

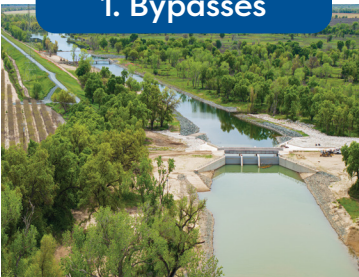
with Four Actions HOW TO RECONNECT THE FLOODPLAINS

New Infrastructure and Management Practices that connect working lands, bypasses, refuges, and rivers to support fish, birds, wildlife, and people in the Sacramento Valley.

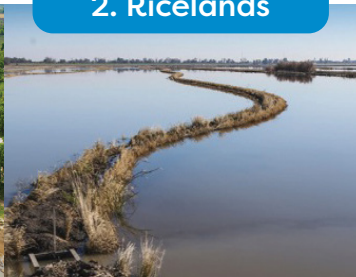
[Watch the Video >](#)



1. Bypasses



2. Ricelands



3. Wildlife Refuges



4. Oxbows



Reactivating our California floodplains protects communities from catastrophic floods, allows working lands to remain productive, provides wintering habitat for migratory birds, generates food for endangered fish, and supports several hundred wildlife species year-round. We cannot turn back the clock to how the Central Valley looked before western settlement, but in specific ways, we can mimic how the historical floodplains once functioned to allow native species to thrive.

We outline four key actions that bring much-needed stability in an ever-changing climate and growing demand for California water. Through increasing the number of years bypasses are activated, by supporting winter flooding on ricelands, ensuring water is delivered to wildlife refuges, and identifying more oxbow activation along the rivers, we can provide the habitat that fish and wildlife depend on.

1. Bypasses

Activating the Bypasses in Drier Year

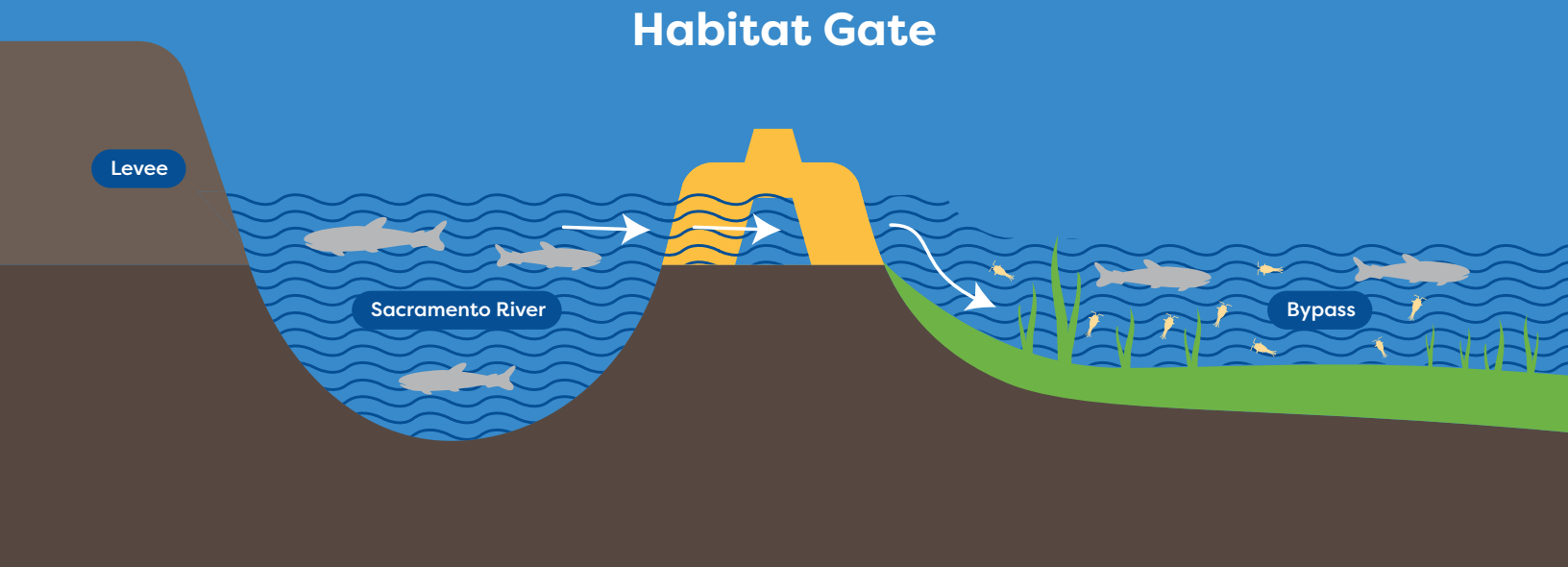
Bypasses (Yolo, Sutter, Tisdale, Sacramento) typically provide benefits to fish and wildlife in normal or wet years, when river flows are higher and relief is needed to prevent flooding in areas across the valley. Studies reveal wetter years, when bypasses are activated, have a profound benefit to native and migratory species, so what if we could allow water to spread out on these same lands in drier years?

