



# Oregon

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## Water Resources Department

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### MEMORANDUM

TO: Water Resources Commission

FROM: Barry Norris  
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SUBJECT: Agenda Item C, February 17, 2011  
Water Resources Commission Meeting

### Peak & Ecological Flow Policy Development Process

#### I. Introduction

In 2009, the Oregon Legislature passed House Bill 3369 (HB 3369), which provides grant and loan programs for water conservation and development projects. The bill further requires that proposed storage projects receiving this funding include protection for “peak and ecological flows.” beginning in 2012. A white paper that addresses the state of the science for peak and ecological flow protection was completed December 2010, and the results were reported during the November 2010 Water Resources Commission (Commission) meeting. The next steps will involve forming a rules advisory committee (RAC) and eventual adoption of administrative rules by the Commission.

#### II. Discussion

According to Wikipedia a **white paper** (or "**whitepaper**") “is an authoritative report or guide that is often oriented toward a particular issue or problem. White papers are used to educate readers and help people make decisions, and are often requested and used in politics, policy, business, and technical fields.” Over the last year a white paper was developed by the Department’s Ecological Flow Technical Advisory Group (EFTAG). The white paper is intended to be used by policy makers in crafting rules, guidance, or other strategies to implement HB 3369. The final draft was peer reviewed, rewritten to reflect those reviews, and posted on the Department’s website in December 2010. Included is an extensive amount of technical information about peak and ecological flows in terms of 1) defining what they are, 2) describing methods that are commonly used to determine them, and 3) providing recommendations regarding how these methods might be applicable to Oregon.

Intended as a treatise on the state of the science for peak and ecological flow protection, the white paper includes examples for implementation that address the potential for simplifying administration of a protection program. It does not address policy matters

such as the importance of including social and/or economic concerns in developing Oregon protection levels. The authors understood their paper would be used by policy makers to develop an implementation plan.

It will be important for interested parties who want to participate in development of an implementation program to get a thorough understanding of what is contained in the white paper. Department staff will use the next six months to process the information contained in the white paper and share it with as many interested parties as possible. This will include presenting the information to interest groups. Sometime around June 1 the Department staff will begin forming a RAC. The goal is for the committee to be large enough to fairly represent the broad range of interest groups that have a stake in the process. The committee will begin meeting in July 2011.

In the past the standard rulemaking process has been that the Department has prepared a draft set of rules as a starting point for deliberation, and the draft rules are presented to a RAC. A series of committee meetings are held to discuss the draft rules, offer changes, and debate policy. It is difficult to estimate the number of meetings that might be necessary in this process, but deliberations should be concluded over a three-month period. Although the goal is to reach consensus, it has not always been possible. When a conclusion can be made that the draft rules are ready, a public hearing will be held, testimony accepted, and a final set of draft rules will be presented to the Commission. A report will be prepared along with the draft rules that will outline the process, the issues that are still outstanding, and a staff recommendation for action.

Staff will follow the same format that has been used in the past. A draft set of rules will be prepared for a RAC that will be based on the science framework contained in the white paper.

Issues that will likely be addressed by the RAC may include:

Consideration of Tiered Approach: The white paper offered an example of a three-tiered approach for establishing protection levels. Each tier would be set apart by the specific circumstances under which an applicant might request water for a storage project. If all the criteria for tier 1 were met, no further analysis would be necessary. If the circumstances of a project allowed that a certain set of criteria in tier 1 are exceeded, requirements for further investigation as required under tier 2 would apply. Extensive investigation as required by tier 3 would apply when other circumstances established by rule apply.

Acceptable Methods for Analysis: The white paper offers various methods that are used to establish protection levels for peak and ecological flows. Additionally, there are standard methods that are currently employed and accepted in Oregon for these analyses. The RAC may wish to standardize the process by specifically listing methods that will be acceptable.

Consideration of RPC Approach: As previously mentioned, in a tiered approach the first tier would have a set of criteria that, if met, would serve as adequate protection for peak and ecological flows. These criteria can be referred to as Regional Protective Criteria, or RPC. Examples of RPCs include, as used in the north coast California example, a percentage of a specified storm event. The white paper proposes use of the two-year storm event, reserving 5%-15% of the peak flow level for appropriation. The RAC may consider the range offered by the white paper and determine appropriate levels that may vary geographically. A second RPC example is consideration of which months are acceptable for storage diversions, or season of use. Again, this may vary geographically. A third example may be acceptable determinations for base flow levels. The possible choices offered in the white paper include existing instream flow rights, use of existing basin investigations, and the 50% exceedance level.

Hydrologic Basin Delineation (Hydrology/Geomorphology): The RAC may wish to develop or adopt an existing basin delineation for purposes of establishing alternate RPCs. Examples might include delineations based on streambed geomorphology and consideration of developed areas versus undeveloped areas around the state and within basins.

Peak Flow Diversions for Low Frequency Storm Events: One of the RPCs discussed in the white paper is reservation of a percentage of a high frequency storm event (10% of the 2-year storm event). Another consideration of the RAC might be the criteria that could allow appropriation of a percentage of a low frequency event. As an example, the RAC might determine that when flows are in excess of a 25-year event water may be appropriated in the amount of 5% of the flow.

Approval Process for Investigations: In the three-tiered approach offered by the white paper, additional investigation will be required of an applicant whose project falls within tier 2 or tier 3. When an applicant completes the investigation and submits it as a basis to support the request for a storage permit, there will be a review process that determines if the information meets the criteria set out by rule. The RAC may wish to deliberate as to how that review process might proceed.

Incorporation of Social/Economic Issues: The RAC may wish to deliberate as to whether mitigating social and/or economic issues should be a part of the process. As an example, the RAC may determine that protection levels may be adequate at a reduced level where certain regional economic or social conditions warrant.

### **III. Conclusion**

In December the EFTAG completed their work and the white paper is posted on the WRD website. It will be important for the Department to work with interests throughout the state so that stakeholders have a common and robust understanding of what is

contained in the white paper. In July 2011, the Department plans to convene a RAC to begin to develop draft rules that protect peak and ecological flows for storage projects that are funded by HB 3369 grant and/or loan funds. The draft rules will be presented to the Commission for its consideration.

This is a discussion item. No WRC action is requested.

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