the intrinsic virtues of rivers themselves. PRC encourages the Oregon Water Resources Department to address the following in the plan:

Instream Values – PRC supports efforts to identify, establish, protect and restore instream flows, including both minimum dry season flows and the higher flows needed to maintain river habitat and trigger biological responses in aquatic species. PRC is involved in restoration and conservation of river systems throughout Oregon. Through our Legacy Rivers Program we have been working in the Umpqua Basin in southwestern Oregon. We are especially concerned with instream flows for aquatic and riparian species in the South Umpqua River sub-basin. The South Umpqua River has populations of native winter steelhead, spring and fall Chinook, resident cutthroat and rainbow trout and coho salmon, which are listed as threatened under the Endangered Species Act. The South Umpqua River is over appropriated during the summer months resulting in low instream flows. The concern of low flows in the system dates back to the 1940's, when the Oregon Fish Commission in 1946 noted that the loss of water in the river reduced flows and increased water temperatures. Today the parts of the South Umpqua River have water temperatures that are above the lethal limits of salmonid survival. There are currently 180 individual streams in the Umpqua Basin that are listed under the Clean water Act's 303(d) list that exceed temperature thresholds for salmonid spawning and rearing. Low base flows resulting from diversions via existing water rights exacerbate the problem of increased stream temperatures during the summer months. It is imperative to get water back into the South Umpqua River during the summer months. Proper water rights adjudication and determination of individual water right allotments combined with incentives to water rights holders for leasing of instream flows

should be part of the solution to loss of stream flow in the South Umpqua River and its tributaries. Water rights holders must be educated to understand that by conserving water, and leasing water rights for instream values will not result in a forfeiture of their water rights. It is also imperative to up-date the water rights maps to accurately reflect where and how much water is being diverted. Water diversion in key watersheds and areas prioritized for conservation of native species must be addressed in watershed restoration planning.

Data Collection – PRC also supports increased funding needed to collect the data to support better management of Oregon's waters, including specifically, money for studies of the state's groundwaters. Through our work in the Umpqua, it has become clear that the basin has different sources for water. The North Umpqua River geology is made up of highly fractured bedrock, and originates from groundwater sources high in the Cascade Mountains. This makes the North Umpqua unique in that it maintains cool water temperatures during the summer months. The North Umpqua, in this way, could have a built in system for buffering the potential effects of climate change. This is very different form the South Umpqua River, which originates in the western Cascade Mountains, but has less of the fractured bedrock geology to store groundwater. The South Umpqua is a much more flashy river system, than the North, and has increased floodplain area compared to the North. These floodplain areas are sources of hyporheic groundwater-surface water exchange. Hyporheic zones are areas where water is cooled in the summer and heated in the winter. Up-welling areas from groundwater sources or hyporheic zones are important areas for spawning salmonids, especially Chinook. It is imperative to determine the places where groundwater sources exist for both of these river systems and conserve them for the future.

We hope these comments have been helpful, and will aid in the development of a strategic plan for development of a statewide Integrated Water Resources Strategy.

Thank you,

Kelly Crispen
Umpqua Legacy River Coordinator for the Pacific Rivers Council

PORTLAND WATER BUREAU
FROM FOREST TO FAUCET

Randy Leonard, Commissioner
David G. Shaff, Administrator

1120 SW 5th Avenue, Room 600
Portland, Oregon 97204-1926
Information: 503-823-7404
www.portlandonline.com/water

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August 16, 2011

Dr. Brenda Bateman
Water Resources Department
725 Summer St. N.E. Ste A
Salem, Oregon 97301

Attention: Integrated Water Resources Strategy Draft Recommended Actions

Dear Brenda:

The City of Portland Water Bureau (PWB) provides drinking water to over 800,000 people in the Portland metropolitan area, either directly or through wholesale water contracts with other cities or special districts. The PWB appreciates the opportunity to provide comments on the Draft Recommended Actions of June 23, 2011. Many of the bulletins contained in this document, as well as the actions listed for each of the bulletins are of interest to the bureau as Oregon's largest municipal water provider as well as supportive of many programs and policies of both the bureau and the City of Portland.

Attached you will find a set of specific comments by bulletin number and by number actions within each of the bulletins. We have provided these comments in concert with those from Bureau of Environmental Services and we support their comments as well as our own. If you have any questions, please feel free to contact Lorna Stickel at (503) 823-7502 or e-mail at Lorna.Stickel@portlandoregon.gov.

Sincerely,

Lorna Stickel

Lorna Stickel
Water Resources Planning Manager

Attachment 1

Cc: Janet Senior, PWB
Rebecca Geisen, PWB
Edward Campbell, PWB
Judi Ranton, PWB
Alice Brawley-Chesworth, BES
Daniel Eisenbeis, Governmental Relations

Comments on the Draft Recommended Actions for the Oregon Integrated Water Resources Strategy – Portland Water Bureau, August 2011

The Portland Water Bureau supports the adoption of an Oregon IWRS by the Oregon Water Resources Commission and appreciates the opportunity to comment on the draft recommended actions. The following comments are presented by the Bulletin numbers and sections.

Bulletin 1 – Action 1 B: Fill data gaps. Although water quality is addressed in the following bulleted actions there isn't a specific action statement that relates to water quality. Since the gaps in understanding are related between water quality, quantity, and the surface/groundwater interface, it would be beneficial to end the first sentence with added language, "…and protect water quality."

Bulletin 2 – Action 2.A. updating long term forecasts. The Portland Water Bureau conducts it's own fairly sophisticated forecasts, as do many of the other water providers in the Portland region. Since the methods of forecasting are very dependent on the data available to drive forecasts and no one size fits all, the last sentence about setting standards for forecasting should be removed, or consider using guidance or guidelines. Also consider adding "trends in per capita demands" to the list of items included in this action.
Action 2.C. should prioritize a list of basins for adjudication. The Sandy Basin for instance has not been adjudicated, but the impact of doing that basin over the Willamette is likely to be both different in priority and certainly in resource needs.

Bulletin 4 – Action 4C. bullet number four is not well stated, and not very realistic. Should be worded in a more collaborative fashion and recognize that utilities that operate water treatment and wastewater plants are interesting in any cost savings to be gained, keeping in mind the cost effectiveness of the measures involved.
Action 4.D. should recognize that WMCP's provide a nexus for addressing water/energy conservation. While many entities don't have to prepare these plans, many do.

Bulletin 5 – Action 5.A. Include supporting research at the basin scale.
Action 5.C. bullet two add to the list drought. Add to the fourth bullet the idea of building resiliency into water management programs and infrastructure operations.

Bulletin 6 – Action 6.A. The Water Bureau has a strong investment in protecting water sources, including the Well Head Protection program in the Columbia South Shore Well Field. We recommend that this action provide a link to existing State programs that provide guidance for source water protection programs. Action 6.B. – The issue of ecosystem services is raised in bullet 3, however, there is no discussion of what is meant by this term in the introductory section. It seems a bit out of place in the water/land use nexus heading. Might be better placed, once defined, in action 3B or in Bulletin 12.

