#### **A PORTFOLIO OF SCIENCE-BASED ACTIONS**

# FLOODPLAN REACTIVATION in the Sacramento River Basin

Our respective organizations, the Floodplain Forward Coalition, are very excited to work with you and our various partners in our collective efforts to reactivate the floodplain in California's Sacramento River Basin, which will create multiple benefits for the region and the State of California. The diverse Floodplain

Forward leaders are working on and have proposed the following portfolio of projects, which together will help reactivate our floodplains for the benefit of fish, wildlife, and people as part of a holistic approach for healthy rivers and landscapes.





## Reactivating the Floodplain

We are all very excited that farmland (primarily ricelands), wildlife refuges, private wetlands (primarily duck hunting lands), the rivers, and flood bypasses can be managed together in innovative ways to mimic the historic floodplains of the Sacramento River Basin to recreate a dynamic fisheries and wildlife conservation landscape that continues to provide flood protection for Sacramento, rural communities and nearby lands. Spreading out and slowing down water moving across this landscape is a nature-based, natural infrastructure solution that mimics natural floodplain processes and provides multiple benefits year-round by allowing farmers to cultivate rice and other crops for humans during the spring and summer, provide food and habitat for a diversity of migratory birds and other wetland- dependent wildlife in the fall and winter; and food for juvenile native fish species in the winter. This landscapestyle water management can bring our ecosystem and farmlands to life through the careful interaction of water, sun, and land.

## SOARING OVER THE FLOODPLAINS

Play Video

#### What Makes a Floodplain Special?

Take flight with us in this 360-degree view of the Sacramento Valley. Explore the Sacramento River Basin through an interactive, virtual tour of some of the most important lands and habitat for people, fish, birds and wildlife. Narrated by California Natural Resources Secretary Wade Crowfoot and featuring Jeff McCreary of Ducks Unlimited, Jacob Montgomery of California Trout and Kim Gallagher, a fifth-generation rice farmer. The camera/viewpoint can be controlled by dragging your cursor around the screen or using the arrows in the upper corner or on the keyboard.

#### Who is the Floodplain Forward Coalition?

We are a diverse coalition of conservation organizations, farmers and other landowners, local governments, water suppliers and academic institutions who care deeply about the future of California and have come together as the Floodplain Forward Coalition to advance a new model for water management and land use as shown in

Portfolio Document

<u>Reactivating our Floodplains: A New Way</u> <u>Forward.</u> We share a vision to bring this vibrant region to life through the innovative management of the existing land uses and resource values that make this region so special, while at the same time restoring the missing components that are needed to truly provide a healthy, sustainable ecosystem. In advancing these efforts, we have truly valued and benefitted from the partnership and active collaboration with federal and state agencies. Their strong leadership, commitment and funding to work with us to reactivate the floodplains for all these multiple benefits is inspiring, and we look forward to continuing efforts with our partners to implement this program in the Sacramento River Basin.



#### A Holistic Approach for Healthy Rivers and Landscapes

Floodplain reactivation is a significant part of a holistic approach that is underway in the Sacramento River Basin - from ridgetop to river mouth - to improve conditions for fish and wildlife throughout the region. This approach and the actions throughout the region are designed to restore ecosystem function of the landscapes and riverscapes, while concurrently helping secure water supplies for communities, farms, fish and wildlife, recreation, and hydropower. We recognize that a healthy river ecosystem depends upon on a sufficient volume of water interacting with a healthy landscape in a way that approximates the habitat patterns to which the native flora and fauna are adapted. Our approach includes a portfolio of actions throughout the region designed to reactivate the landscape-scale patterns of biophysical habitat conditions that robust, resilient populations of salmon and other fish, bird, and wildlife populations depend upon.



#### Active Landowner-Conservation Partnerships

Landowners throughout the Sacramento River Basin are committed to working with conservation partners to advance these floodplain reactivation projects to improve habitat for fish and wildlife, while maintaining flood protection, farming, and managed wetland operations. The historical floodplain has been separated from its rivers by levees, yet there are actions being taken by landowners on both sides of the levees, the so-called *wet and dry sides of the levee*, to use their lands to help reactivate the historical floodplain.



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.

#### Moving Forward Together

The Floodplain Forward Coalition is working together with state and federal agencies to advance these projects as quickly as possible. There is a concerted effort to secure funding from various sources to support scaling-up these efforts and the Floodplain Forward Coalition is working in partnership with the Accelerating Restoration team at Sustainable Conservation to develop a permitting roadmap to help landowners, NGOs, and agencies implement Sacramento Valley fisheries and floodplain restoration actions by applying new restoration specific regulatory tools and seeking ways to further improve the process.

### Landscape Vision with Long Term Benefits

The Floodplain Forward leaders are working together to advance a <u>'landscape scale' vision</u> with a portfolio of projects that will improve habitat conditions for fish, birds and other wildlife and advance actions to aid with their recovery. The scientific monitoring that will accompany these projects will also begin the robust science program necessary to inform future decision-making and adaptive management responses essential to successful fish and wildlife recovery. This portfolio is a collection of projects that are being advanced in the Sacramento River Basin and can be envisioned **in five categories.** 

#### **1** River Connections

Projects that reconnect rivers to their historical floodplains.

#### 2 In-River Function

Projects that enhance, restore and create in-river function & habitat.

#### **3** Floodplain Flow Corridors

Projects that improve/create flow conveyance infrastructure needed to reactivate floodplains and improve fish passage.

#### 4 Floodplain Reactivation & Fish Food

Projects that reactivate floodplains, provide fish rearing habitat, and/or generate fish food.

#### 5 Science, Data Acquisition and Innovation

Efforts that improve the knowledge base through research, experimentation, data collection and advanced analytics.

These opportunities are summarized in the tables on the following pages. The portfolio also includes one-page information sheets for each project.



## Fish & Wildlife Habitat Improvement Projects



Upper River Middle River

Projects

Terain

Wet Side

Managed Wet Lands Footprint

Bypasses



For a complete list of projects, please contact dochoa@norcalwater.org