HOUSE COMMITTEE ON
NATURAL RESOURCES
CHAIRMAN BRUCE WESTERMAN

To: Committee on Natural Resources Republican Members
From: Committee on Natural Resources staff: Annick Miller, x58331 (annick.miller@mail.house.gov), Thomas Shipman (thomas.shipman@mail.house.gov), and Lindsay Walton (lindsay.walton@mail.house.gov)
Date: Tuesday, October 8, 2024
Subject: Oversight Hearing on *"It All Depends on Water: Examining Efforts to Improve and Protect Central Oregon's Water Supply"*

The Subcommittee on Water, Wildlife and Fisheries will hold an oversight hearing on "*It All Depends on Water: Examining Efforts to Improve and Protect Central Oregon's Water Supply"* on **Tuesday, October 8, 2024, at 10:00 a.m. (PDT) at the South Sister Conference Center in the Deschutes County Fairgrounds in Redmond, Oregon.**

Member offices are requested to notify Madeline Kelley (madeline.kelley@mail.house.gov) by 4:30 p.m. on Monday, October 7, 2024, if their Member intends to participate in the hearing.

I. KEY MESSAGES

- Local water challenges must be met with locally driven solutions.
- The best water conservation solutions are developed by local interests and are tailored to the unique circumstances of each region. These solutions are driven most effectively by genuine incentives rather than the issuance of directives from faraway places.
- In the Deschutes River Basin, we have seen how collaboration between irrigation districts, conservation groups, tribes, cities, and others allow for agriculture to continue while protecting and recovering species.

II. WITNESSES

- **Mr. Bobby Brunoe,** Secretary-Treasurer, Confederated Tribes of Warm Springs, Warm Springs, OR
- **Dr. Trish Backsen, DVM,** Farmer and Owner, Oregon Feed and Irrigation, Redmond, OR
- **Mr. Jeff Larkin,** Owner, Jeff Larkin Realty, Redmond, OR
- **Mr. Pat Gaylord,** Geomatics Service Excellence Leader, David Evans and Associates, Inc., Happy Valley, OR
- **Mr. Anthony DeBone,** Commissioner, Deschutes County, Bend, OR

III. BACKGROUND

Deschutes River Basin

The Deschutes River Basin, located in the heart of central Oregon, encompasses more than 10,000 square miles and is the second largest watershed in the state.[1] Its unique positioning—east of the Cascades Mountains and west of the Ochoco Mountains—allows for a steep flow path, dropping over 4,500 feet to the Columbia River.[2] The primary contributor to the basin is snowpack, which recharges the groundwater aquifer and feeds the Upper Deschutes primarily through springs.[3]

Figure 1 Deschutes River Basin | Source: Oregon DEQ

More than 100 years ago, federal and state policies encouraged the settlement of central Oregon's high desert by facilitating access to land and irrigation water.[4] This water has made possible the diverse agricultural sector that has helped shape the region. The Deschutes River Basin provides water for eight irrigation districts, which largely support the agriculture sector, which is critical for the region's economy.[5] Central Oregon was one of the fastest growing regions in the United States in 2023 and supports the state's economy in many ways.[6] From 2010 to 2022, Oregon's population increased nearly 12 percent;[7] while Bend and Redmond, Oregon, grew at 34.2 percent and 43.3 percent, respectively.[8] The area is also a popular tourist destination, with 3.9 million people visiting central Oregon annually.[9] The rapid growth in Jefferson, Deschutes, and Crook Counties has put added pressure on the region's water supply to meet current and future demands.[10]

Over the past two decades, irrigation districts, governmental entities, and conservation groups have collaborated to address these issues. Basin stakeholders have collaborated to implement

---

[1] Deschutes River Conservancy, "Get to Know the Deschutes River Basin" https://www.deschutesriver.org/deschutes-basin-101/get-to-know-the-deschutes-river-basin.
[2] *Id*.
[3] *Id*.
[4] U.S. Bureau of Reclamation, "Upper Deschutes River Basin Study," October 2019. https://www.usbr.gov/pn/studies/deschutes/finalstudy.pdf
[5] *Id*.
[6] EDCO. 2023 Central Oregon Economic Profile. https://edcoinfo.com/wp-content/uploads/2023/09/2023-Central-Oregon-Profile-Final.pdf at 4.
[7] *Id.* at 5.
[8] *Id.*
[9] *Id.*
[10] Deschutes River Conservancy. Deschutes Basin 101: Where Does the Water Go? https://www.deschutesriver.org/deschutes-basin-101/where-does-the-water-go

water conservation and water marketing projects that restored significant flows to basin rivers and streams and aided groundwater uses.

