A Critical Investment in the Future of the Klamath

We are pleased to present this update on Ducks Unlimited's actions in year one of our five-year *Klamath Basin Initiative* and to thank you for your investment and support. You are a vital part of Team DU, and your private funding is the fuel supporting us in driving positive change in the Klamath. In year one, 24 donors made gifts and pledges of more than \$900,000. *YOU are making a difference, thank you!*

Through the *Initiative*, we are bringing leadership and visionary thinking to a stalemated and deteriorating Klamath Basin. Our work toward multi-beneficial solutions is accomplished through leading collaborative efforts with farmers and ranchers, fishery interests, and waterfowl habitat managers. Together, we are re-thinking what is possible to bring forward a new system, integrating wetlands into the recovery of endangered fish, sustainable agriculture, and vibrant waterfowl habitat.

There are no quick fixes in the Klamath Basin. Your continuing support of the *Klamath Basin Initiative* is critical not only to sustain but also to accelerate our work. The future of the Pacific Flyway will be driven by what happens next in the Klamath Basin. Team DU is determined to ensure that future is bright. *Thank you again!*

The Western Region Development Team:

Denise Barrett, Jessop Boden, Garrett Coussens, Anne Hansen, Tim Le Clair, Steve Schmitt, Todd Stoa

Fighting an Uphill Battle in a New Water Era

I am a firm believer that the challenges of today present opportunities for a better tomorrow. The western drought is worsening, and our nation's two flagship waterfowl refuges, Lower Klamath and Tule Lake, are the driest they have ever been. Team DU has had a strong presence in the Klamath Basin, and we are ramping up our efforts now to make significant, long-term impact there for wetlands and waterfowl.

There is perhaps not a more complicated water allocation system in this country than the Klamath Irrigation Project, where the two refuges are at the bottom of the priority list. Limited water supplies due to drought, exacerbated by Endangered Species Act policies, are creating division among water related interests and stalemating finding solutions using traditional thinking. Waterfowl are caught in the middle and are suffering. The situation is dire and there is no easy fix.

Yet difficult does not mean unworthy. Team DU excels at solving landscape scale wetland challenges. Helping the refuges and associated agricultural

partners adapt to a new water era is clearly key. Our challenge – and opportunity – is to bring about multi-faceted, collaborative, and innovative long-term solutions using new thinking amidst drought and disaster.

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Our vision is a Klamath Basin capable of supporting thriving waterfowl populations, productive farmland, abundant fisheries and the cultural values of each. To that end, Team DU is rethinking what is possible by leading a cooperative effort to use Tule Lake as the linchpin driving these multiple benefits.

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We believe that our best opportunity to make the most impactful contribution for waterfowl with broad support is to focus on the wetland-based benefits that Tule Lake can provide. While pursuing this priority, we will continue with a series of complementary near-term actions throughout the Klamath Basin.

This challenge brings DU's leadership style and water resource engineering skillset to the forefront in a way that no other group can match. There is high level interest to proceed with this concept, which can be a model of successful collaboration toward a multi-benefit solution for the Basin's water woes.

Through your support, Ducks Unlimited is the Leader in Wetlands Conservation. Our team is second to none in thinking outside the box and working collaboratively. That is precisely the recipe for success in the Klamath Basin.

Nothing is easy. This is the least difficult path forward in a nearly intractable situation, and yet can be the most impactful. We can do it. We *are* doing it. With your help, we will succeed.

We look forward to keeping you posted on our progress. Thank you.

Jeff McCreary
Director of Operations, Western Region

Key accomplishments – 2021/2022:

Transforming Historic Tule Lake to Benefit Waterfowl, Other Wildlife and Water

The Lost River begins and ends in a closed basin in northern California and southern Oregon. It flows in an arc from Clear Lake Reservoir in California, through southern Oregon and back into Tule Lake. Historically, the Lower Klamath National Wildlife Refuge (NWR) received 80% of its water from the Tule Lake system. We believe that the key to adapting the Refuges to a new, progressive paradigm of water use is to focus on restoring the Lost River system with the multiple benefits for wetlands, fish, agriculture, and ground water recharge. Restoring the Lost River may also help to facilitate a future return of water transfers from Tule Lake NWR to Lower Klamath NWR.

