



*Protecting Water for Western Irrigated Agriculture*

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October 24, 2018

The Honorable John Barrasso, Chairman  
The Honorable Tom Carper, Ranking Member  
Committee on Environment and Public Works  
United States Senate  
410 Dirksen Senate Office Building  
Washington, DC 20510-6175

**Re: October 10, 2018 Oversight Hearing - “Successful State Conservation, Recovery, and Management of Wildlife”**

Dear Chairman Barrasso and Ranking Member Carper:

On behalf of the Family Farm Alliance (Alliance), we respectfully request that you include this written testimony in the public record associated with your October 10, 2018 oversight hearing entitled, “*From Yellowstone’s Grizzly Bear to the Chesapeake’s Delmarva Fox Squirrel -- Successful State Conservation, Recovery, and Management of Wildlife.*” Thank you for your Committee’s hosting of this hearing, which provided useful testimony regarding successful state work to conserve, recover, and manage wildlife, in partnership with federal agencies, landowners and stakeholders. This testimony has been prepared to supplement the hearing record with additional examples of challenges associated with state and local species efforts to recover species and tackle challenges associated with invasive species in parts of the American West.

The Alliance is a grassroots organization of family farmers, ranchers, irrigation districts, and allied industries in 16 Western states. The Alliance is focused on one mission: To ensure the availability of reliable, affordable irrigation water supplies to Western farmers and ranchers. We are also committed to the fundamental proposition that Western irrigated agriculture must be preserved and protected for a host of economic, sociological, environmental, and national security reasons – many of which are often overlooked in the context of other national policy decisions.

Our organization is on record in strong support of improved state-federal consultation relating to conservation and recovery of wildlife and plant species in the Western U.S. We continue to believe that there is a way to encourage collaboration and consultation with states and private stakeholders as partners in meeting the objectives of the federal Endangered Species Act (ESA), while ensuring that

the law is applied consistently and without conflict of interest. Our membership includes ranchers, farmers and water managers who have dealt with challenges associated with species protected by the ESA across the West, from the Delta smelt in California and salmon in the Pacific Northwest, to the greater sage grouse in Wyoming and razorback sucker in the Colorado River. Invasive species proliferate the West, particularly in the estuary formed by San Francisco Bay and the confluence of the Sacramento and San Joaquin Rivers. The purpose of this testimony is to provide some positive examples of how states can conserve, recover, and manage wildlife, in partnership with federal agencies, landowners and local interests. It also serves to underscore the critical importance of addressing invasive species in California and other parts of the West.

## **ESA Success Stories in the West**

### Colorado River Basin Recovery Programs

The Colorado Basin States rely on the efficient and effective management of the Colorado River reservoirs to provide water to approximately 40 million people and 5.5 million acres of irrigated agriculture. The Colorado River system also produces more than 4,200 megawatts of hydroelectric power, and the Colorado River Storage Project (CRSP) power revenues provide funding for programs that allow water project development and operation while ensuring compliance with federal laws and regulations. Additionally, the funds support two endangered fish recovery programs that provide NEPA and ESA compliance for 2,500 water projects in the basin, including every Bureau of Reclamation project upstream of Lake Powell in Wyoming, Utah, New Mexico and Colorado. In both the Upper and Lower Basins of the Colorado River, water users have established successful, proactive programs to respond to ESA issues and environmental concerns.

The Lower Colorado River Multi-Species Conservation Program was created to balance the use of the Colorado River water resources with the conservation of native species and their habitats. The program works toward the recovery of species currently listed under the ESA. It also reduces the likelihood of additional species listings. Implemented over a 50-year period, the program accommodates current water diversions and power production, and will optimize opportunities for future water and power development by providing ESA compliance through the implementation of a Habitat Conservation Plan (HCP).

Partners of the Upper Colorado River Endangered Fish Recovery Program are recovering four species of endangered fish in the Colorado River and its tributaries in Colorado, Utah, and Wyoming while water use and development continues to meet human needs in compliance with interstate compacts and applicable federal and state laws (Family Farm Alliance, 2015). In March, the U.S. Fish and Wildlife Service (FWS) recommended changing the humpback chub from endangered to threatened, meaning it is still at risk of extinction, but the danger is no longer immediate. FWS earlier this month recommended reclassifying the razorback sucker from endangered to threatened (Elliott, 2018). Changing the two fish species from endangered to threatened will allow more flexibility in the way they are protected. Hundreds of thousands of razorbacks once thrived in the Colorado River and its tributaries. By the 1980s they had dwindled to about 100. Researchers blame non-native predator fish that attacked and ate the razorbacks and dams that disrupted their habitat. Their numbers have

bounced back to between 54,000 and 59,000 today, thanks to this multimillion-dollar recovery effort on the Colorado River.