Through habitat gates, or managed notches, we can allow the water to spread out onto the land, even during lower flows. The water still drains down toward the Delta and returns to the system as it would if in the river, albeit this time, with the opportunity for fish and birds to take advantage of this valuable habitat.



Increasing Water Flow Days!

The Fremont Big Notch off of the Sacramento River was constructed to provide such a benefit to activate the Yolo Bypass, and now we must look at other sites like Tisdale Weir, where a gate that is seven feet lower would allow the Sutter Bypass to be potentially activated 50 more days a year. With small tweaks to the infrastructure around the valley, we could have a profound impact on sustaining wildlife populations.



2. Ricelands

Winter Flooding of California Ricelands

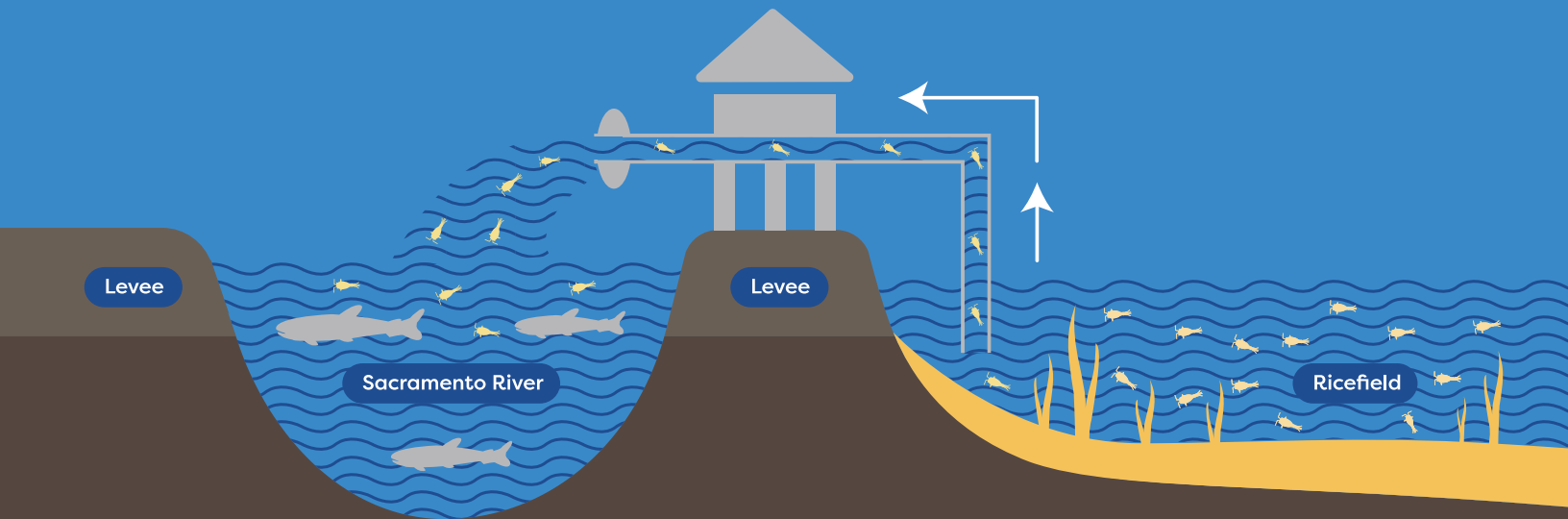
Each year, approximately 270,000 acres of rice are flooded to create wintering wetland habitat for birds, fish, and wildlife. While migratory waterfowl and shorebird species can access various locations, fish are reliant on human management for floodplain food access, especially when bypasses are not activated.

Much of the food production occurs on today's ricelands, however, these sites are disconnected from the river behind levees, thus preventing fish access. But the fields can still produce the "bugs" juvenile salmon prefer when migrating to the Pacific Ocean. After harvest, rice farmers use water to help decompose the remaining rice straw, paired with sunlight, the organic material breaks down to support the billions of zooplankton that reproduce at rapid rates. Instead of having the zooplankton die off, we have a chance to send that food into the river.



Send Food to the Fish

The river, as it operates today, is too cold and moves too fast for zooplankton to grow at reasonable rates to support native fish, so the food is pumped back in at key sections along the river where juvenile salmon need it the most. Bigger and stronger fish means better odds of a successful outward migration.



Learn More about the Fish Food Effort ►

1. [Fish Food on Floodplain Farm Fields Program](#)
2. [Why Fish Size Matters](#)
3. [California Rice Commission's Rice Footprint Report](#)



3. Wildlife Refuges

Wildlife Refuges & Reserves

Supporting five National Wildlife Refuges and three Wildlife Management Areas.

National and state wildlife areas are important havens for California's native species. With improved water reliability, water managers can continue to deliver water to these sites year after year. When these refuges are supported with the necessary water levels during seasonal needs, we can help mitigate against extreme heat and dry spells while maintaining water quality. Continuing to deliver water to the refuges can reduce the stress felt by wildlife that depends on these wetlands. Across the Sacramento Valley, refuges and wildlife management areas are located close to rivers, working lands and bypasses, which all work in unison to support fish, birds, and reptiles year-round.