Water Supply Development

The Bureau of Reclamation (Reclamation) has long been involved in constructing and developing water infrastructure along the Deschutes River Basin in Oregon. Irrigation is necessary to promote and support the agriculture sector. Prior to the popularization of dryland wheat production, the basin was primarily devoted to grazing sheep and cattle.[11] While irrigation development started in 1871, Reclamation development did not occur until 1914 when a comprehensive report of the Deschutes River Basin was issued under the joint sponsorship and financing of the State of Oregon and the federal government.[12]

The initial investigations for the North Unit Irrigation District proposed a project that would have irrigated 133,000 acres; however, due to funding restraints associated with World War I, construction never took place.[13] Reclamation continued its efforts to develop the Deschutes River Basin water infrastructure and made significant progress after a 1936 study was published that explored all storage possibilities above the Crooked River.[14] In tandem with this study, the Deschutes Project was authorized in 1937 by the Secretary of the Interior.

Construction on the North Unit Main Canal began in 1938 and on the Wickiup and Crane Prairie Dams in 1939. The canal and Crane Prairie Dam were completed on time; however, Wickiup suffered significant delays due to complications during World War II.[15] The last dam completed as part of this project was the Haystack Dam, which began construction in 1956 and was completed the following year. While the authorized purpose of this project is irrigation, the dams provide an additional benefit of flood control.

These dams collectively store more than 250,000 acre-feet of water, with the largest, Wickiup, storing up to 200,000 acre-feet.[16] This water is primarily irrigated to produce grain, hay, pasture, mint, potatoes, and seeds.[17] As part of the project, water is diverted from the Wickiup Reservoir into the North Unit Main Canal and pumped over 40 miles north to Haystack Dam, where it is stored until needed for irrigation. To the northeast of Redmond is the Crooked River Pumping Plant, where water is pumped 150 feet from the Crooked River Gorge into the North United Main Canal to provide additional irrigation capacity.[18] Construction of the pumping plant was completed in 1968.[19]

The Central Oregon Irrigation District and the North Unit Irrigation District are currently engaged in a multi-year process to pipe water from the Pilot Butte Canal to bring additional

---

[11] United States Bureau of Reclamation. Deschutes Project. https://www.usbr.gov/projects/index.php?id=445&csrt=9101729379384694784
[12] *Id.*
[13] *Id.*
[14] *Id.*
[15] *Id.*
[16] United States Bureau of Reclamation. The Story of the Deschutes Project. https://www.usbr.gov/projects/pdf.php?id=223
[17] *Id.*
[18] United States Bureau of Reclamation. Deschutes Project. 1996. https://www.usbr.gov/projects/pdf.php?id=112
[19] *Id.*

water resources to the region's multiple water users.[20] This project will bring many benefits to central Oregon: more than 3,000 jobs, improved habitat for fish and wildlife in the region, and a more reliable water supply to the region's farmers.[21]

Water Certainty and Endangered Species Act Compliance

The Deschutes River Basin, like many other river systems in the American West, has faced significant challenges in complying with the Endangered Species Act (ESA). Farmers in the region have faced risks and uncertainties to their water supplies for years. However, almost two decades ago, the eight irrigation districts in the basin (organized as the Deschutes Basin Board of Control or DBBC) began to develop a long-term plan that would provide certainty for agricultural water supplies while, at the same time, water for the listed species.

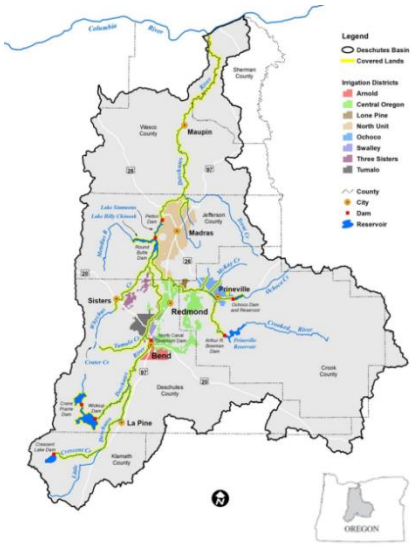

Figure 2 Map of Deschutes Basin | Source: USFWS

The Deschutes Basin Habitat Conservation Plan (HCP) was the product of 12 years of scientific study, hard work, and collaboration between irrigators, federal and state agencies, the Confederated Tribes of the Warm Springs Reservation, cities, counties, multiple non-governmental organizations, and the public in the Deschutes Basin.[22]

An HCP is a "planning document designed to accommodate economic development to the extent possible by authorizing the limited and unintentional take of listed species when it occurs incidental to lawful activities."[23] Finalized in 2020, the Deschutes HCP covers approximately 10,500 square miles of land in central Oregon and has a 30-year term.[24] It provides a pathway and timeline for modernizing the DBBC's water delivery systems through canal piping and other projects.