Bulletin 7 – Introductory section: There should be some discussion of the importance of emergency planning and building in system redundancy and resilience. Action 7.A. should add to the first bullet first sentence that regional solutions need to found cost effective. Action 7.B. add in the brackets noting state/local roles.

Bulletin 8 – In the introductory section under Making Information Available to the Public there should be some mention of the role of local programs in providing this information and the links that could be forged between state and local activities in this area. Action 8.A. bullet 3 should also include social media (internet, webcasts, facebook, blogs etc.) in the list of outreach methods. Specific websites that could be cited as effective links include the Alliance for Water Efficiency and the EPA Water Sense site.

Bulletin 9 – Action 9.A. bullet one mentions the potential for a wastewater fee, this same idea has been mentioned in the context of municipal water supply tap fees. The Water Bureau has great concerns about the equity of such an idea if there is little nexus between those paying such a fee and the services received. If the idea is to take funds from urban areas to fund programs that benefit other parts of the state then the nexus is weak, while drawing on rate capacity that local providers need to fund their own services.

Bulletin 10 – A general comment is that the Bureau is very supportive of the concept of place based approaches with some clarifications. Action 10.C. under ways the State can help a couple of useful additions would be to note that the State framework should include identification of side boards or requirements for local based planning approaches, and secondly that an incentive would be for the State to commit as much as possible to a unified state response to proposals developed under plans that meet state guidelines (sideboards) and requirements. One proposal could be the development of a State MOU between agencies along the lines of interagency coordination on responses to local proposals. Under the heading "regions should use…." The listed bullet "consider conservation pricing (define and charge "full cost….") needs to recognize that a definition of "full cost" should be considered since there are at least two meanings for this term, one is complete cost of service, the second is the broader one where environmental and social costs are also internalized. The second meaning is much harder to define. Under the heading "Regions and localities may want to ask themselves….." in the fourth sub-bullet there is an assumption that identifying the most critical wetlands results in "prioritizing their protection creates a market/credits system". This concept is not explained, nor is there an explanation for why one automatically leads to the other. Revenues assumed by a market based approach is a difficult concept and also seems to imply that a regulatory approach or non-market incentives do not have a role, when it is likely that they will.

Bulletin 11 – In the background section under a market for ecosystem services it is not clear why the discussion is focused mostly in the context of market based approaches. This topic should be cross linked to Bulletin 12 which might be a better place to focus discussion of ecosystem services from this and other bulletins. Ecosystem services can be a part of other approaches in the regulatory and incentive arenas. Action 11. A. the

report materials defines water conservation but not efficiency, yet both terms are used in a somewhat similar manner. The Water Bureau is leaning towards using the term "efficiency" in place of conservation in the future because it has broader implications and resonates with the public and businesses better than conservation. Action 11.B. The Bureau is a bit confused about the discussion in the first bullet regarding water quality treatment and ASR, if the idea is that contaminants are removed via recharge, we are not clear about what this means? Doesn't seem like a wise choice in the areas where groundwater is used as a municipal drinking water source. Some clarification of this concept is needed.

Bulletin 12 - As noted in other bulletin comments, this may be the place to focus the discussion of ecosystem services since the topic or policy heading is clearer. In the background materials under the heading of Project Investments it we recommend including NOAA/NMFS a major funding resource for OWEB and is conspicuously absent from those listed in the last paragraph. Action 12.C. second bullet on invasive species should also list local programs as well as state and federal. Another bullet should be added referencing the need to strengthen and implement non-point pollution control plans and programs.

From: William Rittenhouse
Sent: Friday, August 26, 2011 10:08 PM
To: waterstrategy
Subject: Oregon's Intergrated Water Resources Strategy

To: Oregon Water Resources Department
Subject: Comments on Oregon's Integrated Water Resources Strategy

I urge you to consider adopting actions regarding Oregon's Integrated Water Resources Strategy for an approach that will 1) meet water instream needs; 2) include balanced water policies; and 3) include management actions that will protect and restore healthy waters across the state.

I support the recommendations of WaterWatch of Oregon regarding these fundamental water management strategies:

- *The need to identify, establish, protect and restore instream flows for seasonable variations.*

- *The need for funding data collection, especially money for studies of the state's groundwaters.*

- *The need for a statewide framework for water management, planning and allocation rather than to delegate authority and decision making to local entities.*

- *The need for more or less equal funding between out of stream and instream projects in future agency requests to the Legislature.*

- *The need for improved coordination and consultation between state agencies regarding water quality and fish and wildlife impacts in order to make integrated decisions about water.*

I thank you for considering my views regarding water management strategies.

William D. Rittenhouse

August 31, 2011

Alyssa Mucken
Policy Coordinator, Integrated Water Resources Strategy
Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301

RE: IWRS Draft Recommended Actions

Dear Ms. Mucken,

Thank you for accepting these comments on behalf of Rogue Riverkeeper, a non-profit organization whose mission is to protect and restore water quality and fish populations in the Rogue Basin and adjacent coastal watersheds.

Rogue Riverkeeper, our parent organization, the Klamath-Siskiyou Wildlands Center (KS Wild), and our more than 1,800 members, use and enjoy the Rogue River, its tributaries and other coastal watersheds.

We appreciate this effort to develop an Integrated Water Resources Strategy and have the following comments on the department's draft recommended actions.

Water Management
Oregon's water future must include improved water management, including:

- Measurement of diversions statewide
- Increased field presence
- Enforcement of laws and permit conditions
- Enforcement against of waste
- Conservation and efficiency
- Ensuring all water allocation and reallocation processes adequately protect instream values
- Increase surface/groundwater management to account for the relationship between groundwater and surface water and to protect groundwater-dependent ecosystems
- Ensure that the WRD water right database is current

Instream Values
Throughout Oregon and the Rogue Basin, inadequate stream flows are a chronic problem that harms our valuable fish and aquatic life, further increases our stream temperatures and concentrates pollutants. This problem will only exacerbate with the impacts of climate change. Efforts should be made to identify, establish, protect and restore instream flows, including both minimum dry season flows and the higher flows needed to maintain river habitat and trigger biological responses in aquatic species.

Data Collection
The state should fund research and data collection to support better management of Oregon's waters. In particular, we do not know enough about our groundwater, yet groundwater resources are increasingly being tapped for human use. We need to better understand how aquifers and groundwater and interacting with our stream flows and how groundwater use is impacting our watersheds.

Regionalization
We need a statewide framework for water management, planning and allocation and object to efforts to delegate authority and decision making in these areas to local entities. Any incentives tied to "regionalizing" water should be provided only to regional projects that have a quantifiable benefit to river flows and that meet relevant state standards in all respects.