[See More on Refuge Needs](#)



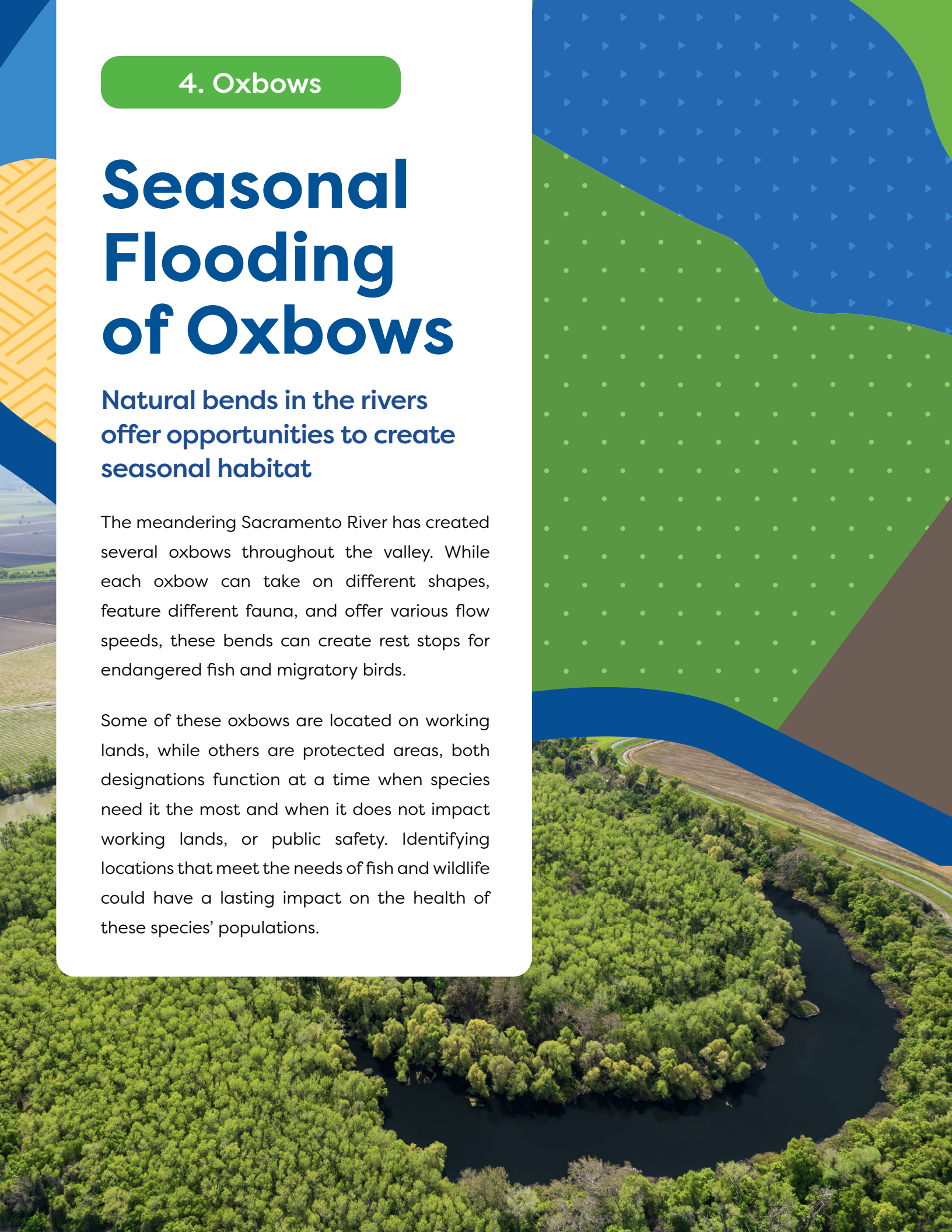
4. Oxbows

Seasonal Flooding of Oxbows

Natural bends in the rivers offer opportunities to create seasonal habitat

The meandering Sacramento River has created several oxbows throughout the valley. While each oxbow can take on different shapes, feature different fauna, and offer various flow speeds, these bends can create rest stops for endangered fish and migratory birds.

Some of these oxbows are located on working lands, while others are protected areas, both designations function at a time when species need it the most and when it does not impact working lands, or public safety. Identifying locations that meet the needs of fish and wildlife could have a lasting impact on the health of these species' populations.



Moving Forward

By connecting working lands, bypasses, wildlife refuges, and the rivers, we can improve our flood protection system and create a more sustainable future for fish, birds, wildlife, and people. But it can't be done alone, it will take the entire valley working together to see a vibrant and healthy watershed. Through collaboration among local, regional, and national partners, we can uncover innovative solutions, determine appropriate funding sources, and reduce cumbersome permitting processes that will ultimately lead us to our goal of creating a sustainable valley for all.



A 35-member organization representing landowners, irrigation districts, higher education, and conservation groups. The coalition, and the collaborative model of dynamic conservation, has resulted in farms, refuges, and managed wetlands providing essential habitat for waterfowl and shorebirds as well as potential food production for endangered fish species.

