

MEMORANDUM

TO: Water Resources Commission

FROM: Barry Norris
Administrator, Technical Services Division

SUBJECT: Agenda Item K, May 21, 2004
Water Resources Commission Work Session

Instream Water Rights Water Use Report – Water Years 2001, 2002, and 2003

I. Issue Statement

As the holder in trust of instream water rights, the Department is required to report annual water use for instream water rights. This report provides the water use reports for instream water rights for water years 2001 through 2003. *This is an informational report only; no Commission action is required.*

II. Background

A. Water Use Reporting

ORS 537.099 requires that government entities holding water rights report water use on an annual basis. This requirement applies to the Department as the holder in trust of instream water rights (ISWRs). OAR Chapter 690, Division 85, adopted in 1988 and amended in 1991, requires water use reports to meet an accuracy standard of 15% unless a specific waiver is granted. When the Commission adopted these rules, it was recognized that continuous streamflow gages were not operated at all instream water right locations, so the 15% accuracy requirements would not be attainable on all ISWRs.

In 1993, the Commission granted the Department a waiver from the 15% accuracy standard. A copy of the order approving a waiver of the accuracy standard is provided in Attachment 2. The waiver applies to existing and future ISWRs when a continuous recording stream gage station is not located within the defined reach. The waiver is conditioned as follows:

1. The Department will submit annual water use reports with monthly flows based on the maximum allowed by the water right.
2. The Department will submit an annual progress report on efforts to bring all instream water rights into compliance with the Water Use Reporting rules to the Commission.

3. The Department will work with Oregon Department of Fish and Wildlife (ODFW) staff in an effort to prioritize instream water rights and bring them into compliance with the Water Use Reporting rules.

There have been up to 169 continuous recording streamflow gages operated by the Department or US Geological Survey (USGS) that measure streamflows at instream water right locations. The locations of these continuous streamflow gages and years of data available for each site are provided in Attachment 1. Published streamflow data for these sites is available on the Department's website at: www.wrd.state.or.us/surface_water/index.shtml.

In addition to continuous gaging stations, the Department also collects miscellaneous streamflow measurements and gage height data at staff gages to measure instream water use. Miscellaneous measurements are accurate but time consuming to collect. Gage height data, which is read from staff plates and calibrated to streamflow, does not meet the 15% accuracy standard; but these readings are quick and easy to collect and provide valuable data on instream water use. Watermasters use both miscellaneous measurement and staff gage readings to distribute water to ISWRs according to priority date of the water rights of record on a stream.

B. Interpreting ISWR Water Use Data

For the purposes of the water use report, streamflow measurements at both continuous and miscellaneous measurement sites that fall below the instream water right indicate the instream water right is not being "met." The percent of time that ISWRs monitored at continuous gaging stations are "met" is provided in Attachment 1. However, this characterization should be used with caution because, in many instances, the instream water right is junior relative to other rights on the stream. ISWRs have the same status as other water rights and are not guarantees that a certain quantity of water will be present in the stream. Each summer as streamflows drop, watermasters regulate junior users to provide water to more senior users. When streamflow measurements indicate that the quantity of water in a stream is less than the instream water right, the Department will require junior water right holders to stop diverting water. However, under Oregon law, an instream water right cannot affect a use of water with a senior priority date.

III. Discussion

A. Water Use Report

Water use data for ISWRs measured at continuous streamflow gaging stations for the available years of record (1991 through 2002 water years) is provided in Attachment 1. Of the 177 ISWRs measured at continuous gaging stations during this period, 113 were met more than 80% of the time. Water use data from continuous gaging stations and from miscellaneous streamflow measurements for the 2001 through 2003 water years is summarized below:

2001 Water Use Summary

For the 2001 water year, there were 1,437 ISWRs at 1,300 locations on 930 streams. The Department collected water use data on 26% of all ISWRs using continuous gaging stations or miscellaneous streamflow measurements. The Department had continuous gaging stations to monitor 183 ISWRs. In addition to these continuous streamflow records, the Department collected 1,152 miscellaneous streamflow measurements to monitor 190 ISWRs during the 2001 water year.

The Department concentrated its water use measurement activities during low flow summer months (July through September). During these months, 613 miscellaneous measurements were collected for 139 ISWRs. Of the 613 miscellaneous measurements collected, 189 recorded flows greater than the associated ISWR and 424 recorded flows less than the ISWR.

2002 Water Use Summary

For the 2002 water year, there were 1,447 ISWRs at 1,309 locations on 935 streams. Water use data was collected for 26% of all ISWRs. Continuous gaging stations monitored water use at 183 ISWRs. The Department collected 1,110 miscellaneous measurements to monitor 196 ISWRs.

The Department concentrated its miscellaneous measurement activities during low flow summer months (July through September). During these months 767 miscellaneous measurements were collected for 190 ISWRs. Of the 767 miscellaneous measurements collected, 249 recorded flows greater than the associated ISWR and 518 recorded flows less than the ISWR.

2003 Water Use Summary

For the 2003 water year, there were 1,451 ISWRs at 1310 locations on 940 streams. Of the total 1,451 rights, 25% were monitored. The Department had continuous gaging stations to monitor 183 ISWRs. The Department also collected 992 miscellaneous measurements to monitor 186 ISWRs.

During the summer months (July through September) the Department concentrated its miscellaneous measurement efforts on 128 ISWR locations. During these months, 657 flow measurements were collected for 153 ISWRs. Of the 657 miscellaneous measurements collected, 232 recorded flows greater than the associated ISWR and 555 recorded flows less than the ISWR.

B. Enhancing Water Use Reporting

As part of the Oregon Plan for Salmon and Watersheds, the Department and ODFW jointly identified priority areas for streamflow restoration in basins throughout the state. These priority areas represent watersheds in which there is a combination of need and opportunity for flow restoration to support fish recovery efforts under the Oregon Plan.

Since this joint prioritization was completed in early 2002, the Department has worked to enhance monitoring of ISWR in these priority watersheds and has made it a priority to monitor these watersheds. Watermasters and other field staff look for opportunities to partner with organizations such as watershed councils who can perform additional monitoring of streamflow for instream water rights in these priority watersheds. Watermasters also pursue funding opportunities to locate and install new continuous gaging stations and to install staff gages on ISWR reaches within priority watersheds.

IV. Summary

The Department expends considerable effort in maintaining existing continuous gaging stations and in collecting and analyzing these data. Over the past three years, there has been little variation in the number of ISWRs monitored by continuous gaging stations. While the Commission has waived the accuracy standard for reporting on ISWRs, the Department continues to look for opportunities to enhance streamflow monitoring for ISWRs. However, increasing and, in some cases maintaining these data collection efforts, is challenging given state budget limitations and reductions in other funding commitments.

V. Recommendation

This is an informational report only; no Commission action is required.

Attachments:

1. Listing of Gaging Stations for Instream Water Use Reports
2. Order Approving Waiver of Accuracy Standard for Reporting Annual Water Use for Instream Water Rights - Jan 7, 1994, Sp Order Vol 48 Page 51

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