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MEMORANDUM

то:	Water Resources Commission
FROM:	Debbie Colbert, Field Services Administrator
SUBJECT:	Agenda Item G, February 29, 2008 Water Resources Commission Work Session

Deschutes Basin Ground Water Mitigation Program Annual Implementation and Evaluation Report

I. Issue Statement

This report provides the 2007 annual evaluation of the Deschutes Ground Water Mitigation Rules, OAR Chapter 690, Division 505; and the Deschutes Basin Mitigation Bank and Mitigation Credit Rules, OAR Chapter 690, Division 521. *This is an informational report only; no Commission action is required.*

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 most recently 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 (See Attachment 1).

The Deschutes Ground Water Mitigation Rules provide two options for ground water users to provide mitigation – completion of an individual mitigation project or acquisition of mitigation credits awarded by the Department based on the completion of a mitigation project. One mitigation credit equals one acre-foot of mitigation water.

The Deschutes Basin Mitigation Bank and Mitigation Credit Rules also provide for the establishment of a mitigation credit system and mitigation banks to help facilitate transactions among holders of mitigation credits and persons interested in acquiring mitigation credits.

III. Discussion

Under the Commission rules, the Department is required to annually report on and evaluate implementation of the Deschutes Ground Water Mitigation Rules. The purpose of the evaluation is to "determine whether scenic waterway flows and instream water right flows in the Deschutes Basin 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." Annual evaluations are done in coordination with the Oregon Department of Fish and Wildlife (ODFW), Department of Environmental Quality (DEQ), Department of State Lands (DSL), and Oregon Parks and Recreation Department (OPRD) and considers new ground water appropriations, streamflow

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monitoring, and mitigation activity. The Department is also required to annually report on the implementation and management of mitigation credits generated and allocated through existing Mitigation Banks.

The mitigation program in the Deschutes Ground Water Study Area continues to expand. These activities are summarized below.

A. New Ground Water Appropriations and Mitigation Activities

Ground Water Appropriation Activity

- Permits Issued: Since adoption of the mitigation rules in September 2002, a total of 66 ground water permits, with associated mitigation, have been issued. Attachment 2 provides a breakdown of these permits by year and zone of impact.
- Applications with Final Orders: By the end of 2007, 30 ground water permit applications have been processed to the Final Order stage. Permits will be issued when the required mitigation or any other required information (such as permit recording fees) is provided. These applicants have five years from the issuance of the Final Order to submit the required mitigation.
- Pending Applications: There are another 40 pending applications for ground water use in the Deschutes Ground Water Study Area. Five of the applications that currently have Proposed Final Orders have been protested. Attachment 3 provides a general breakdown of the pending applications and their status by zone of impact for 2007.
- Incremental Development Plans: In 2005 the Department approved the first ground water permit with an incremental development plan. An additional three permits with incremental development plans were approved in 2006 and two in 2007. By rule, a permit applied for by a municipal or quasi-municipal applicant may be approved allowing the water user to supply mitigation over a period of time, incrementally, as the water use is developed. Mitigation covering the first stage of development must be supplied before the permit is issued. Additional mitigation is then supplied in advance of each stage of development. Each permit holder must have an incremental development plan on file with the Department and may amend that plan with prior approval by the Department.

Mitigation Activity

- Mitigation for the 66 ground water permits issued by the Department is being provided through instream transfers and instream leases.
 - Most mitigation water was provided from instream leases via the Deschutes Water Exchange (DWE) Mitigation Bank.
 - In 2007, accounting for incremental development, the 66 permits issued by the Department required 1400 acre-feet (AF) of mitigation water. Most of the mitigation water (58%) was provided by instream leases via the DWE Mitigation Bank. However, 42% (582 AF) of mitigation water was supplied by instream transfers.

