



Actions to Support Birds and the Pacific Flyway in Dry Years The State Water Resources Control Board Processes

Water resources managers and conservation groups in 2014 and 2015 worked closely together to maximize the limited availability of bird and Pacific Flyway habitat in the Central Valley during extreme drought conditions. Several State Water Resources Control Board (State Water Board) actions were instrumental in assisting our efforts to plan, manage water resources and implement projects and programs to enhance bird and other terrestrial habitat in the Sacramento and San Joaquin Valleys.

Below are specific actions the State Water Board should consider, several of which were executed during the last drought, to support Pacific Flyway habitat during future dry years. Importantly, these actions to safeguard water supplies for the Pacific Flyway are part of an effort for [multi-benefit water management](#) that supports various beneficial uses of water, including conserving water for people during drought and contributing flow needs for sensitive fish species. In addition, we are learning more from recent studies about the value these reactivated floodplains provide when also managed to provide food for fish. We recognize that SWRCB decisions regarding the potential water management actions described below will be considered in light of the need to protect endangered fish, particularly in dry years.

• Curtail diversions in an orderly fashion through the state's water rights priority system

Pacific Flyway habitat, particularly in the Sacramento Valley (including winter-flooded rice ground and managed wetlands), is dependent upon water diverted in accordance with water rights and contracts. Additionally, water districts deliver almost all the surface water that is available for the National Wildlife Refuges, State Wildlife Areas, and private wetlands under contracts. There is a concerted effort to provide more reliable refuge supplies as shown in [Central Valley Refuge Needs](#). Water availability for birds and terrestrial habitat is therefore linked to the water rights priority system and the Pacific Flyway benefits from surface water deliveries in the spring, summer and fall. We all are committed to ensuring water for multiple beneficial uses, including fish, birds, farms and communities.

Curtailling diversions in a timely manner and in accordance with the water rights priority system in 2014 and 2015 provided order and certainty that promoted planning and actions that benefitted the Pacific Flyway. Granted, people were impacted by the curtailment process. Yet, people were not

surprised when they received a notice, and the curtailment process (including frequent and anticipatory notices and hearings) provided an opportunity for water right holders whose water supplies were curtailed to pursue alternative supplies and make land use decisions in response to the dry year. We also appreciate the continuous improvement in the water availability analyses to make this process more effective. In the future, we encourage an orderly process that implements the water rights priority system based on water availability.

The key to the smooth and orderly curtailment in the past was the ability for some of the water rights holders to work directly with the Division of Water Rights Assistant Deputy Director to review local knowledge about water rights – especially storage water rights and contracts to deliver water to other entities with water rights on the same river. This resulted in updating the Assistant Deputy Director's local understanding and changing the curtailments order that reflected the overall water rights picture as it related to curtailments. We suggest that the Assistant Deputy Director or appropriate SWRCB staff member be appointed this duty for future curtailment situations.

- **Lifting curtailments and Term 91 in a timely manner**

The State Water Board process to lift curtailments and Term 91 in response to precipitation events, the reduction in demand after the irrigation season, and the triggers in Term 91 were all critical actions that benefitted the Pacific Flyway habitat in 2014 and 2015. This process allowed water rights holders in the fall to take advantage of increased water in the system by irrigating managed wetlands, harvested rice lands and additional lands that otherwise would not have received water to provide habitat values.

In 2015 this process was further improved by State Water Board efforts, working with the Bureau of Reclamation, the Department of Water Resources and water resources managers to allow flexibility in the timing of diversions during the fall and winter to allow for the irrigation of important bird habitat. As a result, in the Sacramento Valley more than 200,000 acres of agricultural habitat was flooded in the late summer and fall, providing valuable resources to Pacific Flyway species before the winter storms brought rain to the region. Providing flexibility in timing of diversions to create terrestrial habitat at varying times during the fall and winter season was shown to benefit birds in dry years. Water releases to provide terrestrial habitat flexibility should be considered in light of aquatic species needs.

- **Importance of spring diversions for irrigation and bird habitat**

Although much of the Pacific Flyway habitat is focused in the fall and winter, spring water deliveries (April and May) for irrigation of rice lands and refuge habitat create important Pacific Flyway habitat – particularly for populations of migratory shorebirds many of which are declining, as well as farming and cities. These spring deliveries create the base of food both on rice fields and on managed wetlands that feed the millions of migratory birds that use the Pacific Flyway as well as provide brood water for locally breeding waterfowl. This important use of water for irrigation and spring habitat should be considered in overall analysis of water needs and timing for the system.

- **Nesting cover for birds**

Farmers and ranchers idle ground during dry years as a result of water curtailments, water transfers and other agronomic and land management practices. As part of the ongoing efforts by farmers and ranchers to improve the region's ecology and pursue land stewardship, the farming and water leaders in the Sacramento Valley are pursuing a program to support and incentivize the cultivation of non-irrigated cover crops on fallowed or idled lands to provide habitat for birds

and other terrestrial species. Non-irrigated cover crops create critical nesting habitat, increase soil organic matter, reduce topsoil erosion, enhance air quality, and improve soil health on idled fields. The implementation of a flexible cover crop program, such as the Nesting Bird Habitat Incentive Program that is authorized in the Fish and Game Code but still needs funding, will enable these lands to contribute wildlife habitat benefits even during dry years.

We encourage the State Water Board to continue to recognize the importance of water for birds, habitat and ecosystems, and to continue valuable efforts to work with us in our ongoing efforts to protect the Pacific Flyway along with the needs of aquatic ecosystems and human communities.