Funding
Please establish a fund for improved water management that would help pay for increased measurement, replace lost agency water management capacity, increase field presence and provide agency capacity to understand Oregon's future instream needs and meet those needs.

Integration
We support notice and consultation between state agencies that would account for the water quality and fish and wildlife impacts of water allocation and management decisions. Currently, the agencies with responsibility for water allocation, fish and wildlife and water quality do not coordinate sufficiently to make integrated decisions about water.

I look forward to the next round in this process.

Thank you,

Lesley Adams
Rogue Riverkeeper
P.O. Box 102
Ashland, Oregon 97520
Lesley@rogueriverkeeper.org

From: John Schlosser
Sent: Wednesday, August 24, 2011 12:13 PM
To: waterstrategy
Subject: Water Strategy Comments

To whom it may concern:

I wish to comment on the future of Oregon's water resources.

Water Management – Oregon's water future requires improved water management, including:

- Measurement of diversions statewide
- Increased field presence
- Enforcement of laws and permit conditions
- Enforcements against waste
- Conservation and efficiency
- Ensuring all water allocation and reallocation processes adequately protect instream values (i.e. institute a public interest test on transfers).
- Increase surface/groundwater management to account for the relationship between groundwater and surface water and to protect groundwater dependent ecosystems
- Ensure that the WRD water right database is current

Instream Values – Express support for agency efforts to identify, establish, protect and restore instream flows, including both minimum dry season flows and the higher flows needed to maintain river habitat and trigger biological responses in aquatic species.

Data Collection – Express support funding needed to collect the data to support better management of Oregon's waters, including specifically, money for studies of the state's groundwaters.

Regionalization- Express support for a **statewide** framework for water management, planning and allocation **and object to** efforts to delegate authority and decision making in these areas to local entities. Any incentives tied to "regionalizing" water should be provided only to regional projects that have a quantifiable benefit to river flows and that meet relevant state standards in all respects.

Funding – Express support for rough parity between out of stream and instream projects in future agency funding requests to the Legislature. Please also support the establishment of a fund for improved water management that would help pay for increased measurement, replace lost agency water management capacity, increase field presence and provide agency capacity to understand Oregon's future instream needs and meet those needs.

Integration – Express support for notice and consultation between state agencies that would account for the water quality and fish and wildlife impacts of water allocation and management decisions. Currently, the agencies with responsibility for water allocation, fish and wildlife and water quality do not coordinate sufficiently to make integrated decisions about water.

Sincerely,

John Schlosser

From: Steve Scribner
Sent: Wednesday, August 24, 2011 2:55 PM
To: waterstrategy
Subject: response to follow

Regarding the Integrated Water Strategy bulletin and request for comments to it:
As a farmer/rancher in Oregon, I am profoundly disappointed in the lack of consideration given to present and future agricultural water needs.
Water that is used in Ag. has additional value in creating/supporting/sustaining wildlife/riparian habitat. You need to remember farming in Oregon has been an organized activity since the 1850's. Ag. water use has created thriving ecosystems as a byproduct since that time. When irrigation systems are downgraded or removed then a dramatic loss of stream habitat/riparian area/wildlife population occurs.
The prioritization of all other uses over Ag. is prejudicial and lacks merit. This also reflects a deep dissention in water use concepts/strategy/prioritization between Ag. and non Ag. users. The bias shown toward livestock users is especially disheartening.
Why the discrimination toward agriculural practices? and where is Ag. input?
Respectfully,
Steve Scribner

SDAO Special Districts Association of Oregon

August 31. 2011

Water Strategy
c/o the Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301

Dear Integrated Water Resources Strategy Project Team:

I am pleased to provide the following comments on behalf of Special Districts Association of Oregon (SDAO) for your consideration as they relate to the 12 Bulletins and numerous recommended actions contained in the June 23, 2011 Draft of Oregon's Integrated Water Resources Strategy (IWRS). SDAO represents approximately 900 special service districts throughout the State of Oregon. These districts include municipal water and wastewater treatment providers, rural fire protection, library, parks and recreation, and several other types of districts who are governed by unpaid elected officials committed to serving their communities through public service.

Before providing specific comments related to the 12 Bulletins, some general observations might be helpful. First, several of our affiliate members including the Oregon Water Resource Congress, individual members of the Association of Clean Water Agencies (ACWA) and individual water providers will likely submit comments and we encourage you to review those. The comments contained in this letter are primarily from the perspective of municipal water providers who are members of our association.

From a municipal water supplier perspective, I think it is instructive that the vast amount of water being used in the state is for agricultural purposes. Yet, many of the recommendations contained in the document apply to municipal providers. It would appear that more thought should be given to this apparent imbalance.

The use of symbols noting additional steps or priority of the actions is helpful but given the funding implications associated with a number of the actions, a "$" or some other symbol tied to actions that require funding would be beneficial. I would also like to encourage you to make the entire document clear and avoid speculation. Specific examples are provided in the comment related to Bulletin #1 but the concept should be carried out throughout the document. Lastly, a sense of "balance" in the document is encouraged. Some Bulletins seem to include actions that focus on a particular water use sector and in some instances might ignore a

prominent use. Examples when actions were focused on a particular sector are included in the specific comments below.

Specific comments as they relate to the 12 Bulletins and related actions are as follows:

Bulletin #1:

- Avoid speculation in the document. For instance, at the bottom of page 3 and top of page 4 there is a comment that speculates that "wastewater facility upgrades that included improved streamside vegetation protection measures **likely** played an important role in water quality improvements". The paragraph goes on to state the downward trend is "**possibly** due to the increase in Oregon's population".
- On the bottom of page 4, the reference to "an understanding Oregon's water-related infrastructure...." seems out of place in the "Monitoring Surface Water" heading.
- Avoid the use of words that create a lack of clarity. In the "Groundwater Quality" section (page 6) the use of words like "potential concern" or "reason for concern" seems to stray into speculation. The use of similar unclear words is also a part of the "Conjunctive Management of Surface Water and Ground Water" section (page 6).
- On page 7, the second paragraph talks about, "maintain sustainable water supplies" but that term can mean different things to different people. It might be better to state "....understand what are sustainable water supplies."
- Any local data collection referenced in the third bullet of Action 1.B. should adhere to quality control standards to avoid the inclusion of misleading data.

Bulletin #2:

- The listing of the major water uses should be shown in order of their percentage of water use (i.e. irrigation, municipal and industrial).
- The reference to "Industrial Use" on page 12 needs to be clarified. As used, the description leads one to believe that the industrial use might be double counted in the municipal use also. The description references chip manufacturing which uses predominantly water from municipal sources.
- In Action 2.A. the reference to "and more" and the last sentence about water demand forecasts should be deleted.
- It is not clear what the role of the "Carbon Disclosure Project's" is in Action 2.B. A sentence or some explanation beyond a reference to a web site would be helpful.
- Action 2.C. is a huge undertaking so reference to the basins and listing them by priority might be helpful.

