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INSIGHT

Drought in the Klamath River Basin

Updated March 2, 2022

Historic drought conditions in the Klamath River Basin (**Figure 1**) have received national attention and have led to increased conflicts among water users and other stakeholders. The basin includes the Bureau of Reclamation's Klamath Project, which delivers irrigation water to approximately 230,000 acres in Southern Oregon and Northern California. The Klamath Basin has a history of controversies related to water allocation and species protection. In the past, these issues have generated conflict among farmers, Indian tribes, fishermen, water project and wildlife refuge managers, environmental groups, hydropower facility operators, and state and local governments.

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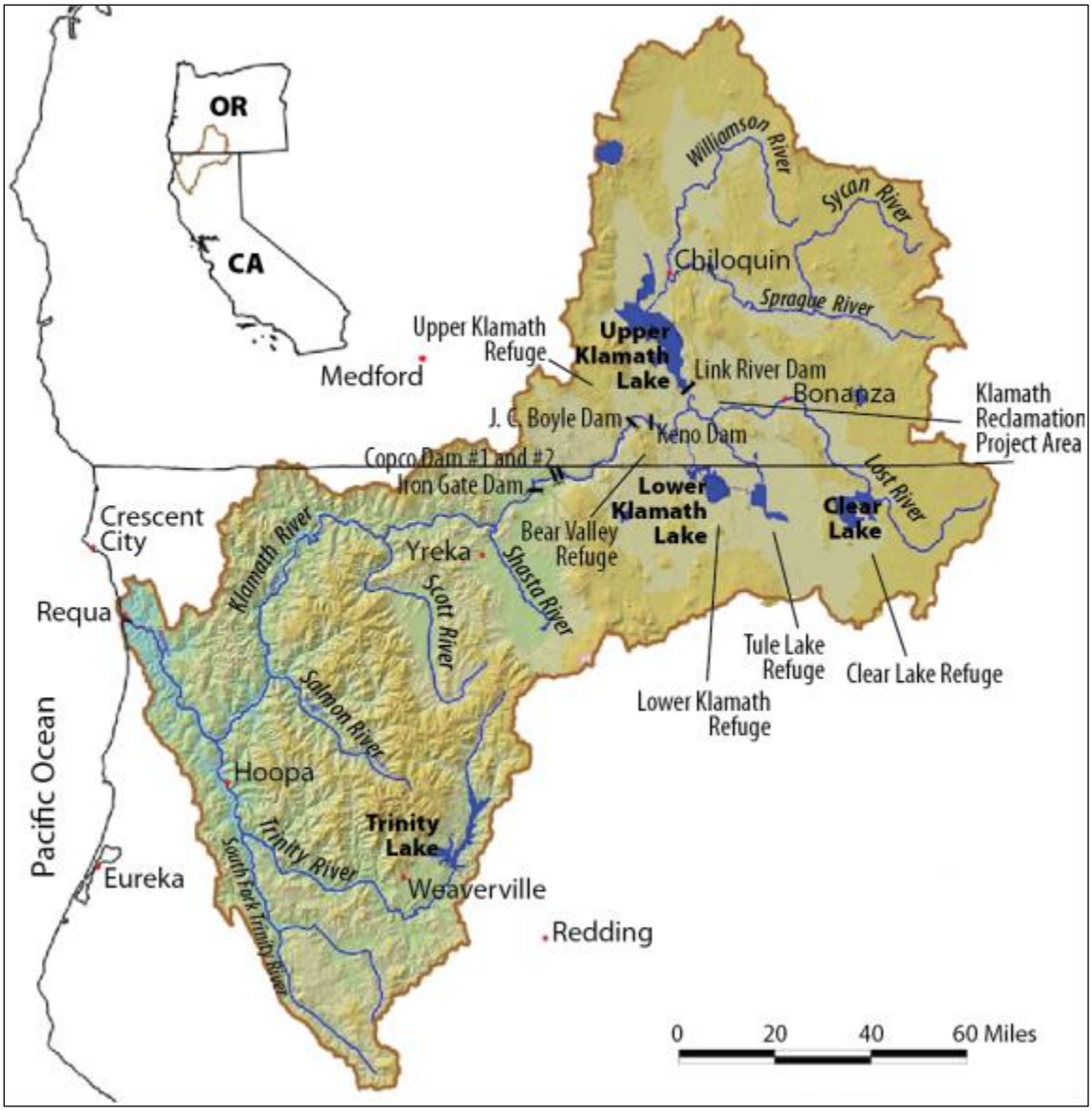
Figure 1. Klamath River Basin



Source: Bureau of Reclamation, adapted by CRS.