Another important program – the San Juan River Basin Recovery Implementation Program (SJRIP), was established to recover the Colorado pikeminnow and the razorback sucker while allowing water development and management activities to continue in the San Juan River Basin. Basically modeled after the Upper Colorado program, it focuses more on water users in New Mexico and southwest Colorado, including all the diverted water to the Rio Grande.

The Colorado River programs embody effective cost shared partnerships among states, tribes, federal agencies, water users, CRSP power customers and environmental organizations throughout the basin, and they guarantee federal requirements are met while protecting water supplies for human needs. CRSP power revenues have been provided to the basin-wide programs consistently for more than two decades and have been supported by every administration since President Reagan.

On August 22, 2018, our organization joined the Colorado River Energy Distributors Association and The Nature Conservancy on a letter sent to Congressional appropriators emphasizing the importance of continued, reliable funding to support these endangered fish recovery programs on the Colorado River. We reiterate that message today.

#### Little Snake River Watershed

The Little Snake River watershed in south-central Wyoming is a portrait that weaves into it the environment and conservation, the community and its economy. It is a portrait that caught the attention of John C. Fremont, while traveling through the Little Snake Watershed in 1844, who wrote, “The country here appeared more variously stocked with game than any part of the Rocky Mountains we had visited: and its abundance is owing to the excellent pasturage and its dangerous character as a war ground”.

The symbiotic relationship between food production and the environment lives on today. The Little Snake River Basin today is the permanent home to 21,000 mule deer, 9,000 elk, 25,000 pronghorn antelope, 2,500 Sage Grouse, 20,000 mother cows, 10,000 domestic sheep, and 800 people. Land ownership in the basin consists of 68% federal, 8% state, and 24% private lands.

For the last three decades the Little Snake Basin has clearly demonstrated that conservation and food production are compatible (Family Farm Alliance, 2016). This is achieved through strong local leadership working with a myriad of federal, state, and local agencies, nonprofit conservation organization, private landowners, and the interested public in a collaborative, goal-oriented “on-the-ground” approach to conservation and production. For the last two and half decades, the local conservation district has lead efforts with numerous partners to address resource issues while maintaining or enhancing agriculture production in the watershed.

In an era where new surface water storage projects face tremendous political and regulatory hurdles, Little Snake River residents led an innovative initiative that resulted in the construction of a multiple purpose reservoir in the headwater reaches of the watershed. While providing a reliable water supply to downstream ranching communities, the stored water released from High Savery Dam has contributed to the recovery of the Colorado River Cutthroat Trout, a candidate species for listing

under the ESA. The reservoir has a minimum inviolate pool which the Wyoming Game and Fish Department uses to support the largest brood population of Colorado River Cutthroat Trout in the entire Colorado River Basin. This “environmental pool” is tapped into by fisheries managers to provide much-needed cool freshwater flows for over 40 miles of downstream recreational fisheries.

In addition to providing supplemental water for fisheries from High Savery Reservoir, irrigators have worked with conservation partners like Trout Unlimited, the Wyoming Water Development Commission, Wyoming Wildlife and Natural Resource Trust Fund, and the U.S. Fish and Wildlife Service Partners program to modify every diversion structure on the Wyoming side of the watershed to allow for fish passage. Several low-head diversion structures employ natural channel design concepts to allow for three warm water sensitive fish species to successfully navigate the diversion structures. In the last seven years, fifteen irrigation diversion structures have been modified at a cost of over \$8 million dollars. A decade ago, the aquatic habitat was highly fragmented and access by native fish may have been restricted to only a few miles of river. Today, the irrigation diversion structures have opened up the entire watershed, so that fish can now literally move from the lower basin to the Continental Divide, over 100 stream miles away.