Bulletin #3:

- The third type of instream water right (pollution abatement) doesn't seem to be addressed in this bulletin (see the introduction of bulletin 3).
- On page 16 under the "Data Gaps" section, it notes that "Instream water rights in Oregon today have been designed to address situations of low flow ….". This is not accurate since many of the instream water rights were established at levels that equaled the estimated average natural flow of the stream (the amount of water in the river if there were never any diversion of water). It would appear to be a stretch to claim that an average flow of the river in its natural state is a "low flow" condition.

Bulletin #4:

- The bulletin uses a national average for energy costs associated with water and wastewater facilities. There should be a caution with using this national average since a considerable amount of drinking water is delivered through a gravity system, thus pumping costs are not as significant when compared to the national average.
- Action 4.B. appears to require legislation which should be included as one of the symbols.
- Action 4.C. appears to be focused on only water and wastewater. The Action should be broadened if it is going to be kept in the document. Furthermore, setting energy targets for water facilities ignores the fact that supply and distribution systems differ greatly depending on a multitude of factors. Furthermore, our members are very sensitive to the rates they charge their customers and will pursue energy efficiencies when it makes sense. As a result, setting targets ignores those fundamental differences and as a result this bullet should be stricken.

Bulletin #5:

- Overall, this bulletin should emphasize how all uses can be more **resilient**. In the case of municipal water providers, this might be done by encouraging interconnections and access to multiple sources of waters. The idea of encouraging everyone to be prepared for emergency events could also be included. Based on local climate studies, the region might also benefit from greater storage and revisiting the timing of when water is stored in current projects.
- Actions 5.A. and 5.B. can be extremely expensive so the focus should be on the consideration of adaption strategies.

Bulletin #6:

- Action 6.B. should include the "gavel" symbol since it specifically notes that rules would have to be developed.
- Action 6.C. appears to reference a variety of activities that are already being conducted under existing statutes and rules. It is unclear if there are any "new" actions or just an

implementation on existing actions. This should either be clarified or the action removed.

Bulletin #7:

- Although it is understandable that this section would focus more on municipal systems and dams, it should also be noted that there are other types of water related infrastructure (i.e. irrigation canals, etc.) that also have important infrastructure needs.
- Action 7.A. focuses on "regional" approaches means different things to different people. It should be noted that these decisions should be left to local decision makers and their citizens. Perhaps the reference to regional or regionalizing should either be defined or replaced with a term that might better reflect the goal of restructuring how local coordination and planning is conducted.
- As noted in the first statement, the focus on municipal systems in Action 7.B. seems to ignore other water infrastructure that is important. This action should be broadened so as to not only emphasize municipal infrastructure. Specifically, the second bullet in Action 7.B. fails to recognize the process that is used to create water related standards. Suggesting that facilities should upgrade to address emerging contaminants prior to standards being proposed or developed fails to acknowledge the role of science and research in the decision making process. This bullet item should be deleted.

Bulletin #8: No comments.

Bulletin #9:

- The use of the chart on page 41 is confusing and doesn't appear to be consistent with claims about a disinvestment and failure to take advantage of cost share opportunities. This information either needs to be clarified or corrected.
- In Action 9.A. the concept of creating a water management fund needs further clarification before being proposed. A case for how the creation of this fund would be more beneficial than adopting agency budgets with the funds necessary to carry out water management activities. It should be noted that a specific reference to a water rights fee that could be used for general purposes is not something that we would support.

Bulletin #10:

- Overall, the development of place based approaches that reflect the needs of the communities is something that should be encouraged and facilitated. This Bulletin provides an opportunity for progress on addressing water management issues on a local level.

- One caution in the narrative for the "Small Urban Communities" section is the reference to the American Recovery and Reinvestment Act (ARRA) funding. The example used doesn't appear to be "typical" of the projects that accessed funding of the program and conflicts with our understanding of the amount of the funds allocated under this program. The section goes on to note that ARRA funding was left "on the table". Confirmation from the Infrastructure Finance Authority of this statement is needed since this statement doesn't appear to be consistent with other reports on the funding of projects with ARRA funds. Confirmation of the statement about how some communities are "in non-compliance with drinking water standards" needs to be confirmed and if it is true, some scope or scale should be provided to avoid making it sound like this is a common problem faced by small communities.
- Bulletin 10 seems to provide an excellent opportunity to take a proactive step on addressing needs within the Willamette Basin. Specifically the state can be in a leadership position to reinitiate work that started in June 1996, when the U.S. Army Corps of Engineers (USCOE) began working cooperatively with the State of Oregon and stakeholders as part of the Willamette Basin Reservoir Study. The study was intended to evaluate whether changes in the operation, storage and allocation of water in the existing Willamette Basin reservoirs would better serve current and future water resource needs. Currently, USCOE is operating the projects in a manner that meets the Bi-Op target flows (using approximately 540,000 acre feet of the 1.64 million acre feet). However, to implement its responsibilities under the Bi-Op, Bureau of Reclamation and USCOE are required to take actions to protect released stored water instream for fishery resources. To this end, the federal agencies have expressed their intention to submit water rights "transfers" at some future date that would change the authorized use for the stored water from irrigation to multipurpose use. However, such "transfers" affecting these reservoirs without stakeholder input and coordination with the State of Oregon may result in an inequitable allocation of stored water and the potential loss of water for existing water right holders. This uncertainty about future water supplies threatens the economic development and environmental restoration opportunities in the Willamette Basin.
- A general observation is that when referencing "wastewater," it might be helpful to note if it is "treated" or not. Action 10.C. talks about the use of wastewater and the delivery of wastewater, and it should be clear that the document is only talking about treated wastewater.

Bulletin #11: We have no specific comments other than to be supportive of efforts to expand storage opportunities.

Bulletin #12: This Bulletin also provides a unique opportunity to highlight the public health protection measures that are inherent beyond the protection of source water. For example, the Environmental Protection Agency (EPA) notes that there are four components to providing safe drinking water. In addition to source water protection efforts, the EPA stresses the importance of providing for the treatment of source water, having a well maintained infrastructure and having a well-informed public. Although the protection of source water is one component, it should be recognized that there are a number of actions that result in positive public health benefits.

On behalf of SDAO, I would like to thank the IWRS Project Team for their coordination and work on this document. We recognize the significant time it has taken work with the various agencies and stakeholders on this process to date. The hope is that you will find the comments to be informative and useful as the project team finalizes a document for consideration. Please contact me if you have any questions or require clarification. Thank you again for the opportunity to provide input.

Sincerely,

Mark Landauer
SDAO Government Affairs

From: Carol Taylor
Sent: Monday, August 29, 2011 8:41 AM
To: waterstrategy
Subject: selling water

With so many areas of the US and the world having severe droughts we have no business selling water to Nestle bottling. We do not know how large our springs or aquifer are nor how long it would take them to empty our resources & then move on. They don't care about people or this community. It is all about money with Nestle. Help stop this foreign company from encroaching on our area. Thank you.