- As required, in each year that the program has been in place, the DWE Mitigation Bank held another matching quantity of mitigation water (credits) in reserve in the appropriate zones of impact for each acre-foot of mitigation water used provided by instream leases.
- In 2007, there were 58 active mitigation projects. The cumulative total number of mitigation projects has increased each year with 4 in 2003, 15 in 2004, 22 in 2005, and 50 in 2006.
 - Of the mitigation projects active in 2007, 49 were instream leases (submitted by the DWE Mitigation Bank) and 9 were permanent instream transfers (submitted by other parties). Attachment 4 provides a summary of ground water permit and mitigation activity for 2007 by zone of impact and demonstrate that more mitigation is in place than required in each of the zones of impact in which new ground water permits have been issued.
- The DWE Mitigation Bank submitted an annual mitigation credit transaction report to the Department for the 2007 calendar year.
 - In 2007, the DWE Mitigation Bank completed 38 mitigation credit transactions with ground water permit holders and permit applicants.
 - Generally the DWE Mitigation Bank has operated with temporary mitigation credits based on instream leases. In all cases, the DWE Mitigation Bank has maintained sufficient "reserve" credits to cover temporary mitigation credits used by groundwater permit holders in each zone of impact.
 - In 2006, the DWE Mitigation Bank acquired their first permanent mitigation credits (40) from another mitigation credit holder. All 40 of these mitigation credits were assigned to ground water permit holders in 2007.
- In May 2006, the Commission approved a bank charter for Deschutes Irrigation LLC., managed by John Short. This mitigation bank only deals with permanent credits and had no transactions during 2007.
- There are 6 permits that have switched in full from temporary mitigation credits to permanent credits through the help of the DWE and private interests. One other permit has switched partially to permanent mitigation credits.
- Three of the permits issued by the Department, with a mitigation obligation totaling 40 AF, did not provide mitigation in 2007. Each groundwater permit holder is required by rule and by permit condition to provide mitigation for the life of the groundwater permit, and subsequent certificate. The Department has contacted each of these permit holders. In two cases, the permit will need to be cancelled as an alternative permit or source of water is being secured. In the third instance, while the use has not yet been developed, the Department will be working with the permit holder to assure that mitigation is secured.

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B. Mitigation and Streamflow Monitoring

The Deschutes Mitigation Model was developed by the Department to numerically estimate (i.e., model) the effects of mitigation and groundwater allocation and to calculate changes in the frequency instream requirements are met as a result of these effects. The model is based on historic stream flow for water years 1966 to 1995.

The Model shows that current applications for mitigation activities and groundwater allocations, if permitted, will cause the percent of time the instream requirement is met in the lower river (below Pelton Dam) to decrease slightly in winter months and to increase slightly in summer months. On an annual basis, the model shows that because of these mitigation activities the instream requirements in the lower Deschutes River will be met slightly more often (about 0.5%) than in the past.

IV. Summary

The Department continues to implement the Deschutes Ground Water Mitigation Rules and Deschutes Basin Mitigation Bank and Mitigation Credit Rules. Ground water permit applications and mitigation projects are moving through the required processes. The program is producing positive benefits as more mitigation water has been approved and protected instream than required for the 66 ground water permits issued. The Deschutes Mitigation Model shows that because of these mitigation activities the instream requirements in the lower Deschutes River will be met slightly more often than in the past. Active mitigation projects in the General, Middle Deschutes, Whychus Creek (formerly named Squaw Creek), Little Deschutes, and the Crooked River zones of impact (locations of new ground water permits) have resulted in a surplus of mitigation water (credits), including the reserve mitigation credit obligation for those permits using temporary mitigation credits.

V. Recommendation

This is an informational report. No Commission action is required.

Attachments:

- 1. Deschutes Ground Water Study Area Zones of Impact Map
- 2. Permits Issued by year and by Zone of Impact
- 3. Status of Pending Ground Water Applications for 2007
- 4. Summary of Mitigation Activity for 2007
- 5. Mitigation Provided by Subbasin and Zone of Impact for 2007

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