The DU Team has been thinking about, planning for, and implementing projects in pursuit of this concept for well over a year, focusing on the bottom of the system at Tule Lake NWR and working closely with the Refuge and Tulelake Irrigation District (TID). Here is a summary of some of our actions.

Immediate Actions to Maximize Water Efficiencies and Benefit Habitat at Tule Lake NWR

Team DU submitted a proposal that will begin improving the Tule Lake NWR water management system to revitalize this critical wetland habitat. The two large agricultural sumps are the remnants of the historic Tule Lake and when functioning, Sump 1A is 9,000 acres and Sump 1B is 3,500 acres. DU is also actively pursuing funding from the Wildlife Conservation Board (WCB) for a comprehensive infrastructure assessment to improve wetlands health, fish recovery, and agriculture. This study includes DU-led topographic surveys, identifying project alternatives, a 75% engineering design, and environmental permitting. This work is expected to take about three years. Some activities, such as the topographic surveys, are already completed.

Your *Klamath Basin Initiative* gifts have been invested in the initial phase of this effort that will lead to the engineering and actual infrastructure phase beginning in spring 2023; *thank you*.

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DU has developed a list of "shovel ready" infrastructure improvement projects to continue this important work. We are also in conversations with interested parties about funding and next steps. For example, DU staff recently participated in the Klamath Basin Integrated Fisheries Restoration and Monitoring Plan (IFRMP) workshop. One aspect of the plan is a Priority Restoration Tool to rank restoration strategies intended to drive public funding streams. DU successfully advocated to include the Tule Lake NWR Integrated Management Plan as a high priority restoration strategy for the Lost River Basin, a significant step forward.

DU's participation in this critical public funding prioritization process is supported through your gifts to the *Klamath Basin Initiative; thank you*.



Tule Lake NWR, August 2020. Southeast corner, Sump 1B.

Leadership and Coalition Building

Over the past year, Team DU led numerous meetings with key groups to fully understand the complicated water mechanics, policy, and regulatory history, as well as the complex interpersonal dynamics of the Basin. We identified where DU's leadership and collaboration strengths are value added to a solution that integrates wetlands to provide multiple benefits for waterfowl, and improves the entire watershed for fish, agriculture, and communities.

We established and maintained solid relationships with key partners: refuge leadership, Bureau of Reclamation (BOR), Klamath Water Users Association (KWUA), Klamath Drainage District, (KDD), Tulelake Irrigation District (TID), farmers and ranchers, and established relationships with Tribal Leaders.

You are an important member of Team DU, and your support is crucial to these actions; thank you.

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Public Policy

The Bipartisan Infrastructure Law, signed by President Biden in November 2021, has five focus areas across the country, including a historic investment in the Klamath Basin. In March 2022, the U.S. Fish and Wildlife Service began soliciting year one project proposals. DU immediately began conversations with water users to identify and prioritize infrastructure projects to propose. More than 80 proposals were submitted and in August, \$26 million of funding became available, including \$10 million to expand the fish hatchery and nearly \$16 million for ecosystem restoration projects. Of that, DU received the largest non-fish, shovel-ready grant for \$2.6 million for water management infrastructure improvement at the two Refuges (see details below). This is the first round of investments from the bill that provides a total of \$162 million investment over five years in the Klamath Basin. DU will continue to submit project proposals to this important funding source in future years.

Science

Waterfowl Survey

As the western U.S. continues to be gripped by drought, DU is investigating how a lack of water and wetlands is impacting ducks and geese in the heart of the Pacific Flyway. During fall 2022, DU led coordination with our state, federal, and other NGO partners to fund and conduct aerial waterfowl surveys throughout the Klamath Basin, the broader southern Oregon, and northeastern California landscape, as well as within the Central Valley, to better understand how the drought is affecting waterfowl numbers and distribution. The outcomes of this research may be critically important in future droughts to identify waterfowl habitats that are crucial conservation priorities. DU is also supporting the efforts of the California Rice Commission, the U.S. Geological Survey, and the California Department of Fish and Wildlife to mark 80 ducks and 80 geese in the Central Valley with satellite transmitters to collect real time data on how the birds behave and move during this record setting drought.

