



# Oregon

Theodore R. Kulongoski, Governor

## Water Resources Department

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### MEMORANDUM

**TO:** Water Resources Commission

**FROM:** Phillip C. Ward, Director

**SUBJECT:** Agenda Item H, February 29, 2008  
Water Resources Commission Work Session

### **Deschutes Basin Ground Water Mitigation Program Five-Year Review**

#### **I. Issue Statement**

This report provides the five-year evaluation of the Deschutes Ground Water Mitigation Program required under OAR Chapter 690, Division 505. The Commission set up the five-year review as part of its adaptive management approach for the mitigation program. Based on this review, the Commission may direct the Department to initiative rulemaking to adjust the allocation cap or take other action.

#### **II. Background**

On September 13, 2002, the Commission adopted the Deschutes Ground Water Mitigation Rules and the Deschutes Basin Mitigation Bank and Mitigation Credit Rules. These rules implement Senate Bill 1033 (1995 Oregon Laws), HB 2184 (2001 Oregon Laws) and HB 3494 (2005 Oregon Laws). The rules provide for mitigation of impacts to scenic waterway flows and senior water rights, while allowing additional appropriations of ground water in the Deschutes Ground Water Study Area. By rule, the mitigation program allows only an additional 200 cubic feet per second (cfs) of new ground water use.

The Commission is required to evaluate the mitigation program every five years. OAR Chapter 690, Division 505-0500 (2) identifies that the first evaluation is to occur prior to January 1, 2008, or upon reaching 150 cfs of the 200 cfs allocation cap, whichever comes first. The Department has not yet allocated 150 cfs to new ground water use.

Depending upon the outcome of this evaluation, the Commission may determine whether the 200 cfs cap on new ground water allocations may be lifted or otherwise modified. The Commission may also initiate proceedings to declare all or part of the basin a critical ground water area, close all or part of the basin to additional ground water use, or take other administrative action.

#### **III. Discussion**

This report provides a summary of the results of the five-year evaluation, comments received on the draft evaluation, and changes made in response to those comments. The detailed five-year evaluation of the program is provided in Attachment 1.

### *A. Evaluation Criteria*

The primary metric for evaluation of the Deschutes Mitigation Program is whether scenic waterway and instream water right flows continue to be met on at least an equivalent or more frequent basis as compared to long-term, representative base period flows established by the Department. The rules also require an evaluation of the program itself, associated mitigation, the zones of impact, and specifically, the effectiveness of mitigation projects and mitigation credits that involve time-limited instream transfers, instream leases and allocations of conserved water from canal lining and piping projects.

To evaluate the mitigation program, the Department relied upon two basic tools: 1) tracking of data associated with new ground water permits and pending ground water permit applications, mitigation projects, and mitigation credit transactions through the mitigation banks and other credit holders, and 2) an instream flow model. The methods for the instream flow model are described in Attachment 2 and will undergo peer review in 2008.

### *B. Summary of Evaluation Results*

- 66 new ground water permits have been issued since the mitigation program was adopted.
- 42% of the 200 cfs cap has been allocated under final orders and new ground water permits.
- Pending applications exceed the remaining balance of the 200 cfs cap.
- Mitigation established each year has consistently exceeded the amount needed (including for reserves) on average by 66%.
- The majority of ground water mitigation has been provided in the general zone of impact.
- The majority of mitigation has occurred through instream leases and has been provided through the Deschutes Water Exchange Mitigation Bank.
- While the majority of mitigation has been through temporary credits, there is a growing number of permanent credits established under the program.
- Mitigation provided in each zone of impact met requirements for new ground water uses for each zone.
- More than 39 cfs of instream flow has resulted from permanent and temporary mitigation.
- On an annual basis, scenic waterway and instream water right flows are met or have been improved, compared to base period flows.
- Overall streamflows have been improved by as much as 27 cfs in some areas because of mitigation.

### *C. Stakeholder Comments*

On January 18, 2008, the Department posted a draft of its five-year evaluation report. On January 23, 2008, the Department held a public meeting in Bend to present the draft report. The meeting was attended by 26 individuals representing a range of organizations, interest groups, and water users in the Deschutes Basin. Department staff presented the evaluation report and took public comments. Of those attending, four individuals, representing WaterWatch of Oregon, Mark

Yinger Associates, Deschutes Irrigation LLC, and 1000 Friends of Oregon, offered comments on the evaluation report. The majority of the comments received at the meeting were technical in nature. For example, WaterWatch requested the monthly data for each gaging station included in the streamflow evaluation. They also commented on the consumptive use assumptions for new permits, the location of mitigation compared to the identified zone of impact, and permits issued prior to adoption of the program that have not provided mitigation. Mark Yinger Associates requested publication of the instream flow methods, case studies showing how new ground water permits and mitigation are incorporated into the model, and more detail on how zones of impact are identified for each new ground water permit. Deschutes Irrigation LLC commented that, since the pending applications exceed the current 200 cfs cap, water users are turning to ground water transfers to meet their needs. 1000 Friends of Oregon commented that they would be interested in a study of the economic and socio-economic impacts of the program.

