



Oregon

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MEMORANDUM

TO: Water Resources Commission

FROM: Kyle Gorman, South Central Region Manager

SUBJECT: Agenda Item H, June 4, 2010
Water Resources Commission Meeting

Deschutes Basin Ground Water Mitigation Program Annual Implementation and Evaluation Report

I. Issue Statement

This report provides the 2009 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.

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 allow groundwater users to provide mitigation through an individual mitigation project or through an approved mitigation bank. The Deschutes Basin Mitigation Bank and Mitigation Credit Rules 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. One mitigation credit equals one acre-foot of mitigation water.

III. Discussion

The Department is required to annually report on and evaluate implementation of the Deschutes Ground Water Mitigation Rules. 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 address new and changing water needs, while protecting scenic water way flows. Mitigation program 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 83 groundwater permits, with associated mitigation, have been issued. Two of these permits were cancelled in 2008 and one was cancelled in 2009. Attachment 2 provides a description of the fourteen new permits that were issued in 2009.
- **Applications with Final Orders:** By the end of 2009, 34 groundwater 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 or the Final Order expires. A few of the final orders have expired since the last update.
- **Pending Applications:** There are another 31 pending applications for groundwater use in the Deschutes Ground Water Study Area. Four 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 2009.
- **Allocation Cap Summary:** The amount of new groundwater use that can be approved under the program is limited to a total of 200 cfs. 72 cfs of water has been allocated under new permits. 52 cfs has been allocated in approved final orders, and there is an additional 74 cfs in pending applications which leaves 2.4 cfs available under the 200 cfs “cap.” However, the amount available under the 200 cfs “cap” will likely be adjusted if the proposed rule change is adopted by the Commission (proposed Division 522 – Deschutes Basin Water Management). The proposed rules include changing how the quantity approved for permits and final orders issued under the Deschutes Mitigation Program are debited under the 200 cfs “cap.”
- **Incremental Development Plans:** A total of 9 incremental plans have been approved. 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. 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 current 80 groundwater permits issued by the Department is being provided through instream transfers and instream leases.**
 - The majority of mitigation water provided for new permits continues to be primarily from instream transfers. In 2009, most of the mitigation water (71%) (1312 AF) provided was the result of instream transfers. The remaining mitigation water (539 AF) was provided by instream leases via the DRC Mitigation Bank.
 - In 2009, accounting for and including Municipal and Quasi-municipal incremental development, the 80 permits issued by the Department required 2145 acre-feet (AF) of mitigation water. Mitigation water in the amount of 1750 AF was provided by permit holders. The amount of mitigation water provided is less than the full obligation because three permits did not provide mitigation in 2009. In addition, four permits did not provide the full amount of mitigation as identified their incremental

- development plans. The Department is working with these permit holders to address changes to their incremental development plan. The Department, based upon recommendations of various stakeholders, proposed new administrative rules that will likely address this issue.
- As required, in each year that the program has been in place, the DRC 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 2009, there were 47 active mitigation projects.
 - Of the mitigation projects active in 2009, 24 were instream leases (submitted by the DRC Mitigation Bank) and 23 were permanent instream transfers (submitted by other parties). Attachment 4 provides a summary of groundwater permit and mitigation activity for 2009 by zone of impact and demonstrates that more mitigation is in place than required in each of the zones of impact in which new groundwater permits have been issued.
 - In 2009, the DRC Mitigation Bank completed 35 mitigation credit transactions with groundwater permit holders and permit applicants.
 - Generally the DRC Mitigation Bank has operated with temporary mitigation credits based on instream leases. In all cases, the DRC Mitigation Bank has maintained sufficient “reserve” credits to cover temporary mitigation credits used by groundwater permit holders in each zone of impact.
 - There are 10 permits that have totally switched from temporary mitigation credits to permanent credits through the help of the DRC and private interests. Three other permits have partially switched to permanent mitigation credits.
 - Six of the permits issued with a mitigation obligation totaling 54.7 AF have failed to continue to provide mitigation, one at least since 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. Three of these permits have since been cancelled. For two of the remaining permits that have not provided mitigation, 2009 was the first year that mitigation was not provided. The Department will be contacting each of these permit holders and will be working with them to assure that mitigation is secured.

In the case of a permit where mitigation has not been provided since 2007 and the use has not yet been developed, the Department will continue to work with the permit holder to secure mitigation. However, if mitigation continues to not be provided, the Department will be required to pursue cancellation of the permit.

- Prior to the adoption of the mitigation rules, the Department issued three groundwater permits that included a requirement to provide mitigation. Two of these permits are being proposed for cancellation for failure to meet permit conditions, including mitigation. The Department is working with the third permit holder to provide the required mitigation.

B. Mitigation and the Five Year Deadline

Final orders approving a new groundwater use in the Deschutes Mitigation Program set a five-year limit for the applicant to provide the required mitigation. Once mitigation obligations are met, the Department issues the ground water permit. There are several applicants that are facing the five-year limit for providing their mitigation. If mitigation is not provided within the time line, the final order expires. To help these applicants meet this timeline, the Department jointly hosted, with the Deschutes River Conservancy, a public meeting on January 15, 2009. The Department sent out 19 invitations to applicants whose time limit for providing mitigation was within the next year or two. 12 people attended the presentation and discussed their mitigation obligation options. Permits have been issued to 6 of the 19 applicants and two applications have been withdrawn. Three of the applications with final orders expired in 2009. The remaining 8 applications out of the initial group contacted by the Department have final order deadlines that expire in 2010.

C. Mitigation and Streamflow Monitoring

To monitor the impact of new groundwater permits and mitigation on scenic waterway flows and instream water right flows, the Department developed a streamflow monitoring model using historic streamflow data. The streamflow model was constructed using a base period of flows from 1966 to 1995 at selected gaging stations around the basin (evaluation sites). This base period represents river flows during a period of time after all of the dams were constructed and before the Scenic Waterway Act was amended to include consideration of groundwater impacts. The model considers the effects of new permitted ground water use and mitigation projects on streamflows.

Evaluation of the data through 2009 demonstrates that there is a slight decrease in the percent of time (< 0.3%) that instream requirements are met at four evaluation sites compared to baseline conditions. However, the annual volume of streamflow at all evaluation sites shows an increase in flow (Attachment 5). How an increase in annual streamflow can result in a decrease in the amount of time an instream flow requirement is met was explained in the 2008 five-year mitigation report and is related to the timing of debits effects (i.e., groundwater withdrawals) compared to the timing of credits effects (i.e., instream transfers and leases) on streamflow. Overall, the amount of mitigation available in each zone of impact continues to exceed the amount of mitigation needed for new groundwater uses.

IV. Summary

The Department continues to implement the Deschutes Ground Water Mitigation Rules and Deschutes Basin Mitigation Bank and Mitigation Credit Rules. Groundwater 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 80 groundwater permits issued. Model results through mid-2009 suggest that the percent of time that instream flow requirements are met has decreased at certain locations. However, further evaluation and analysis are needed before any conclusions may be reached or recommendations may be made to the Commission.

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Attachments:

1. Deschutes Ground Water Study Area Zones of Impact Map
2. Permits Issued in 2009 by Zone of Impact
3. Status of Pending Ground Water Applications for 2009
4. Summary of Mitigation Activity for 2009
5. Summary of streamflow for Water Years Ending September 2008 and September 2009

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