Economic Impacts

Ducks Unlimited is partnering with the Klamath Water Users Association, Oregon State University, Klamath, Siskiyou, Modoc counties, and others to fund a study of the economic impact of changing water supplies for the Klamath Project with respect to agriculture and refuge-based recreation, including the economic value of recreation outside the Basin, based on the role of the refuges in maintaining the Pacific Flyway.

Your Klamath Initiative gifts are helping move these efforts forward; thank you.

Complementary Actions

Project Completed: Pump Station at Lower Klamath NWR to Reuse Agricultural Drain Water

The Unit 2 Pump Station Project, located along the Straits Drain, can re-use water both within the

Refuge and provided through a cooperative partnership with the KDD and landowners. This partnership

allows water used to irrigate nearby fields to have a second life in supporting thousands of acres of

critical wetland habitat. Last spring, this agreement was key to securing the only agricultural water that
the Refuge received in 2022, helping to limit impacts in a drought year when every drop of water counts.

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New Funding Secured: Four Pump Stations

The \$2.6 million funding secured in August from the Bipartisan Infrastructure Bill will be used to build four pump stations, two each in both Lower Klamath NWR and Tule Lake NWR. Together, these pump stations will improve water supply reliability and functionality on more than 20,000 acres of wetland habitat on both Refuges, while also improving irrigation efficiency and decreasing operational costs for more than 20,000 acres of irrigated agriculture. These pumps are not going to make more water, but when water does become available, we'll be able to maximize the benefits – vital in this new water era. Timeline to completion: 18 to 36 months.

Progress Report: Lower Klamath NWR Unit 2/3 Re-Route Project

Progress continues on the Unit 2/3 Re-Route Project, a major water-use conveyance and efficiency project that will streamline water delivery and improve water management capabilities for the Lower Klamath NWR. The assessment will be completed in Spring 2023, at which time we will submit a grant proposal to WCB for construction funding.

Update: Airboat Motor Purchase and Duck Hospital

We recently purchased and installed a new airboat motor to replace the Refuge's aging equipment. Airboats are critical to access shallow water and manage botulism outbreaks by saving sick birds and collecting dead ones to limit the outbreak. While the Refuge did not need "duck hospital" services this year, DU stands ready to provide funding to respond to future potential botulism outbreaks.

Next Steps: Upper Klamath NWR

We are helping to plan and leading implementation of the Upper Klamath NWR Barnes-Agency Restoration Project, a 14,000+ acre effort to benefit fish, water quality, and waterfowl. The U.S. Fish and Wildlife Service is finalizing the environmental assessment, and DU is completing engineering design and beginning permitting. Phase I is slated for construction in summer 2023.

Future Potential: Private Agricultural Lands:

In early 2022, the Klamath Basin Farming and Wetland Collaborative Regional Conservation Partnership Program (RCPP) received a \$3.8 million USDA Farm Bill grant to implement conservation projects that provide temporary habitat for migrating waterfowl on working agricultural lands. The RCPP grant offers financial incentives for agricultural producers to meet critical habitat requirements, providing short-term relief for migratory birds. Landowners will receive payments to either leave standing grain or to fall/winter flood their



The Klamath Basin hosts the largest wintering concentration of bald eagles in the lower 48 states.

fields. The latter is presumed to be minimal this year, but despite the ongoing extreme drought conditions, landowner sign-ups have nearly exhausted the first-year allocations. This will provide thousands of acres of supplemental fall and winter habitat this year in the Klamath Basin and funds remain for at least two more years.

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Thank You

Your gifts to Ducks Unlimited make a difference. DU invests at least 80 cents of every dollar in our conservation mission and in fiscal year 2022, our efficiency was 83%. Your contributions help to secure the future of wetlands and waterfowl here in the Pacific Flyway and across the continent.

This is our flyway and our challenge. Thank you.



Ducks Unlimited conserves, restores, and manages wetlands and associated habitats for North America's waterfowl. These habitats also benefit other wildlife and people.

To learn how you can help, please contact:

Anne S. Hansen

Sr. Director of Development 901.605.3647

For your convenience, make a pledge payment or new unrestricted gift online here.

www.ducks.org/california

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