In the far reaches of Northeastern California, a rancher finds much needed assistance from Sacramento. The vital irrigation infrastructure on the 2,375-acre Carey Ranch, located 9 miles southwest of Alturas in Modoc County, was in dire need of repair.

Regional Biologist John Ranlett, of Ducks Unlimited, a national leader in wetlands conservation, based in Memphis, Tenn., initiated the assistance from Sacramento on the Carey Ranch.

"I received a call from John to see if I knew of any ranchers that might be interested in carrying out voluntary projects in the area," recalled Carolyn Carey, when sharing how this project came to fruition. "Jokingly I told him he could replace the weir on our ranch that had just failed for the third time that summer."

Like most ranchers, the Careys had been implementing cheap, short-term fixes to a deteriorating weir on the Pit River that diverted water to irrigate pastures and meadows in the floodplains where their commercial cattle graze. The cost for the Careys to fix the weir on their own was out of the question.

The Carey Ranch was a draw to the partners because it was already providing valuable habitat to many species of resident and migratory game and non-game wildlife. From a simple phone call, a restoration project was born and a ranching operation and a diversity of wildlife benefited.

The initiating partner, Ducks Unlimited, works across North America with farmers, ranchers and other landowners to improve the agricultural and wetland habitat value of their land. Projects include providing habitat management infrastructure improvements to waterfowl areas, restoring seasonal wetlands and protecting important agricultural areas from urban development.

In the case of the Carey Ranch, Ducks Unlimited helped a rancher to rebuild critical aging flood irrigation infrastructure. The organization put forth technical services including construction design and permitting approval, valued at more than $20,000.

The Wildlife Conservation Board (WCB), created by the California State Legislature in 1947, primary responsibilities is to allocate funds for the preservation, protection and restoration of wildlife habitat. For the Carey Ranch project, nearly $225,000 was contributed from the The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84).

U.S. Fish and Wildlife Service's Partners for Fish and Wildlife Program seeks to efficiently achieve voluntary habitat restoration on private lands, through financial and technical assistance, for the benefit of

Continued on page 42
Federal Trust Species. This program contributed $25,000 to the project, along with technical assistance, including acquiring permits necessary to complete the project from within the federal agency.

The Carey Ranch's contribution to the project came in the form of in-kind contributions, such as equipment work necessary to install culverts and limited cash funds.

"Without these partners coming together, structural failure of the irrigation weir would have resulted, which in turn would have lead to significantly diminished floodplain pasture grazing values through the loss of flood irrigation capabilities and a significant reduction in wetland habitat value on the ranch," stated Ranlett when reflecting on why Ducks Unlimited chose to partner on this project.

One of the key components of the ranch that produced much of the habitat values appreciated by the partners needed to be replaced so that wetlands for waterfowl, shorebirds, and other waterbirds persisted, and the wet meadow pastures vital to the cattle operation would remain in place. With the help of the Wildlife Conservation Board and Ducks Unlimited, a new weir was a reality on the Carey Ranch.

The wet meadow and irrigated pastures were enhanced through the reconstruction of a dilapidated irrigation weir located in the Pit River channel. The weir provides water to flood irrigate native floodplain wet meadow and hay pastures. The wetlands on the ranch occur in wet meadow pastures located on the floodplain of the Pit River and are sustained seasonally by the Carey's ranch management practices.

The annual installation of two wooden irrigation weirs (in concrete structures) in the excavated and levied flood control channel, that is now the Pit River, is used to divert water on the ranch. Due to U.S. Army Corps of Engineers flood control channel excavation, along this stretch of the Pit River during the 1950s, the historic river channel and oxbows were isolated on the floodplain from the Corps' excavated channel. Without installation of the two irrigation weirs, pasture flood irrigation would not be possible and the floodplain wetlands would dry by late spring.

As part of the project, reconstruction of two low berms and associated culverts that impound irrigation and watershed runoff on the floodplain in historic oxbow wetlands took place.

The third component of the project was riparian habitat expansion, which consisted of planting willows in select areas on the Pit River adjacent to existing patches of willow riparian habitat.

The $292,000 price-tagged project resulted in enhanced irrigation capabilities by reconstructing and

Continued on page 44
modernizing the weir and improving safety of weir operations. It was a win for the Careys because it improved overall ranch management and forage available for cattle grazing.

The project was a win for the conservation partners because it enhanced 675 acres of high-quality native floodplain wet meadow pasture and 200 acres of irrigated pasture. The project improved fall and spring migration and breeding habitat for a variety of waterfowl, shorebirds, waterbirds and neotropical migratory birds. The project also enhanced wetland-associated uplands and improved nesting cover for waterfowl and a variety of other avian species.

"The project beautifully fit within the WCB's Ecosystem Restoration on Agricultural Lands program, established under Proposition 84 in 2006 to provide wildlife habitat on agricultural lands. Through our joint efforts, the wet meadows on the Carey Ranch will continue to provide habitat for thousands of migrating birds for decades to come," states Peter Perrine, acting assistant executive director, WCB.

The Carey Ranch wet meadow and riparian habitat enhancement project three years from inception, to grant application, through obtaining permits, construction and will be considered a completed project this winter.

"It was key for us to partner with Ducks Unlimited, we needed a third party to help locate possible funding sources, then help us with the grant application to WCB, and one who understood the bureaucracies of the permitting process," states Carey. "The resulting project partners helped in ways we could not have imagined. There could not be an easier way to replace infrastructure on a ranch."

Now that the project is complete, the Careys are responsible for maintaining the improvements provided by the project under a 25-year agreement. The pre-project management that produced the habitat and pasture values on the ranch are agreed to be implemented in the future so the ranching and habitat values continue.

It is also important to note that the scope of this long-term agreement only applies to the areas of the ranch that were affected under the WCB grant application, and specifically states maintaining grazing as an essential component of the management agreement.

"The project on the Carey Ranch was pivotal in the area," stated cooperator Dominic Bachman, partners biologist, U.S. Fish and Wildlife Service. "It has sparked interest from other landowners in the area to improve their ranches, giving them a first-hand view of the opportunities to voluntarily enhance land for the benefit of wildlife and their grazing operation."

The continued recognition of the ecological values of private working landscapes and managed grazing creating habitat preferred by a variety of species is facilitating voluntary partnership like this throughout the state.

If you are interested in learning more about voluntary programs or getting in contact with local conservation partners, contact the CCA office, (916) 444-0845.

---

**STEPS TO IMPLEMENTING CAREY RANCH PROJECT**

1. Applying and getting acceptance for WCB funding.
2. Completing environmental permitting and documentation.
3. Topographic survey and preparing an engineering design.
4. Solicit bids for construction, since state funds are being spent, these funds are subject to state procurement rules and regulations.
5. Reconstructing the dilapidated irrigation weir, by rancher.
6. Reconstructing one low berm and repairing another low berm, installing associated culverts, and seeding perennial pasture grass on the berms.
7. Planting willow cuttings in two areas along the south and east bank of the river.
8. Implementing long-term management of project area by Carey Ranch.