Carol Taylor
Cascade Locks, OR

From: Duffe, Bruce J NWP
Sent: Tuesday, August 23, 2011 8:38 AM
To: waterstrategy
Cc: Ammann, Julie H NWP; Thrush, Cindy NWP; Buchholz, Robert J NWP
Subject: Bulletin 9 of 12 IWRS

Comment for page 45

US Army Corps of Engineers Funding is also available under the Floodplain Management Services program. More information should be added in conjunction with the CoE Planning Assistance to States program

Bruce J Duffe, PE
Portland District Corps of Engineers
CENWP-EC-HR
Chief; Reservoir Regulation & Water Quality
W 503.808.4886
C 503.819.9823

"Look, that's why there's rules, understand? So that you *think* before you break 'em."

From: Salter.Joel@epamail.epa.gov
Sent: Tuesday, August 23, 2011 8:26 AM
To: Alyssa Mucken
Cc: barber.anthony@epa.gov; VanHaagen.Paula@epamail.epa.gov
Subject: Re: [IWRS] Reminder: Comments due by Aug. 31 on Oregon's Integrated Water Resources Strategy

Hello Alyssa, Thank you for the opportunity to review the integrated water resource strategy. Bulletin 4 and 5 touch on topics the US EPA has spent considerable time and effort in developing public awareness and information to facilitate implementation of programs. I would like to offer a publication that introduces the "plan, Do, Check, and Act" concept at utilities, and introduce you to a pilot project with utilities that implemented the concept. We collaborated with several important partners in Oregon and the Association of Clean Water Agencies (ACWA) news letter does a good job of identifying who these partners are and the project results. Reading through Bulletin 5 I note that you have referenced EPA publications. I've cc'ed our climate change expert in Seattle so that she is aware of the good work being done in Oregon and also to provide an opportunity for additional input.

(See attached file: FINAL VERSION - Energy Management Guidebook.pdf)(See attached file: ACWA Energy Yields Savings 6-11.pdf)

Sincerely,

Joel Salter
Oregon Water Programs Coordinator
US EPA - Oregon Operations Office
805 SW Broadway, Suite 500
Portland, Oregon 97205

Water for Life, Inc.

August 31, 2011

Attn: Water Strategy Project Team
c/o Oregon Water Resources Department
Sent electronically to: waterstrategy@wrd.state.or.us

Water for Life appreciates the opportunity to provide comments on the Draft Recommendations for Oregon's Integrated Water Resources Strategy. Water for Life hopes the comments provided herein are useful as planning processes continue.

Additional Focus On Interagency Processes and Interaction With Public

As noted in the Draft Recommendations, "[t]here are more than 15 state agencies whose responsibilities touch upon some aspect of water management and data collection, as well as dozens of federal agencies and hundreds and more private and local entities."[1] Recognizing this, the Draft Recommendations call for mapping of Oregon's water related institutions.

While mapping is an important and necessary component of an integrated water management strategy, one area that perhaps deserves additional consideration is the mechanism through which different agencies will coordinate activities and communicate in regard to the use and management of the state's water resources. In this regard, it appears that developing formal channels and processes through which various agencies coordinate activities and communicate on use and management of the state's water resources would promote the objective of integrated water management and provide a number of public policy benefits. Such benefits likely include enhanced efficiency, improved coordination, and clearer communication with the public.

[1] Draft Recommendations, Pg. 7.

To the extent there is a recognition that developing more integrated processes of interagency and public communication on use and management of the state's water resources is desirable, Water for Life would suggest the establishment of a policy advisory group to work on addressing such issues. The policy advisory group could consist of a broad spectrum of public and private stakeholders and be charged with the task of developing recommendations on formal mechanisms through which agencies communicate, coordinate activities, and interact with the public on issues wherein more integrated water management is desired. Such action would also carry out the intent of ORS 536.220(2)(c)(E), which was enacted as part of HB 3369 (2009) providing for the development of an integrated water resources strategy.

Integrated Strategy Should Attempt To Reconcile Inherent Competition/Conflicts Between Out-Of-Stream Demands And Instream Uses

Bulletin 2 of the Draft Recommendations acknowledges that out-of-stream water demand is projected to increase by 13% between 2008 and 2050. The projected increase in out-of-stream demand conflicts with the state's competing policies of protecting instream flow through peak and ecological flows, as well as other means identified in Bulletin 3. As efforts are made to develop an integrated water resources strategy, Water for Life would suggest that it is important for this tension to be explicitly recognized and for serious efforts to be undertaken to reconcile the tension to the greatest degree possible.

As water is a necessary and finite resource, there are only a limited number of ways to meet increasing demand. The available avenues essentially consist of either (a) using less water through conservation/efficiency measures or (b) increasing water storage. In terms of promoting conservation and water use efficiency, Water for Life would recommend that efforts be undertaken to review the existing conserved water program provided for in ORS 537.455 *et seq.* for purposes of exploring opportunities to encourage enhanced use of the program. Similarly, Water for Life would recommend redoubled efforts to explore how additional water storage capacity may be promoted or incentivized.

In conjunction with this, it is important to recognize that policies identified in Bulletin 3 concerning instream flows, base flows, and peak and ecological flows are competing for same finite water resource that must be used to satisfy increasing out-of-stream demand. Similarly, certain of the policies identified in Bulletin 3, particularly those concerning peak and ecological flows, serve to constrain the extent to which out-of-stream demand may be satisfied through increased water storage. Therefore, just as it is appropriate and necessary to create

more efficient means of satisfying out-of-stream demand, efforts should be undertaken to explore the efficacy and efficiency of the aforementioned policies.

For example, there are currently 900 instream rights in Oregon.[2] Are all 900 instream rights necessary to their full extent? Are all such rights demonstrably furthering the public purpose for which they were requested? Are there policies or programs that may be established to fulfill instream needs in a more targeted or efficient manner than existing instream policies? If certain storage or conservation measures increase, are there particular instream rights or policies that should be correspondingly altered, modified, or decreased? Water for Life believes that exploring these types of issues is essential in the management of a finite resource in an integrated fashion so as to meet the competing instream and out-of-stream demands on the resource.

Water and Land Use Nexus

For all intents and purposes, the connection between land use and water is self-regulating as people are only capable of engaging in productive activity requiring water to the extent water is available. To establish artificial regulatory standards serving to impede productive purposes is less than a prudent course and Water for Life is concerned about the inclusion of such a course in the Draft Recommendations.

