

## MEMORANDUM FOR THE RECORD

COORDINATION TITLE - 20WVP05 Willamette mainstem flow target at Salem

DATE - 26 March 2020

PROJECT - Willamette Valley Projects

RESPONSE DATE - 31 March 2020

**Description of the problem**

As of 26 March 2020, the Willamette Valley River Basin has received less than 50% of normal precipitation and the snow water equivalent is 86% of normal. Refill of the Willamette Valley Project (WVP) began on February 1. System-wide inflow in February was 110% of average but by the end of the month, all projects were below rule curve. System-wide inflow in March has been 76% of average and storage has continued to lag. Currently, WVP system storage is 35% full and 31% below rule curve. Storing as much water as possible in April will allow projects to maintain minimum tributary flow thru the summer.

**Type of change/outage required**

Because of the current dry conditions and continued dry outlook, the minimum flow target for the mainstem Willamette River at Salem was decreased below criteria (17,800 cfs; detailed in the Biological Opinion) for the period of April 1 – 15 as proposed and recommended by the Corps, NMFS, and ODFW to be conservative for meeting other fish needs later in the year (e.g. spawning flows in the North and South Santiam). The minimum flow target for the mainstem Willamette River at Salem was changed from the 17,800 cfs minimum flow to instead target the natural flow that occurs from regulation of the WVPs and unregulated flows. During this period, regulation of the WVP consists of project releases that meet the minimum project outflow identified in the Biological Opinion with reductions at Foster and Big Cliff to flows of 1,100 cfs and 1,200 cfs respectively. As of 26 March 2020, flow at Salem in the Willamette River was 10,700 cfs.

**Impact on facility operation**

This will allow the WVPs to increase refill so that there is additional water to provide augmentation flows for the Willamette mainstem and tributaries during the summer and fall.

**Dates of impacts/repairs**

The temporary minimum flow target at Salem in the Willamette for April is effective April 1 through April 15. This operation will be re-evaluated by mid-April based on river temperature and fish movement to determine appropriate mainstem and tributary flows for the remainder of April.

**Length of time for changes/impacts/repairs**

Approximately 2 weeks.

**Expected impacts on fish**

There will be minimal impacts to fish with cool water temperatures in early April and fisheries benefits are expected later in the year with stored water available to augment summer low flows.