### **ESA and Invasive Species Challenges in California’s Bay-Delta**

Much has been said and written about California’s recent record-breaking drought and its drastic repercussions, including an unprecedented reduction in water for agricultural use (Keppen and Dutcher, 2015). The drought experienced by agricultural producers is, in part, an artificial drought created by regulations that reduce water deliveries to farms as a strategy for the recovery of populations of protected species in the rivers and San Francisco Bay-Delta system. Water use in the American West has always been an issue surrounded by competition and contention, which is exacerbated during times of drought creating frustration, uncertainty, and fear among the various user groups. A feeling of competition is particularly intense between agricultural water users and proponents of instream use for ecological services and protected fish populations.

With the record dry conditions experienced over the previous years, coupled with water supply reductions related to regulatory actions, water allocations for all use sectors were reduced with many agricultural water users receiving no allocations at all from the Central Valley Project (CVP). Settlement contractors, primarily agricultural water users, have water rights that predate the federal project. Even these priority rights on the system have seen reduced allocations due to regulatory actions. Resilience in food systems is inherently dependent on the water resources available to producers. The health of the San Francisco Bay-Delta ecosystem directly pertains to those water deliveries.

While dry conditions have certainly contributed to the water crisis in California, the application of environmental laws and policies has undermined one of the primary uses of the CVP, supplying water for agriculture, with little apparent benefit to the environment. A large portion of the water in the Sacramento and San Joaquin rivers is left in stream to flow to the ocean to provide specific conditions in the rivers for salmon and sturgeon, species protected by state and federal policies. The San Joaquin Valley farms and communities use fresh water pumped from the San Francisco Bay-Delta to supplement their needs; however, over the past several decades, exports via those delta pumps have

been reduced as a means to comply with water quality standards in the Bay-Delta and to address the decline in the delta smelt population, another protected species.

Presently, agriculture in California does not have a reliable supply of water, which undermines the ability to make long-term decisions to maintain the agricultural industry. The frustrating fact to agricultural producers is that the water cutbacks that have already occurred have not helped in increasing the populations of salmon and the delta smelt, the species listed for protection under the ESA. The National Research Council has suggested that reducing pumping for agricultural water does not significantly impact fish populations; whereas, other stressors along the systems, such as wastewater contaminants and nonnative aquatic species, do have a more significant impact on the health of the ecosystem and the populations it supports.

#### The Collaborative Science and Adaptive Management Program

Clearly, protected fish populations can be more effectively managed by focusing on other stressors to the Bay-Delta system while also providing a reliable water supply for agricultural use. Over a decade ago, when the Federal District Court in Fresno California rejected the Biological Opinions for Winter-Run Salmon and Delta Smelt as “arbitrary and capricious”, a unique bond was formed among the combatants fighting over the Bay-Delta. All sides agreed to organize the Collaborative Science and Adaptive Management Program (CSAMP) to work together on improving the scientific foundation for the Court ordered remand and reconsultation. While the 9<sup>th</sup> Circuit subsequently overturned the ruling, the CSAMP has continued to function to this day (Peltier, 2018).

The participants at the policy level are the top regional leaders of the Bureau of Reclamation, FWS and the National Marine Fisheries Service (NMFS). From the State of California, the directors of the Department of Fish and Wildlife (CDFW) and the Department of Water Resources participate. Rounding out the CSAMP table are the general managers of several major public water agencies, including Westlands Water District, the Kern County Water Agency, the Metropolitan Water District of Southern California and several Non-Governmental Organizations including the Natural Resources Defense Council, the Coalition for a Sustainable Delta and the Pacific Coast Federation of Fishermen’s Associations.

This collaborative science effort is supported by numerous technical working groups and truly reflects a new way of approaching the “Wicked Problems” of water system management and ecosystem management in the Sacramento-San Joaquin Delta. By identifying and focusing on the common scientific questions before them the CSAMP participants are finding common ground and are able to openly discuss their disagreements that have long occupied the policy ground of the Delta.

#### Invasive Species Challenges in the Bay-Delta

More broadly in the Delta, invasive species are a very significant problem for which too little is being done. It is widely known that the Delta is teeming with more than 185 invasive species, ranging from aquatic plants to sport fish to nasty beaver-like varmints known as Nutria. In fact, it is estimated that

at least 95 percent of the aquatic biomass in the estuary is non-native and these unwelcome guests continue to be among the most serious stressors on the ecosystem (Peltier, 2018).