Water for Life's overarching concern about creating an artificial nexus between water law and land use is illustrated by debate that has persisted for many years about regulating rural and semi-rural lands for residential development. In recent years, opponents of such development have attempted to utilize potential water-related issues to achieve their objective of preventing residential development in certain areas. Specifically, political opponents of residential development on semi-rural or rural lands have attempted to restrict development through legislation imposing restrictions on exempt domestic wells. Yet as noted in the Draft Recommendations, exempt domestic wells are a de minimis percentage of total water use in Oregon. Rather than placing undue emphasis on a de minimis water use for the purpose of driving land use policy in a particular political direction, it would appear the more prudent course would be for the state to focus its energy on the 99% use of the resource.

As the foregoing example illustrates, the net result of creating an artificial nexus between water policy and land use policy is that water policy devolves so that it is no longer focused on securing maximum beneficial use of the resource,

[2] Draft Recommendations, Pg. 62.

but instead, into a tool that may be utilized to prevent productive practices such as agricultural production, forestry, and residential development. Decisions on what productive practices may be employed on particular lands are decisions most appropriately addressed through direct political debates concerning land use regulation, not indirectly through water policy. Creating an artificial nexus between water policy and land use policy results in water policy becoming a means rather than an end and does not promote water resource management decisions that are sound in their own right.

Place-Based Approaches

Bulletin #10 discusses the objective of developing "place-based" approaches to water management. At the outset, it is important to recognize there is some potential contradiction between the discussion of place-based approaches and the idea of developing an integrated statewide water resources strategy. While it is certainly important for local water resource management decisions to take into account unique local conditions and dynamics, it is also important that water management decisions and processes be as consistent and uniform as possible. In reviewing the Draft Recommendations, Water for Life would respectfully suggest that further consideration be given as to how flexibility for place-based approaches may be created while maintaining processes and policies that are uniform and consistent statewide.

Conclusion

As efforts to develop a statewide integrated water resources strategy continue, Water for Life believes it is important for emphasis to be placed on the processes through which agencies will coordinate activities and how the public and affected parties will be included in such processes. In addition, as planning processes continue, Water for Life recommends focusing energy on identifying avenues through which contradictory aspects of the Draft Recommendations may be reconciled in an integrated fashion. At the same time, Water for Life recommends avoiding efforts to integrate policies or areas of the law when doing so does not promote water resource management decisions that are sound in their own right (e.g. attempting to create artificial nexus between water law and land use law).

While the comments provided herein are general in nature, Water for Life hopes they will be useful and considered as strategy development continues. In this regard, Water for Life, and presumably other interested parties as well, would appreciate any additional information that may be provided in regard to whether

subsequent draft recommendations will be released and whether there will be any additional opportunity to provide comment.

Sincerely,

/s/

Kyle Marino
Water for Life President

WATERWATCH

PROTECTING NATURAL FLOWS IN OREGON RIVERS

August 12, 2011

Alyssa Mucken
Policy Coordinator, Integrated Water Resources Strategy
Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301

Re: Comments, IWRS Draft Recommended Actions

Dear Alyssa,

Thank you for the opportunity to comment on the WRD's Draft Recommended Actions for Oregon's Integrated Water Resources Strategy (IWRS). We appreciate the WRD's continued effort to elicit broad public involvement in the development of the Integrated Water Resources Strategy. We also appreciate the WRD's ongoing efforts to ensure that the IWRS reflects the statutory mandate to develop a strategy that addresses both instream and out-of-stream needs equally. Below please find our comments on the draft Recommend Actions.

Bulletin 1: Understanding Oregon's Water Resources and Supplies

Action 1b: We support the priorities that are included in this section but feel it should be expanded to include

1. Conjunctive Management of groundwater and Surface water—
   (a) Groundwater Investigations: This bullet should be re-written to proactively state that completing these studies is a top priority for the state.
   (b) Add a bullet that the state will further quantify/understand the impacts of exempt wells on streamflows and other water users.
2. (Add section) Integrate ODFW priorities/responsibilities and Water Quantity Efforts. Similar to the directives on Water Quality and Water Quantity, we recommend adding a bullet that sets for a plan to better integrate ODFW fish protection efforts and goals (flow/passage/screening) into all WRD allocation/reallocation/management actions.

Bulletin 2: Understanding Oregon's Out-of Stream Needs

Background: We strongly support the inclusion of a section of water measurement in this section. That said, the goal of the state should be to achieve water measurement on all diversions over time. The WRC's Measurement Strategy is a good place to start, but in a long term planning document such as this the state should set forth broader measurement goals. Moreover, the WRC Strategy should be more accurately defined, namely that the first tier is to measure significant diversions in high priority areas, and the second tier is to measure significant diversions statewide. This will involve greater than the 2,200 diversions noted. Additionally, it would be helpful to put in a sentence regarding the fact that all new permit holders

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(gw/sw/reservoir) are required to measure as a condition of their permit (this has been WRD practice since 1993). It is also appropriate to mention the statutory and rule provisions calling for measurement.

Actions:

1. Add section, Exempt Well Reform: We strongly recommend that the WRD include a commitment to reform exempt well laws so as to better protect other water users and Oregon's natural resources. The WRD should take a leadership role on this issue and include it in the plan. We appreciate that there is a sub-bullet under Action 2.B that calls for studies to determine average demands of exempt well use, but this really does not get at the issue.
2. Action 2.A. Update Long Term Water Management Forecasts: If funding is called out for this action item, funding should be noted for all other action items as well. That said, as suggested at the PAG meeting, it might be best to simply delete and reserve the funding discussions to the funding section of the document.
3. Action 2.B. Improve Water Use Measurement: Consistent with our comments above, we would suggest the WRD's measurement goal be broader than the WRC Strategy. To achieve this, in the first sentence we'd suggest deleting the word "significant" and "in high priority watersheds".

Bulletin 3: Understanding Oregon's Instream Needs

Action 3.A., Complete our understanding of flows needed to support stream functions. This should be a "key" priority. Without the work identified in 3.A. regarding base and elevated flows, then the protections recommended in section 12.B., which are contingent on 3.A., will never come to fruition. With regards to elevated flow studies, the goal of the Strategy should be to determine elevated flow needs (peak and ecological) statewide.

Action 3.B., Improve our understanding of the relationship between groundwater and ecosystem needs. The sub-bullet "Complete WRD/USGS Groundwater Studies" should be a "key" priority. These studies are very important for both instream and out-of-stream interests.

Bulletin 4: The Water & Energy Nexus

Action 4.B. Take Advantage of Water Infrastructure to Develop Hydroelectric Power: With regard to bullet point one (in conduit hydro), there needs to be a corresponding commitment to balance this new source of power with meeting instream needs. HB 3369 is very clear that the Strategy needs to focus on meeting Oregon's water needs. To the extent that adding power projects to existing canals will serve as a disincentive to put water instream (as there would be less power generation), this could run at cross purposes with the statutory mandates of HB 3369. More ever, any "encouragement" should be consistent with existing state law which sets minimum environmental sideboards (i.e. fish passage and screening). We do not think this should be a "key" priority as it is not directly related to the mandates of HB 3369.

