

**Water Resources Department** 

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#### **MEMORANDUM**

**TO:** Water Resources Commission

**FROM:** Barry Norris, Administrator

**Technical Services Division** 

**SUBJECT:** Water Resources Commission Meeting

Agenda Item L, April 15, 2005

Water Measurement Report

### I. Issue Statement

In 2000, the Water Resources Commission adopted a strategy for increasing water measurement and reporting statewide. This staff report provides an update on the implementation of the statewide water management strategy and, in particular, a progress report on completing the significant diversions inventory and assessment.

## II. Background

In 2000, the Commission endorsed a plan for statewide water measurement. The plan included strategies for improving a number of water measurement and reporting programs conducted by the Department including water use reporting, the hydrographics program, and ground water level reporting. The Department has provided several progress reports to the Commission on these programs.

The Commission's water measurement strategy also included a program to inventory significant diversions and conduct field assessments of these diversions. The Department's strategy for increasing measurement statewide has been to focus limited staff on the largest diversions and diversions with the greatest potential impact on streams.

Significant diversions are characterized as:

- 1. Surface water diversions that are required by the Department to measure or report through a water right condition; or
- 2. Surface water diversions without a water right condition measurement requirement that are:
  - a. Greater than 5 cfs; or
  - b. Greater than 10% of the lowest monthly 50% exceedance flow as defined in the water availability model, and greater than 0.25 cfs.

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To complete the significant diversion inventory and assessment, staff initially focused on inventory and assessment work in high priority streamflow restoration watersheds identified by Oregon Department of Fish and Wildlife (ODFW) and Department staff. In 2001, staff completed the significant diversions inventory, which identified approximately 1600 significant diversions within 280 priority watersheds. Staff began site investigations of these significant diversions to assess their status and inventory their physical characteristics. The goal was to complete the inventory and assessment by April 2005.

### III. Discussion

## Water Use Reporting

Currently, water use reporting compliance by governmental entities is 85%. The number of governmental entities that are required to report water use annually to the Department has increased slightly, from 720 to 726. The number of other water users required to report use has increased from 766 two years ago to 945 today. Compliance among these other users is 70%. As described in the April 2003 report to the Commission, the Water Use Reporting database is now available to the public on the Department's website and includes water use reports from public entities such as municipalities and irrigation districts.

Since April 2003, other improvements have been made in both reporting and accuracy compliance. The Department consolidated all water use reporting data that is received. This information is linked to the Department's water right condition database to facilitate easy crosschecking for compliance. Additionally, the Department developed a new web interface for users to submit their water use data. In 2004, 10 % of the water users required to submit water use reports submitted them on-line.

These improvements and regular reminders from the Department led to higher compliance rates. However, the Water Use Coordinator position is proposed for elimination in the Governor's Recommended Budget. Future progress and maintenance of the program will be severely limited as a result of this budget reduction. Additionally, there will be little, if any, review for compliance and data quality.

# **Hydrographics**

Elimination of the hydrographics backlog continues to be a challenge for the Department given staff and funding resources. However, some improvements are being made by seeking other funds to support hydrographic record processing. For example, the Department obtained funding from OWEB to process 111 station years of gage record in the John Day Basin. That contract has been completed and was quite successful. Although only about 8% of the total backlog, it was a major first step in testing the success of using outside contractors to process hydrographic

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records. The Department recently received some additional funding for working records for one gage in the Deschutes Basin.

In addition to efforts to address the hydrographics backlog, staff recently upgraded the software used to develop rating curves and process stream gage data. This new software has dramatically increased the efficiency of working hydrographic records.

## **Ground Water Level Reporting**

In January 2003, ground water users were required to report static water levels in 1917 wells. Today, the number of wells required by condition to report static levels is 2226. In 2004, roughly 50% of the well users were required to report static levels submitted reports.

As reported previously, a centralized ground water level database has been developed and is available on the Department website. Interested parties can access data and hydrographs through our web page. The information is linked to the well log database. This is a significant development in our efforts to tie all ground water measurements into a single, easily accessible location for interested parties. This database is being kept up-to-date as field staff and water right holders submit additional data.

## Significant Diversions

To complete the significant diversion inventory, staff focused their efforts in high priority streamflow restoration watersheds. To date, 2567 significant diversions have been identified in 293 high priority watersheds. The number of significant diversions in priority watersheds within each of the major river basins is shown in the attached map. According to water right records, 543 of these significant diversions are required by conditions in the water right to have a measuring device installed.

In 2000, when the Commission endorsed the water measurement strategy, the goal was for all significant diversions identified on the inventory to be field-assessed by April 2005. To date, field staff have completed assessments of approximately 47% of the diversions in the inventory.

While these assessments have been a primary focus of the Department's Oregon Plan efforts, there are a number of reasons the assessments are not complete as scheduled. Locating, assessing, and entering data for each of these diversions has been more labor-intensive and challenging than originally anticipated. Since the April 2005 goal was identified, we have also had several low water years that have added to the regulatory workload of our watermasters and other field staff. Finally, the number of priority watersheds and number of the significant diversions increased over time but the schedule was not adjusted to reflect this additional workload. Field staff are optimistic that, even with the increased workload, all assessments will be completed by the Commission's July 2005 meeting.

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Field assessment data, to date, provide some interesting information. Of the 1209 diversions that have been inspected and entered into a database, 267 no longer exist or are unused, and 206 are required by condition to have a measuring device. However, only 62 have the required measuring devices installed (30%). Of the remaining 1003 diversions that have been field inspected, 208 (21%) have measuring devices installed, even though there is no requirement in their water right.

While the remaining assessments are completed, Field Services Division is developing strategies for bringing diversions required to measure in compliance with their permit conditions. They are also developing outreach and other options for increasing measuring at significant diversions not currently required to measure. These strategies and efforts will be discussed with the Commission at its July 2005 meeting.

### VI. Recommendation

This report is informational. No Commission action is required.

Attachment: Map of Significant Diversions in High Priority Watersheds

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