Background

Water supplies from both the federal Klamath Project and other *off-project* sources of water support irrigated agriculture, which is a driver of economic activity in the Klamath Basin. Other major users of Klamath Project water include six national wildlife refuges that sustain migratory bird habitat and several Native American tribes that rely on basin fish species. Currently, two species of upper basin fish (Lost River and shortnose sucker) are listed as endangered under the Endangered Species Act (ESA; P.L. 93-205), and one species of lower basin fish (coho salmon) is listed as threatened under the ESA. The basin also contains seven dams on the Klamath River and its tributaries, built between 1918 and 1962. PacifiCorp, a regulated utility, owns six of these dams (known as the Klamath Hydroelectric Project). The

original Federal Energy Regulatory Commission (FERC) license to operate these dams expired in 2006; FERC has since extended operations in multiple temporary annual licenses.

The Klamath Project has a history of conflicts associated with water deliveries. In 2001, Reclamation, at the direction of the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS), significantly curtailed water deliveries to the Klamath Project to provide more water for endangered fish. Irrigators protested these actions. In 2002, irrigators received significantly more water than in the previous year, but thousands of Chinook salmon died on the lower part of the Klamath River, largely due to poor water conditions and fish health in that part of the basin.

In response to earlier conflicts, the federal government facilitated formal negotiations in the basin between 2006 and 2010. The resulting agreements—the Klamath Basin Restoration Agreement (KBRA) and the Klamath Hydroelectric Settlement Agreement (KHSA)—aimed to resolve long-standing issues in the basin. The KBRA proposed actions to restore Klamath fisheries and support tribes, and it provided assurances for water deliveries to wildlife refuges and project irrigators. The KHSA outlined a process to remove four of PacifiCorp's dams on the Klamath River. These agreements were proposed but not enacted in prior Congresses. The process for removing the four PacifiCorp dams has gone forward, with the federal government no longer directly involved in dam removal. At the same time, Reclamation continues to operate the Klamath Project under recent biological opinions (BiOps) under the ESA for listed species.

