Tule Lake Flow-Through
An Achievable Solution

Back row, L-R: Dave Hammel, irrigator; Gene Souza, KID manager; back row middle: Gary Derry, Shasta View ID; Front L-R: Brad Kirby, TID Manager; John Vradenberg, biologist US Fish and Wildlife; Frankie Meyers, Yurok tribe member; Mike Belchik, Yurok tribe fish biologist; Toz Soto, Karuk tribe fish biologist; John Crawford TID/KWUA; William Ray, Klamath tribe chairman; Mike Mckoen, KWUA VP; Charlotte Seus, next generation; Scott Seus, KWUA president; Ryan Ray, Yurok tribe council member

Photos by Elizabeth Nielsen

By Barbara March

The Klamath Basin has spent two decades focused primarily on a single management approach: dividing up available water according to Endangered Species Act (ESA) mandates. The Klamath Water Users, irrigation districts and the farmers and ranchers they serve all agree, this narrow approach has failed.

Now an opportunity has emerged to move beyond conflict and toward solutions that improve conditions for fish while sustaining the farms, refuges, wildlife, and communities that depend upon the connectivity of Basin water.

The proposed Tule Lake Flow-Through would move water continuously from Upper Klamath Lake (UKL) through the Klamath Basin's agricultural lands and wetlands within the Klamath Basin Refuge Complex. This managed conveyance-treatment-return system would use canals, farms, lakes, wetlands and drains as one connected hydrologic network similar to its ancient past.

Elizabeth Nielsen, executive director of the Klamath Water Users Association believes the Klamath Basin has the infrastructure, expertise, and drive to make the Tulelake Flow-Through happen.

"Tulelake Flow-Through represents a tangible opportunity to improve conditions across the Klamath Basin," she said. When we talk about the Basin, we're talking about farms and ranches, fish, wildlife and refuges, the headwaters and the river, and the communities water supports. They're all connected; they can all work together."

Since 2001, water management in the Klamath Basin has been heavily influenced by mandates issued under the Endangered Species Act (ESA) for the purpose of protecting listed fish species. As a result, water allocations have increasingly prioritized instream water volumes and lake levels, often leaving farms, ranches, wildlife refuges, and rural communities with reduced water supplies. Yet, despite these regulatory actions, fish populations have not improved.

Nielsen noted that "The 2025 water year showed us what the system is capable of when there is water on the landscape. Wetlands responded, wildlife responded, and the benefits were felt throughout the Basin. Flow-Through gives us a chance to build on those successes."

This modernized flow-through concept emphasizes water quality, sustainable agriculture, groundwater recharge, wetland habitat and native fish recovery. Mimicking natural hydrologic conditions Flow-Through water would move continuously from Upper Klamath Lake through agricultural lands, the Tule Lake and Lower Klamath Wildlife Refuges and return to the Klamath River with the goal of improved water quality.

Maintaining live flows through pumping and infrastructure would immediately benefit agriculture by reducing damage to irrigation infrastructure, improve operational uncertainty for water users, limit reliance on groundwater pumping and eliminate the stress and uncertainty that have plagued Klamath irrigators for nearly three decades.

Continuous soil moisture could improve efficiency by lowering the total volume of surface water required to charge

Klamath tribe chairman William Ray, Tulelake Irrigation District president John Crawford, Yurok tribe member Frankie Meyers

John Vradenberg, biologist USFW

the system annually while sustaining crop and livestock production. This approach would restore the shallow aquifer which has also suffered since 2001. Flow-Through would bring back healthy soils and productive farmland, stabilize rural wells, maintain ground stability critical for infrastructure and ultimately recharge the local economy which is dependent on the health and vigor of Klamath Basin agriculture.

Environmental benefits would include managing the Tule Lake and Lower Klamath Refuges as dynamic, functioning wetlands instead of static storage areas. In other words, the refuges would be put back to their natural work; filtering nutrients from flowing water and providing needed habitat for migratory birds and other wildlife while addressing the seemingly never-ending challenge of poor water quality, dust storms, disease outbreaks and grasshopper infestations.

Botulism in particular, is best managed with continuously moving water. This devastating disease thrives in stagnant water and has killed hundreds of thousands of waterfowl in the refuges over the last 20 years. The desire to help the refuges manage botulism is bringing farmers, Tribes, conservation groups and agencies together in conversations about what is best for the Klamath ecosystem and communities.

Fish, including salmon and suckers could benefit with improved water flow and expanded habitat availability across canals, wetlands, and managed waterways due to a combination of fish screening and fish passage improvements at key locations. Nielsen noted that the KWUA is actively coordinating with the federal government (Bureau of Reclamation) regarding future infrastructure protocol.

"Now we need to start doing," said Nielsen. "Botulism has already started in the refuges, and without quick action we are headed toward a catastrophic outbreak. The sooner we put Flow-Through into practice, the sooner we can collect data, evaluate the results and refine the approach as needed."

> "Not since the end of the Klamath Basin Restoration Agreement 10 years ago have these parties gotten together to address resource and community issues."
>
> *–Scott Seus*

While additional analysis, monitoring, and implementation work would be needed to fully evaluate these outcomes, the Tule Lake Flow-Through concept illustrates the potential for more integrated water management approaches that seek to deliver benefits across multiple Basin interests.

Nielsen summed it up. "What encourages me right now is the momentum behind this effort. Agencies, Tribes, conservation organizations, and local stakeholders are all engaging in the conversation because we recognize the same thing: the Klamath Basin needs solutions that move us beyond conflict and toward long-term stability."

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