In exchange for the commitments to conserve water over time through the HCP, the DBBC districts are authorized to continue to access their water supplies without running afoul of the ESA. As required under the HCP, the DBBC districts and irrigators are making significant financial investments to implement water conservation measures, such as canal piping.[25]

---

[20] Central Oregon Irrigation District. Formal Public Scoping Meeting. Pilot Butte Watershed Plan/Environmental Impact Statement. July 19, 2022. https://coidpiping.com/wp-content/uploads/2022/07/COID-formal-scoping-meeting_final_.07.20.22.pdf

[21] *Id.*

[22] Testimony of Dan Keppen, Executive Director of Family Farm Alliance, before the House Subcommittee on Water, Wildlife and Fisheries, March 8, 2023. https://docs.house.gov/meetings/II/II13/20230308/115450/HHRG-118-II13-Wstate-KeppenD-20230308.pdf.

[23] "Habitat Conservation Plans." U.S. Fish and Wildlife Service. Habitat Conservation Plans | U.S. Fish & Wildlife Service (fws.gov)

[24] "Deschutes River Basin Habitat Conservation Plan." U.S. Fish and Wildlife Service. Deschutes River Basin Habitat Conservation Plan | U.S. Fish & Wildlife Service (fws.gov)

[25] *Id.*

Federal Lands Management and Water Supply

Forests play a critical role in watershed health and are key to ensuring safe and reliable supplies of clean drinking water across the United States. In Oregon, more than 32 million acres, constituting roughly 53 percent of the land base, are owned by the federal government,[26] making federal land management, particularly forest management, critically important for water supply.

Across the country, more than one billion acres are at risk of wildland fire.[27] Federal land management agencies have identified 117 million acres of federal land at high or very high risk for wildfire, representing nearly one-fifth of the overall land they oversee.[28] These high-risk federal forests are overloaded with dangerous dry fuels that have been allowed to accumulate through a century of fire suppression combined with a lack of thinning, prescribed burns, and mechanical treatments.[29] Overstocking makes forests less resilient by increasing competition among trees for the water, minerals, and sunlight necessary to sustain a healthy forest. The West's unprecedented drought has further weakened overgrown national forests, leaving them extremely vulnerable to wildfire. Recent research has shown that some areas are experiencing the driest conditions in 1,200 years.[30] These conditions have turned vast swaths of the nation's forests into ticking time bombs that can ignite with a single spark. It is no longer a matter of "if" these areas will experience catastrophic wildfire but "when."

Oregon is no exception. The state has experienced exceptional drought, with the past two decades labeled as "the worst megadrought on record."[31] The semi-arid climate, combined with Oregon's geology, makes drought recovery that much more difficult, as the need to recharge the deficit of water in the aquifers.[32] Additionally, the ever-persistent wildfires in the Deschutes National Forest have severely damaged central Oregon's recreation and tourism industries.[33] These dynamics—the ecological importance of the basin, the many ways this region influences the state's economy, and the anticipated increase in resources that will be needed due to population increases—highlight the importance of actively managing the watershed's environment and infrastructure. To balance the interests of the many stakeholders that are end users of the basin's water, the region has a long history of collaboration between conservation groups, the agriculture sector, and others across the region.[34] That collaboration and engagement provide many lessons that can be applied at the federal level.

---

[26] Congressional Research Service, "Federal Land Ownership: Overview and Data," February 21, 2020, R42346, https://crsreports.congress.gov/product/pdf/R/R42346.
[27] Testimony of Christopher French, Deputy Chief, U.S. Forest Service, before the Senate Energy and Natural Resources Committee, June 24, 2021, https://www.energy.senate.gov/services/files/AAF7DF40-2A47-4951-ADA4-4B124AD3894F.
[28] Hoover, Katie, "Federal Wildfire Management: Ten-Year Funding Trends and Issues (FY2011-FY2020)," October 28, 2020, CRS, R46583.
[29] Ingram, Robert G. "Robert G. Ingram: Forest Fuel Management - the Ugly Truth." *TheUnion.com*, October 9, 2020, www.theunion.com/opinion/columns/robert-g-ingram-forest-fuel-management-the-ugly-truth/.
[30] *Id.*
[31] State of Oregon Official Website. Oregon Drought. https://www.oregon.gov/owrd/programs/climate/droughtwatch/Pages/default.aspx.
[32] Deschutes River Conservancy. Bend Bulletin – Central Oregon gets a break from drought, but threats still loom. June 15, 2024. https://www.deschutesriver.org/in-the-media/bend-bulletin---central-oregon-gets-a-break-from-drought-but-threats-still-loom
[33] United States Forest Service. Wildfire Crisis Strategy: Central Oregon Landscape. https://www.fs.usda.gov/detail/deschutes/landmanagement/resourcemanagement/?cid=fseprd1070210
[34] Deschutes River Basin Building Formal Collaboratives to Leverage Federal Funding. https://www.rivernetwork.org/wp-content/uploads/2023/03/deschutes-river-amp-case-study-river-network.pdf