



The CVJV plays a critical role in the conservation of bird populations that depend on Central Valley habitats for some or all of their life cycles. Now, more than ever before, a collaborative approach to bird conservation is critical; no single organization could successfully address this complex issue alone. Working through voluntary partnerships and guided by its science-based Implementation Plan, the CVJV is well-equipped to lead this effort.

*Pintails using a postharvest-flooded rice field during their non-breeding season – Mike Peters*



## Central Valley Joint Venture 2020 Implementation Plan

# EXECUTIVE SUMMARY

HABITAT TYPE	PLANNING REGION					Valley-Wide
	SACRAMENTO	YOLO-DELTA	SUISUN	SAN JOAQUIN	TULARE	
Managed Semi-Permanent Wetlands	9,421	7,160	1,355	9,377	7,055	<b>34,368</b>
Managed Seasonal Wetlands	6,875	4,500		5,837	2,792	<b>20,004</b>
Managed Seasonal Wetland Enhancement	6,256	2,196	2,386	5,330	1,795	<b>17,963</b> annually
Riparian Habitat	8,377	5,906	1,408	8,368	9,273	<b>33,332</b>
Winter-Flooded Rice	324,847	15,823				<b>340,670</b> annually
Agricultural Easements	54,000					<b>54,000</b>
Grassland (Secondary Focus Area)						<b>10,337</b>
Oak Savannah (throughout Primary Focus Area)						<b>8,483</b>

**TABLE 1.** Habitat conservation objectives (in acres), integrated across all bird groups, by planning region and for the Central Valley as a whole. (See the Conservation Delivery chapter for more details.)

**CENTRAL VALLEY JOINT VENTURE**  
U.S. Fish and Wildlife Service, Migratory  
Bird Program

2800 Cottage Way, Suite W-2606  
Sacramento, CA 95825  
[www.centralvalleyjointventure.org](http://www.centralvalleyjointventure.org)







**The Central Valley Joint Venture 2020 Implementation Plan uses the best available science to establish habitat and population objectives for seven major groups of birds in the Central Valley of California. The Plan is intended to be useful to policy makers, regulators, agencies, conservation organizations and landowners working to further bird habitat conservation efforts in the Central Valley. The Plan represents the combined expertise of a wide range of professionals from conservation organizations, state and federal agencies and the private sector.**

This 2020 Plan updates and expands the Central Valley Joint Venture (CVJV) 2006 Implementation Plan to incorporate new science, new bird groups and the practical constraints of water availability, conservation opportunities, current and predicted shifts in climate and the impacts and needs of human communities in the region.

The CVJV is a self-directed coalition consisting of 20 public and private organizations. For more than 30 years, the partnership has directed its efforts toward the common goal of meeting the habitat needs of migrating and resident birds in California's Central Valley. This Implementation Plan identifies specific goals and objectives for bird conservation that will drive the CVJV's efforts until the next plan update.

Protecting, restoring and managing habitat to benefit bird species also provides many benefits for other native Central Valley animals and plants. These species and habitats, in turn, collectively benefit the people and communities of this region through improved water quality, more effective flood control, increased recreational opportunities and improved quality of life from connection to natural spaces, among other benefits.

Central Valley Joint Venture. 2020. Central Valley Joint Venture 2020 Implementation Plan. Sacramento, CA: U.S. Fish and Wildlife Service.  
Available from: [www.centralvalleyjointventure.org/science/2020-implementation-plan](http://www.centralvalleyjointventure.org/science/2020-implementation-plan)

## CENTRAL VALLEY BIRDS AND HABITAT

The Central Valley provides some of the most important bird habitat in North America. The Valley hosts one of the largest concentrations of migratory birds in the world during the fall and winter, in their non-breeding seasons, and also provides critical breeding habitat for a wide variety of bird species. Altogether, approximately 400 species of birds use the Central Valley during all or part of their lifecycles.

Once a vast mosaic of wetlands, riparian forests, grasslands, oak woodlands and saltbush scrub, the Central Valley has transformed dramatically over the last century. The loss of a large proportion of native habitat by conversion to agriculture, river channelization and urban development caused dramatic declines in wildlife. Many once-abundant bird species are now reduced to relatively small populations or are entirely gone from the region.

Despite this significant alteration of the Valley's natural landscape, land managers, landowners, conservation organizations and others work together to maintain valuable habitat and create new habitat in support of migratory bird populations. Since the 2006 plan, the CVJV and its partners have made clear and measurable improvements to critical bird habitat in the region.

## CONSERVATION OBJECTIVES AND STRATEGIES

The Plan establishes short-term habitat and population objectives to guide conservation efforts over the next ten years. It also sets long-term (100-year) objectives that represent the ultimate conditions necessary to sustain bird populations.

In this Plan, the CVJV establishes conservation objectives for seven bird groups:

- non-breeding waterfowl
- breeding waterfowl
- non-breeding shorebirds
- breeding shorebirds
- breeding and non-breeding waterbirds
- breeding riparian landbirds
- breeding grassland-oak savannah landbirds

The objectives cover habitat protection, enhancement and/or restoration; population levels; and in some cases, breeding density. Experts on each bird group used existing data from the Central Valley region, employed established methods and developed new methods when necessary to develop the objectives. Most of the chapters focusing on specific bird groups were developed from peer-reviewed scientific publications that are publicly available for readers seeking more in-depth information. The Plan also presents a framework for setting conservation objectives for all Central Valley bird species that are at particularly high risk of population decline ("at-risk bird species").

The habitat objectives developed for each bird group, shown in Table 1, are generally organized by the CVJV's five planning regions, collectively the CVJV's Primary Focus Area. The higher-elevation region surrounding the planning regions is the CVJV's Secondary Focus Area; this is the area covered by the grassland bird habitat objectives.

Strategies to achieve the conservation objectives fall within four focal categories: land management and conservation, water management, funding and budgets and the human dimensions of conservation. Given the necessity of planning for uncertainty, the Plan includes an examination of the most likely scenarios under which priority conservation actions should take place. The two key drivers of these scenarios are conservation opportunities and water availability.

## OTHER IMPORTANT CONSIDERATIONS

- **Water supplies:** Adequate water supplies are critical for wetland-dependent bird habitat, which includes both managed wetlands (such as refuges) and flooded agricultural lands.
- **Policy:** Public policy decisions play a significant role in bird conservation efforts.
- **Multiple benefits:** Bird conservation actions that also provide direct benefits to human communities, such as groundwater recharge, improved water quality and enhanced access to recreation, build increased support for the CVJV's efforts.
- **Climate considerations:** Major shifts in climate patterns in the Central Valley, occurring now and projected to occur over the next century, will have profound effects on bird populations.
- **Role of human communities:** It is critical to explicitly integrate human interests and motivations into conservation policies and programs.