“Taken together, the large number of exotic species, their dominance in many habitats, and the rapid and accelerating rate of invasion suggest that the San Francisco Bay and Delta may be the most invaded estuary and possibly the most invaded aquatic ecosystem in the world,” wrote Andrew N. Cohen and James T. Carlton in “*Accelerating Invasion Rate in a Highly Invaded Estuary*”.

Some of these non-native plants and animals are very destructive to the ecosystem and make managing for the recovery of five ESA-listed fish extremely complicated. For example, Asian Clams in the Delta can be found in concentrations of 40,000 per square meter. These filter feeders take out the bottom end of the food chain contributing to the fact that the Delta is “food short” for the listed species. The Delta has an excellent bass fishery, but these predators are known to consume 90% of the downstream migrating salmon. Water hyacinth and other aquatic plants which cover thousands of acres of Delta waterways also help predators, impair water management infrastructure, interfere with marinas and recreational boating and deplete oxygen from the system. In addition, hyacinth limits biological diversity of important organisms that are a vital food source for native endangered species (Peltier, 2018).

A more recent intruder, Nutria, has the potential to create catastrophic harm to the Delta levee system and damage the ecosystem. These 15-20-pound rodents are able to devour as much as a quarter of their body weight in vegetation each day, wasting and destroying as much as ten times that amount. These destructive feeding habits cause extensive damage to native plants and destroy marshlands resulting in further loss of critical habitat and wetlands, necessary for native species. Nutria are prolific breeders and are difficult to detect. The potential for breaching levees and the flooding of delta islands and resulting severe water supply disruptions for Bay Area and Southern California residents and Central Valley farms demands an aggressive eradication effort.

The State of California has an undersized nutria surveillance and trapping program in place. Agricultural interests, including the California Farm Bureau Federation, are urging the state to maximize resources to address this threat that is truly an emergency. CDFW wants to know about all potential nutria sightings, and is sending 7,000 letters to property owners along the San Joaquin River, requesting access to survey for nutria. The recently enacted 2018-19 state budget includes \$400,000 allocated to the Department of Food and Agriculture to survey the extent of the problem and help CDFW with eradication efforts. California agricultural leaders are also appealing to Secretary of Agriculture Sonny Perdue to exercise his discretion in moving more teams from Wildlife Services into California and lead the eradication effort (Hecteman, 2018).

Of course, invasive species challenges are not limited to the Bay-Delta. Western water users also confront challenges associated with invasive salt cedar, tamarisk, quagga mussels, and cheatgrass, just to name a few. For example, tamarix species along riparian corridors or around desert springs can seriously reduce underground water tables and surface water availability, drying up wetlands, and reducing flows. Tamarix species can increase flooding in riparian areas by narrowing channel width. In addition, the plants are flammable and can introduce fire into wetland and riparian communities that are not adapted to periodic burning (DiTomaso and Kyser, 2013).

While millions of dollars have already been spent on efforts to reduce the impacts of these and other non-native pests, it hasn't been enough. And more invasive species will continue to arrive. Addressing the harmful impacts of invasive species must become a priority.

## **Conclusion**

We are pleased to see the Committee re-assess the original intent of the ESA, which emphasized a paradigm where species conservation could be achieved in cooperation with state and local interests, including farmers and ranchers, instead of at the expense of agriculture, which is happening in several Western states under current interpretation of the Act.

The Family Farm Alliance for decades has worked to develop specific, practical changes to the ESA that we think will make it work effectively today. Application of the ESA today must be viewed through the prism of other human needs, including food production. To that end, management of our natural resources should be geared towards an approach that views the entire landscape - including invasive species - in a more holistic manner regarding its value for wildlife, food production, and other capacities. The flexibility built into the Act has the potential to yield net conservation benefits for imperiled species, as practitioners have recognized (Henson et al, 2018). While a regulatory approach may be necessary for species on the brink of extinction, such an approach should be employed sparingly, consistent with congressional intent and sound public policy. For threatened species, a partnership approach should be the guiding principal.

Thank you again for your strong leadership on this matter, and thanks also to you and your staff for working with us in this Congress. We appreciate the Committee's consideration of our views. If you have any further questions regarding our comments, please do not hesitate to contact me at (541)-892-6244, or [dan@familyfarmalliance.org](mailto:dan@familyfarmalliance.org).

Sincerely,

A handwritten signature in black ink, appearing to read 'Dan Keppen', with a stylized flourish at the end.

Dan Keppen  
Executive Director

## Reference Sources

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