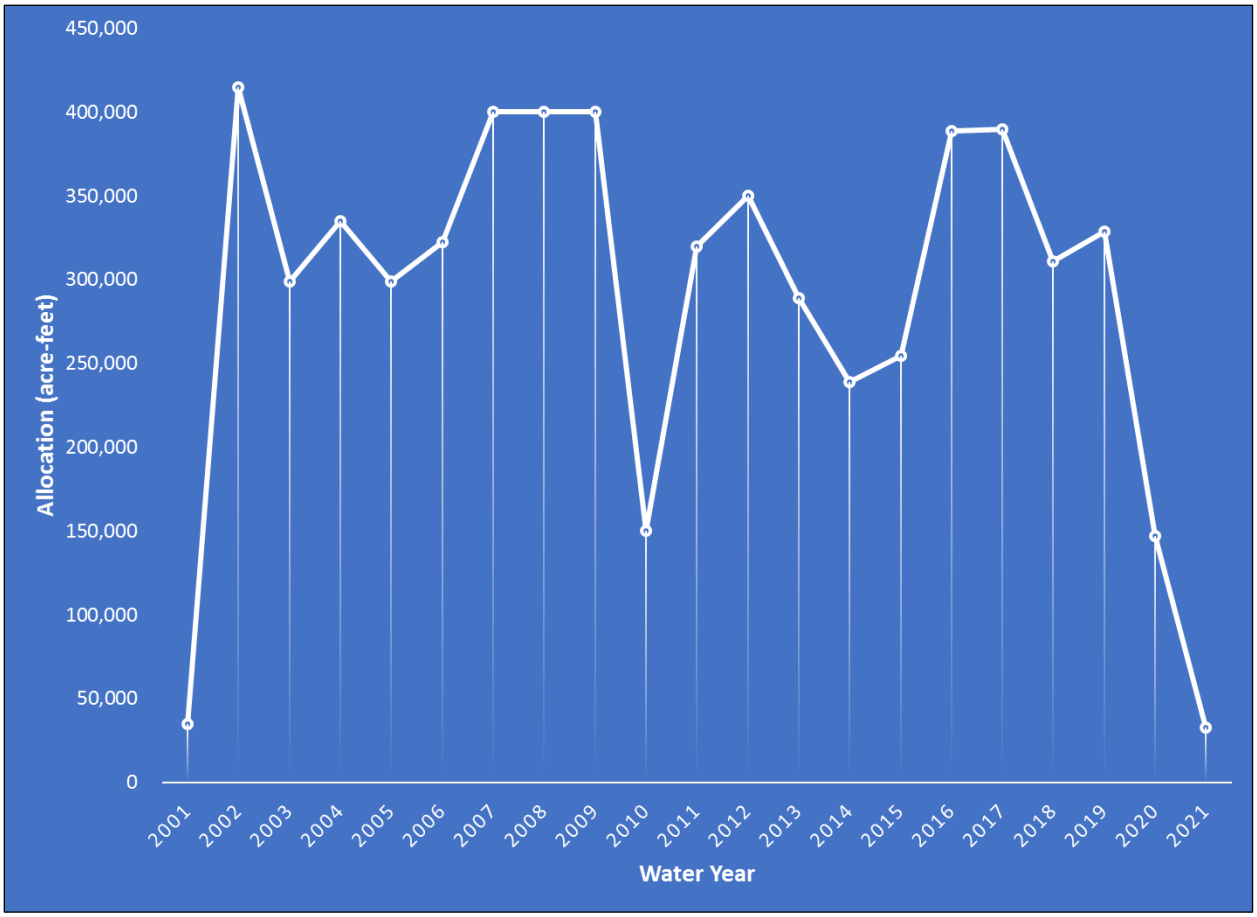
Previously, Congress has provided additional appropriations in response to issues in the basin, including the following:

- $20 million in the 2001 farm bill (P.L. 107-20) and $50 million in the 2002 farm bill (P.L. 107-171), for water conservation and drought relief efforts in the basin
- National Oceanic and Atmospheric Administration funds for fishery disaster determinations under the Magnuson-Stevens Fishery Conservation and Management Act in 2007 ($60 million), 2016 ($3.86 million), 2016-2017 ($8.96 million), and 2018 ($2.23 million)
- $17.57 million to Reclamation and other agencies in 2008-2011 for the Klamath Dam Removal Determination studies
- $62 million to Reclamation in 2001-2015 for the Klamath Water Bank and successor agreements
- $26 million to Reclamation from 2016-2020 for BiOp reconsultation and funding for other Klamath drought relief and water conservation efforts

Recent Drought and Federal Response

Recently, the Klamath Basin has faced some of its driest years in decades. Inflows in 2021 were at historically low levels, and Reclamation allocated only 33,000 acre-feet for irrigators (**Figure 2**). In May 2021, Reclamation announced the closure of the Klamath Project "A" canal, a major source of project releases. The agency also said it would not implement Klamath River surface flushing flows for salmon (an action it normally conducts pursuant to the ESA) during the current water year. Per terms in the BiOps, Reclamation created a Temporary Operations Plan (TOP) to manage water to address competing needs.

Figure 2. Klamath Project Water Allocations, 2001-2021



Source: CRS, based on Bureau of Reclamation data.

Notes: Does not reflect supply for areas served exclusively by Clear Lake and Gerber Reservoirs. The 2001 allocation does not reflect mid-season releases or water made available through emergency groundwater wells.

