

# Central Valley Habitat Exchange

## A New Solution for Saving Species, Benefitting Landowners

Lynn Berts/NRCS



Historically, seasonal floods transformed the Central Valley of California into a vast inland sea of floodplain habitats teeming with fish and wildlife. The introduction of a massive network of flood and irrigation infrastructure has allowed the Central Valley to become one of the world's most productive agricultural regions, producing about \$17 billion in agricultural products annually. But this landscape conversion also led to the threatened and endangered status of numerous species across the region.

Today, California is striving to protect remaining habitat and recover that which has been lost over the past decades, while also preserving valuable agricultural lands and expanding residential and commercial development to accommodate a growing population. At the same time, California is investing in flood protection and water supply infrastructure to protect communities and enhance agricultural production. Combined, these projects will require the restoration and conservation of an unprecedented amount of floodplain, riparian, and agricultural habitat.

These projects and plans represent billions of dollars of investment, and require restoring and maintaining at least 600,000 acres of high-quality habitat for multiple species over the coming decades. If implemented correctly, these projects could significantly advance state and federal recovery efforts for endangered species, including the state's once profitable salmon fishery.

### The Solution

The Central Valley Habitat Exchange is creating a framework for effective habitat conservation in the Central Valley by actively engaging farmers and ranchers in the fulfillment of state conservation goals and mitigation obligations while improving ecosystem function. The Exchange aims to increase the supply of protected and restored habitat in the Central Valley by creating profitable opportunities for landowners to protect and enhance high quality habitat.

With 70 percent of the land in the Central Valley under private ownership, effective conservation for species must include programs compatible with working lands. The Central Valley Habitat Exchange creates this compatibility by allowing habitat to be traded as a commodity, just like crops. By measuring the quality of habitat at a particular site, a credit value is assigned that willing landowners can sell to private and public investors. Investors include state agencies seeking habitat for mitigation requirements or restoration mandates, in addition to private developers with standalone mitigation needs.

---

*“The Exchange will create an economic incentive for growers and landowners, like myself, to maintain high quality wildlife habitat on our farms as well as to diversify our income beyond just farming.”*

*- John Brennan,  
Knaggs Ranch*

---



Illustrated above, a rice farm in the Sacramento Valley where juvenile salmon and waterbirds thrive in flooded rice fields.



## A Multi-Species, Landscape-Scale Approach to Conservation

One of the most innovative components of the Central Valley Habitat Exchange is the multi-species Habitat Quantification Tool (HQT). The HQT measures the capacity of a parcel of land to support a particular species or natural community. To date, the multi-species HQT can assess the habitat quality for Swainson's hawk, Chinook salmon, riparian birds, and giant garter snake. More species will be added to the list soon, including the monarch butterfly.

The HQT is an innovative approach to multi-species conservation in the following ways:

- The HQT uses a landscape-scale approach, such that habitat projects are incentivized where they are most needed. Further, the HQT's multi-species habitat evaluation approach allows project proponents to understand and design projects to maximize benefits to multiple species, and create additional financial opportunities for landowners.
- The HQT is able to quantify both the existing habitat value of projects, including productive agricultural lands, as well as the expected habitat value of a project after planned restoration or management actions have improved habitat function.
- The HQT allows a robust understanding of habitat quality on any site, and enables public and private entities to fulfill mitigation requirements or understand the environmental return on conservation investments. Ultimately, the HQT and the habitat projects it supports must satisfy the regulatory mandates of state and federal wildlife agencies.

The Central Valley Habitat Exchange will programmatically manage use of the HQT to ensure assessments are conducted accurately and consistently across the Central Valley.

## Key Components of the Exchange

The Central Valley Habitat Exchange consists of the multi-species HQT, an accounting system, performance assurance mechanisms, and an adaptive management process to track measurable outcomes and facilitate coordination among conservation and mitigation activities throughout the Central Valley. In addition to these features, the other key components of the Exchange include:

- Single or Multi-species Management Plans
- Performance Contracts
- Financial Assurances
- Project Verification and Performance Reports
- Conservation Easements or other land protection instruments

## Collaborative Process and Next Steps

The Exchange is being developed by a broad collaboration of experts. Together, it represents:

- Leading conservation organizations (American Rivers, Environmental Defense Fund, Environmental Incentives, Audubon California, Trout Unlimited, Point Blue Conservation Science).
- The State of California (California Department of Water Resources, Sacramento-San Joaquin Delta Conservancy, California Department of Conservation).
- Central Valley agricultural producers and representatives (Davis Ranches, Tule Basin Farms, University of California Cooperative Extension, Farmland LP, KCOE-Isom).
- Flood and water management agencies (Metropolitan Water District, Sacramento and West Sacramento Area Flood Control Agencies).

To learn more, please contact:

Dan Kaiser,  
[dkaiser@edf.org](mailto:dkaiser@edf.org)

John Cain,  
[jcain@americanrivers.org](mailto:jcain@americanrivers.org)

Katie Riley,  
[kriley@enviroincentives.com](mailto:kriley@enviroincentives.com)

The immediate next steps of the Central Valley Habitat Exchange include conducting multi-species HQT assessments and facilitating pilot transactions with early adopters. The Exchange will also work to build additional species into the multi-species HQT, hire an interim Exchange administrator and create administrative structures for facilitating multiple transactions across the region.