We oppose the inclusion of bullet point two under Action 4.B., which suggests that there should be greater access to unallocated water in the Columbia River when high flow events are occurring. Division 33 is a very important fish protection tool (and also a solid example of successful ODFW/WRD integration in water allocation decisions) and the Strategy should not be

suggesting actions that would undercut this. This section is inconsistent with the governing principle that actions comply with existing laws and policies. Again, this section should be deleted.

Bulletin 5: Climate Change

We would recommend that the background section incorporate some of the key points regarding risks to ecosystems. For instance, the Governor's Climate Change Adaptation Framework lists increased air temperature/heat events as a risk that is very likely to occur. The Framework notes that:

> Overall, increased average air temperatures will result in increased water temperatures and reduced flows in streams, which over the long term will cause shifts in aquatic habitats, species, and communities. There is serious risk that increased average air temperatures will affect water temperatures and aquatic habitats to the extent that important core populations of salmonids will go extinct. See Risk 1.

There are other factors/risks noted as well that should be referenced in this document. Please see link for more detail: http://www.oregon.gov/LCD/docs/ClimateChange/Framework_Final.pdf?ga=t

Action 5.B: Develop Climate Change Scenarios/Models: Climate change scenarios/models should include an analysis of the effects of climate change on the needs of fish and other aquatic species.

Action 5.C: Assist with Climate Change Adaptation Strategies: We would suggest incorporating the following sub-bullets.

- Develop a water management plan to address likely changes to management of existing and future water rights, instream needs (including instream water rights and scenic waterway flows), water availability, conjunctive management, etc in response to changes in hydrology and temperature brought about by climate change.
- Provide assistance to flow restoration efforts to are related to cold water refugia (assistance amounts should be in rough parity with "assistance" to water users to increase storage, etc.).

Moreover, existing bullet two needs to have the word "drought" added to it.

Bulletin 6: The Water and Land Use Nexus

Action 6.A. Ensure that Local Governments Have Access to Data Needed for Decision Making: The reference for funding should be deleted. Presumably all actions should receive funding, thus this discussion should take place in the funding section.

Bulletin 7: Water-Related Infrastructure

Background: It would be informative to have a paragraph that discusses the possible benefits to the environment from regionalization. For instance, it might be that coastal communities could invest and use a single reservoir (i.e. proposed Rocky Creek site) in exchange for relinquishing surface water rights on some of the smaller more sensitive fish bearing streams.

Action 7.A. Encourage Regional (Sub-Basin) Approaches to Water and Wastewater Systems: To better fit with the statutory goals of the Strategy, this section should include an "ecological screen" in relation to regionalization projects. Moreover, any incentives tied to regionalizing water should be tied to regional projects that have a quantifiable benefit to river flows (i.e. moving off sensitive streams, etc). Moreover, while we don't object in principle to the providing of grants and loans to regionalization efforts, parity demands that the strategy also provide (in other sections) notation that the state will provide loans and grants to streamflow restoration/augmentation efforts.

Bulletin 9: Funding for Oregon's Water

Background: As noted at the PAG meeting, the bar graphs do not necessarily make a compelling case for the WRD. We very much support the funding section, but suggest it be reworked to better tell the WRD's story. For instance the "staff decline" graph used in budget discussions with the WRC, as well as the information on watermaster FTE declines, might better provide a compelling story.

We suggest the WRD delete the sentence on page 42 that states that "to help communities progress towards a regional approach to water the state will also need to dedicated staff and resources to these efforts." There is still much debate as to what the phrase "regional approach" means. Until that is better defined, it should not be used in the document as a given. We think it is appropriate, on the other hand, to include in this section a sentence about increasing field staff (water masters). As water availability decreases, user conflicts increase and climate change alters the water regulation landscape, the state should advocate for increased field presence in this plan.

Action 9.A. Establish a Water Management Fund for the State of Oregon: WaterWatch strongly supports the inclusion of this section.

Action 9.B. Capitalize Funds for Local Water Projects: Funding should also be provided for water acquisition/restoration projects. This is consistent with the title of this section which calls for the funding of "protection".

Bulletin 10: Place Based Approaches

Background: Recognizing that the WRD flagged at the PAG meeting that this section was still a work in progress, we did want to note that the background section is a bit confusing as to purpose. For instance, a large portion of this section is dedicated to the traditional concept of regionalization, even though this concept is already found in the infrastructure section (where it seems more appropriate). Moreover, it is unclear as to the reason for including the Klamath Agreement. If the Klamath Agreement is being included as an example of where the state should move regarding regional approaches, WaterWatch would have concerns because, as the WRD is aware, the only two Oregon conservation groups involved in negotiations were kicked out of the process for voicing concerns over the lack of protection of flows for fisheries. Similarly, the inclusion of territorial sea example is somewhat perplexing as it introduces a concept that is not necessarily consistent with the IWRS exercise (the focus of the governing statute is streams, not oceans). Additionally, the purpose of including Water Management and Conservation Planning

is unclear as these are specific to municipalities and irrigation districts, and to not provide a template for any sort of balanced water management "plan" on a basin or even stream scale.

The basin plan section could be expanded, as the WRD Basin Plans could be a good starting point for future planning as they include components specific to protection of fisheries, water quality and land use goals. All in all, we'd suggest reworking and focusing this section a bit more.

Action 10.C. Facilitate Regional (sub-basin) water resources planning: HB 3369 calls for a state water resources strategy to be developed by WRD, ODFW and DEQ. It does not direct the state to delegate water resources planning to the local level. While we recognize that the statewide plan might need to be adapted to the unique hydrology and/or issues facing individual river basins, no where in the governing statute is there a directive to provide a framework for local communities to complete there own integrated water management planning (i.e. the document says the WRD will "help" it should say the WRD will "lead"). Overall, it is unclear what exactly is being proposed here. Once this section is flushed out a bit more, the PAG and other interested stakeholders should be given the opportunity to provide further comments.

Bulletin 11: Water Management

Background: We very much support a section dedicated to water management. That said, we suggest that this section set forth some of the more traditional water management practices that are needed now and into the future. These functions are key to proper management and utilization of Oregon's waters and thus necessarily need to be in the statewide strategy. These management actions/goals include, but are not limited to:

- Increasing field presence
- Enforcement of laws and permit conditions
- Enforcing against of waste
- Increasing measurement
- Conservation and efficiency
- Ensuring all water allocation and reallocation processes adequately protect instream values (i.e. institute a public interest test on transfers).
- Review/amend conjunctive surface/groundwater management (Div. 9, exempt wells, regulation, etc)
- Ensuring the WRD water right database is current

Again, as the IWRS will presumably be used as a template for WRD priorities/actions into the future, these key management activities should be an integral part of the document.