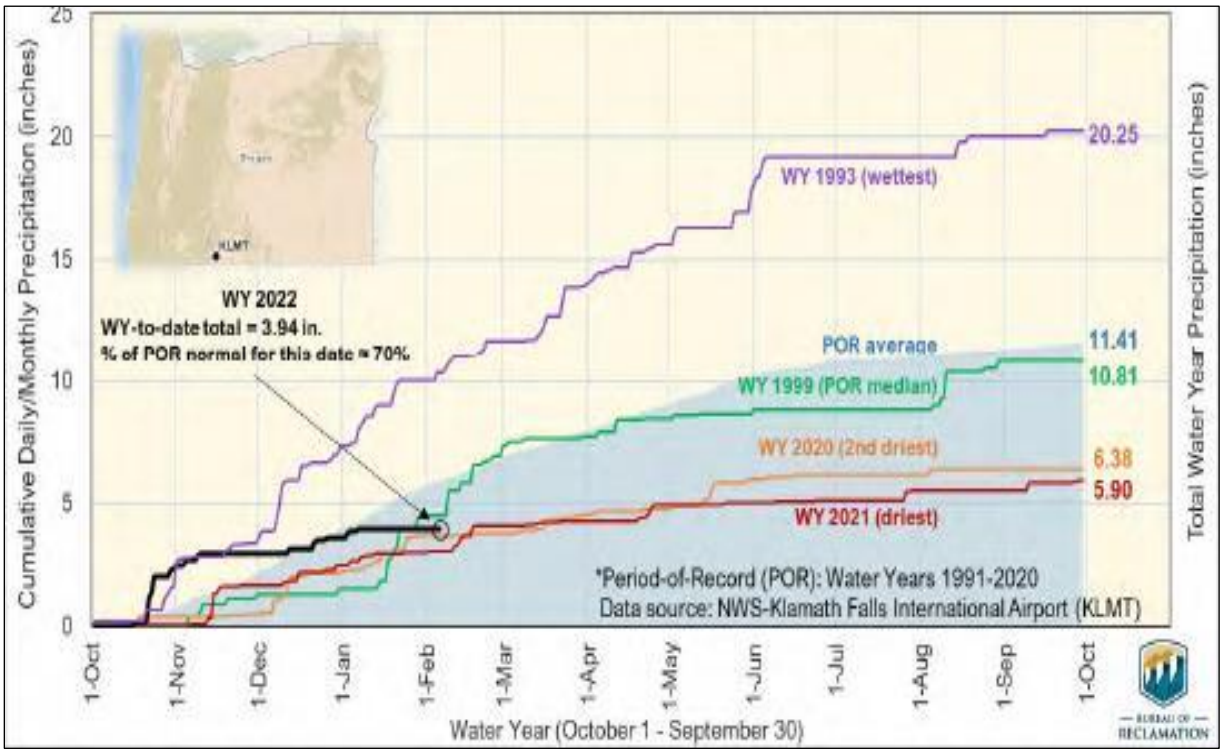
In response to the aforementioned 2021 drought conditions, the federal government provided additional aid in the basin, including the following:

- $15 million in Reclamation funding for the Klamath Drought Response Agency (DRA), which was announced in April 2021, plus $3 million in trial technical assistance for ecosystem activities
- $15 million for a U.S. Department of Agriculture block grant under the CARES Act (P.L. 116-136) to fund DRA producer payments to reduce irrigation demand.
- $10 million for Reclamation drought response in the FY2022 continuing resolution (P.L. 117-43)
- $162 million for ecosystem restoration on FWS-leased lands in the Infrastructure Investment and Jobs Act (P.L. 117-58)

Conditions in the basin are again below average in 2022 (**Figure 3**). Reclamation's Klamath Project allocations are expected in April 2022 and may lead to stakeholder calls for additional federal aid and other actions.

Figure 3. Klamath River Basin: 2022 Hydrology in Context

(2022 conditions at Klamath Falls, OR, as of February 7, 2022)



Source: Bureau of Reclamation, Klamath River Basin Hydrologic Outlook, February 8, 2022, at https://www.usbr.gov/mp/kbao/docs/2022-02-08-kb-hydrologic-outlook.pdf.

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