

Reactivating Floodplains in the Sacramento River Basin

How working lands on both sides of the levees are aiding fish and wildlife.

Conservation and Flood Protection

Choosing between conservation and flood protection no longer has to be an either-or proposition. In the Sacramento River Basin, farmland, wildlife refuges and the bypasses not only serve as flood protection for our cities and rural areas, but are now being managed to work together to create dynamic conservation habitat for fish and wildlife. This effort is underway on both sides of the levees.

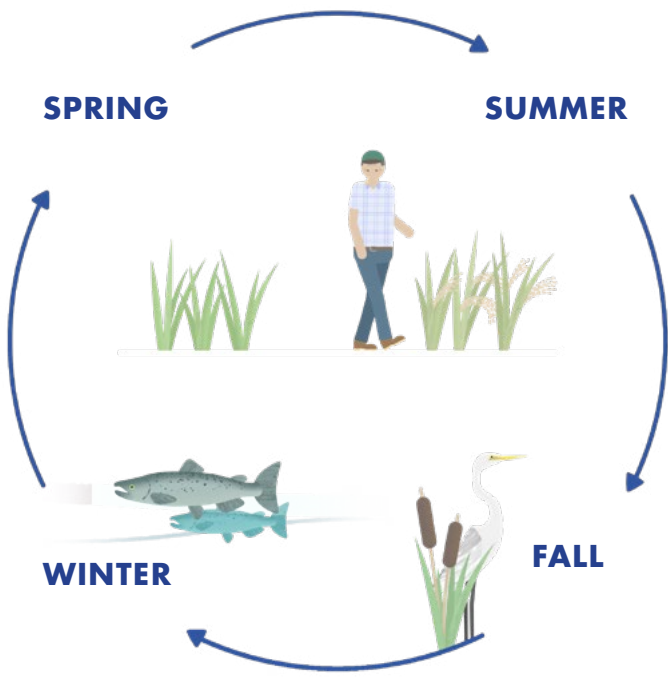
What is the Wet Side and Dry Side?

The two areas located on both sides of the levees are defined as *Wet Side* and *Dry Side*:

- **Wet-Side** lands are located within the footprint of the current flood protection system, including the river channels and bypasses. Allows for fish to freely access during wet stages.
- **Dry-Side** farm fields are located outside the current flood protection system but were once part of the historical floodplain. Fish cannot access this side.

With today's knowledge of the landscape and scientific understanding of how wildlife interacts with these historical floodplains, we have improved our water management to mimic natural flows across the lands once seen here centuries ago.





Finding Multiple Benefits

By spreading out and slowing down water across the historical floodplains (the Dry Side and Wet Side), we are able to mimic natural flows and provide multiple benefits year-round. From growing crops for people in the spring in summer to creating habitat for wild birds, reptiles, and other fauna in the fall to producing food sources for birds and fish in the winter.

This novel, holistic water management strategy brings our ecosystem to life through the careful interaction of water, sun and land.

Private-Public Partnership Focused on the Fix:

Landowners throughout the Sacramento River Basin are committed to projects that advance floodplain reactivation to improve habitat for fish and wildlife, while maintaining farming and managed wetland operations. The historical floodplain has been divided by levees, yet there are actions that can be taken by landowners on both sides of the levees that will reactivate the historical floodplain.

The combination of these actions mimic natural, shallow, long-duration flood patterns and restores the ecological process that drives healthy and productive aquatic ecosystems. Together, Wet-Side and Dry-Side water management strategies show tremendous promise for fish and wildlife populations on working lands.



Wet-Side of Levees: Lands Within the Flood Protection Footprint

Projects within the flood protection bypasses create seasonal wetland habitat on agricultural lands. By managing the flows, we increase the duration of flood events and give the water residence time necessary to spur robust aquatic food production for fish and wildlife.

Migrating bird species use the flooded bypasses to rest and feed during their journey along the Pacific Flyway. Chinook salmon enter and exit the floodplain fields providing them with high food-density foraging opportunities, refuge from predators, and an unimpeded migration corridor to the San Francisco Bay.

These projects operate in conjunction with enhanced fish passage at various weirs to increase the frequency of floodplain activation and optimize adult fish passage through the bypasses. Inundation of the floodplain



[Discover how fish are using the bypasses](#)

occurs during the late fall and winter months allowing for duck hunting and continued farming during the growing season.

Dry-Side of Levees: Lands Outside the Flood Protection Footprint



[See how farm fields grow food for fish](#)

Fish cannot access aquatic habitats beyond the Wet-Side of the levee, but managed aquatic habitats on farm fields and other managed wetlands (duck clubs and refuges) on the Dry Side still benefit fish through food production.

Dry-Side projects re-activate historical floodplains by diverting water from the rivers to farm fields during fall and winter. Holding water on these fields for several weeks produces abundant amounts of zooplankton and invertebrates (fish food). Fields are then periodically drained, transporting the food and water back to the river ecosystem.

These projects have the potential to re-integrate several hundred thousand acres of historical floodplain food web production back into the Sacramento River Basin ecosystem to aid endangered fish populations.

[Learn more about our Floodplain Forward Coalition](#)