Water Conservation: This section should include a thorough description of the Conserved Water Act. This is an important tool to restore streamflows while at the same time preserving the original out-of-stream water use. Use of the Conserved Water Act is consistent with HB 3369's directive to meet instream and out-of-stream needs.

Storage: While storage (both above and below ground) certainly needs to be part of the IWRS, it is unclear to us why this discussion has been placed in the "water management" section. It

might be more appropriate in a Bulleting of its own (supply?), leaving the "management" section to focus on traditional management functions (as opposed to allocation).

Ecosystem Services: If the WRD is going to include a section on ecosystem services, it should make very clear that use of ecosystem credits cannot be used to bypass and/or otherwise undermine the directives of existing law. Regulatory sideboards are a key component to the success of any type of ecosystem service scheme.

Recommended Actions:
Action 11.B. Increase Built Storage:

- We agree with the comment made at the July PAG meeting that this heading should be amended to just say "increase supply". As written it shows a bias towards built storage, even though the sub-bullet points include non-built storage.
- Under the sub-bullet "expand or improve existing storage projects", the document should also include a directive to investigate better/alternative reservoir management scenarios to better meet a number of uses, including instream uses.

Action 11.C. Encourage Additional Water Re-use:

- To ensure that streams that are dependent on effluent are not harmed, sub-bullet one should be amended to read: Ensure that Oregon has the right policies and regulations in place to facilitate municipal and industrial water re-use, in a manner that does not harm instream values, including flow and temperature.
- Sub-bullet two should be amended to read: Conduct a statewide assessment of the potential for water re-use to fulfill current and future water supply needs, matching the water quality of reclaimed water to appropriate end uses. This assessment will investigate the impacts on streamflows of potential re-use projects.
- Sub-bullet three speaks to funding, which as noted at the PAG meeting is not necessarily appropriate in connection with certain action items.
- Sub-bullet four should be amended to read: Encourage and incentivize increased industrial water re-use that will not negatively impact instream values, including flow and water quality.

Action 11.D. Assist in the Development of Ecosystem Credits and Markets: WaterWatch objects to the inclusion of this section in the strategy. In 2011 a poorly drafted ecosystem services bill was introduced that made clear to WaterWatch that there are still many questions about how this concept would work, and that there appears to be no clear understanding of how ecosystem markets would apply to water quantity. Any ecosystem service activity that moves forward should have built in flow protocols and make very clear that these credits cannot be used to get around any regulatory directives and/or screens (i.e. injury, place based mitigation, etc)

Action 11 (E) ADD: As noted above, there are a number of traditional water management tools/activities that should not only be spelled out in the background but should have a specific recommended action on these (measurement, enforcement, field presence, conjunctive gw/sw management, etc).

Bulletin 12: Ecosystem Health & Public Health Needs

Background: Noticeably missing from this section is any discussion of rivers and/or flow. This would be a good place to insert a couple/few paragraphs on the importance of healthy rivers, and a description of the suite of flows necessary to achieve this component of ecosystem health. ODFW presented some good information to the PAG on this subject that could be incorporated here.

Project Investment: Second paragraph, typo, it should be the Oregon Watershed Enhancement Board (that provides the majority of the funding).

Recommended Actions:

Action 12.B. Pursue Additional Instream Protections

- This section notes it is contingent upon implementing 3A. This notation should be deleted as not all of the actions are dependent on 3A.
- Sub-bullet two should be amended to say "Establish or Adopt" rather than "apply". The state should make a commitment to actually get these instream water rights in place, not simply apply for them. The recommended change will send a signal as to new applications, but also to 80 plus instream water rights that have been on hold for 20 years because of protests/agency resources. Additionally, we strongly support the reference to the suite of flows, this should be retained as it is consistent with existing law.
- ADD SUB-BULLET: Protect instream values (flow and quality) in all WRD water allocation and reallocation decisions. Ensure that there are regulations and policies in place to protect instream flows in all allocation/reallocation decisions (i.e. public interest review of transfers).
- Sub-bullet three: This section should make clear, as suggested at the PAG, that the state will not use instream water rights and/or scenic waterway flows as a "ceiling" on restoration efforts. Fish and wildlife, recreation and water quality are statutorily recognized beneficial uses. The Instream Water Rights Act does not contemplate a limitation on instream transfers vis a vis existing state instream water rights (many of which were issued at amounts below that applied for by ODFW).

Action 12.D. Improve Habitat and Habitat Access for Fish: This should be a "key" action item. Fish passage and screening laws have been in place for nearly a century. Coming into compliance with those laws should be a top priority of the state.

ADDITIONAL COMMENTS:

WaterWatch urges the WRD/WRC to incorporate two additional Bulletins to the Recommended Actions document.

a. Groundwater Surface Water Conjunctive Management: Of note, at the January PAG meeting there were numerous comments made about a higher level focus on groundwater and surface water management. At that meeting it was suggested that this issue was important enough to warrant its own "bubble", which would have been translated into a Bulletin of its own for the purposes of the recommended action document. While we appreciate that there are some interspersed references to groundwater surface water issues in the existing document (i.e.

groundwater studies) we would urge the WRD/WRC to consider inserting a wholly new Bulletin on this issue. Included in this could be a discussion of groundwater studies, exempt wells, conjunctive management/allocation, etc. Given that the state is overapproprated nearly every month of the year, the vast majority of water right applications are either for storage or groundwater, it seems appropriate to highlight this in the study. This is an issue that is important to both instream and out-of-stream interests equally. To ensure that the state does not do further damage to our state's water resources it is essential that it have sufficient information, as well groundwater policies and controls in place.

b. State Agency Integration: HB 3369 calls on WRD, ODFW and DEQ to develop an integrated water resources strategy. At virtually every PAG meeting the subject of agency integration has come up. It appears to us that there is still great confusion as to how this strategy will fully integrate these three agencies, as well as other state/federal agencies, into the day to day management of our state's water resources. Given the mandates of HB 3369, the strategy needs to be very clear as to the "integration" actions of the state agencies. While some of these are interspersed in select sections of the existing document, we urge the WRD to incorporate a new Bulletin on this topic specifically.

Overall Organization: While we understand that instream issues have been captured largely under Bulletins 3 and 12, we are somewhat concerned that "degraded aquatic ecosystems" which was previously called out as an "upcoming pressure" has disappeared as a stand along "bubble" under this section. Both groundwater/surface water issues and degraded ecosystems/imperiled fish are significant "pressures" in Oregon's water picture. We are still assessing organizational structure, including those of the one page handout that accompanies this Recommended Action document, and will provide further input in the future but wanted to note this concern as an issue that might need further attention.

Conclusion: Again, we very much appreciate the hard work the WRD has put into this and other documents to try to ensure a balanced result that meets the statutory guidelines regarding instream and out-of-stream uses. We look forward to further review/input on this and other IWRS documents.

Sincerely,

Kimberley Priestley
Senior Policy Analyst

cc: Brenda Bateman, WRD

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