Since the meeting, the Department has also received five written comments from Oregon Parks and Recreation Department (OPRD), Oregon Trout, the Deschutes River Conservancy (DRC), WaterWatch, and the Deschutes Water Alliance (DWA). These comments are provided in Attachment 4. In their comments, both WaterWatch and OPRD stated that they would not be supportive of lifting the 200 cfs application cap. They felt that such a change would be premature given that the cap has not been reached and that the effects of 200 cfs on the river are not yet known. OPRD suggested another review of the allocation cap as part of the next five-year evaluation of the mitigation program would be appropriate. WaterWatch disagreed with the streamflow discussion in the section of the attached report addressing the evaluation of scenic waterway and instream water right flows. WaterWatch identified that it appears that the Department is only looking at how streamflows are responding and not the required flows. They asserted that the mitigation rules require the Department to monitor Scenic Waterway and Instream Water Right flows and whether those flows continue to be met not only on an annual basis but also on a monthly basis.

The DWA stated that they believe that the mitigation program is successful and encouraged the Commission to continue the program. The DWA also requested that the Department move forward with the facilitated process to evaluate the mitigation program as required under HB 3494 for the 2009 Legislative Assembly. They also requested that the state contribute funding to the DWE Mitigation Bank. The DWA suggested a rulemaking is needed to clarify that the 200 cfs allocation cap should exclude proposed ground water uses (applications) where the use is offset by the cancellation of an existing ground water right (allowed under OAR 690-505-00610 (8)) or those proposed ground water uses (applications) that are non-consumptive. Both the DWA and DRC commented that the current cap may encourage speculation and that applications without a use have been submitted that “take up” available cap allocation. The DRC provided a number of technical and editorial comments on the draft report.

Oregon Trout identified that the Water Resources Department has a duty to bring streamflows back up to required levels and that this should be done at a faster rate. They also suggested that stored water could be used to accomplish this goal.

*D. Response to Comments*

In response to comments received, a number of technical and editorial comments have been incorporated into the five-year report. A more detailed description of how the zones of impact were established and used was added to the report. To provide some socio-economic context in response to 1000 Friends, the source of mitigation water (i.e., irrigation, municipal, quasi-municipal) and the new uses of ground water have been described.

In addition to these changes to the report, the methods for the instream flow model are provided in Attachment 2. Case studies showing debits and credits will be added to the model report as it undergoes peer review this year. Tables showing the results from the instream flow model on monthly basis are provided in Attachment 3.

*E. Next Steps*

It has been five years since the Department's administrative rules for the Deschutes Mitigation Program were adopted by the Commission. The evaluation provided in Attachment 1 demonstrates that the program is working and that instream requirements are being met more frequently as compared to representative based period flows. Current applications exceed the 200 cfs cap and have prevented a few applications from moving forward even though their use would have zero mitigation obligation. In the future, it would make sense to initiate rulemaking to adjust the way these "zero mitigation obligation" applications are counted in the total 200 cfs cap. However, in 2008, the Department must begin the evaluation of the program that is required under HB 3494. By January 31, 2009, the Department is required to report to the Legislature on the implementation and operation of the Deschutes Ground Water Mitigation and Mitigation Bank programs. The report is to include:

- The cumulative rate of water appropriated under all ground water permits approved in the Deschutes River Basin after the effective date HB 3494.
- The volume of water, in acre-feet, provided for mitigation; and
- The measured stream flow of the Deschutes and its major tributaries.

HB 3494 also identifies that this report may include information on the progress on restoring stream flows in the Deschutes River Basin to a point sufficient to support anadromous fish and on any statutory changes necessary to accomplish the needed stream flow restoration. HB 3494 directs the Department to consult with Deschutes River Basin water users and organizations. The Department is to work with basin water users and organizations to seek funding for a facilitated process to develop this report and to evaluate the ground water mitigation and mitigation bank programs.

The Department would like to focus its efforts over the next year on this broader evaluation of the program which will have significant public involvement. Based on that broader review and report to the Legislature, the Commission could give the Department direction to initiate rulemaking or take other action to address the cap and other elements of the program. In the

meantime, the Department will be reviewing all of the pending mitigation bank applications for completeness of information and documentation of the requested quantify of water. This effort may free up some of the cap for the remaining applications over the short-term.

#### **IV. Alternatives**

The Commission may consider the following options:

1. Direct staff to initiate proceedings to declare all or part of the basin a critical ground water area or to close all or part of the basin to additional ground water use.
2. Direct staff to initiate rulemaking to eliminate or modify the 200 cfs allocation cap, including potentially modifying the cap to exclude non-consumptive uses and other uses that have a zero mitigation obligation.
3. Direct staff to report back after further review of the program.

#### **V. Staff Recommendations**

The Director recommends Alternative 3 that the Commission direct staff to report back as part of its broader HB 3494 review of the program. In the meantime, the Department will review the applications that are waiting in the “queue” to ensure that appropriate and documented needs are requested.

Attachments:

1. Deschutes Ground Water Mitigation - Five-Year Program Evaluation Report
2. Assessing the Impact of Mitigation on Stream Flow in the Deschutes Basin
3. Monthly stream flow tables by gage
4. Copies of written comments

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