

“In protecting freshwater resources, I have found EDF to be constructive, creative and highly professional problem solvers.”

**Jeff Kightlinger**  
General manager  
Metropolitan Water District of Southern California

A large buck with impressive antlers is wading through a stream. The water is splashing around its legs. The background consists of tall, golden-brown grasses and a rocky, forested hillside. The scene is captured in a natural, outdoor setting.

# ECOSYSTEMS



## WHY WE WORK ON ECOSYSTEMS

“Working lands such as farms have tremendous potential to contribute to cleaner rivers, restored freshwater ecosystems, abundant wildlife and secure energy supplies.”



**David Festa**  
VP Land, Water and Wildlife

## EDF MILESTONES

1967

A small group of scientists forms EDF and wins a U.S. ban on DDT in 1972.

1974

Our study of Mississippi River water helps pass the Safe Drinking Water Act, establishing the first comprehensive health standards for water.

1983

We prevent construction of new dams in California by arranging that cities pay for water conservation on farms.

1995

Our Safe Harbor initiative is launched, giving landowners new incentives to save endangered species.

2010

In partnership with Texas ranchers, we help increase the known population of endangered golden-cheeked warblers by 50%.



## BRINGING WATER AND LIFE BACK TO A BELOVED DELTA

The West has enough water for people and ecosystems alike, if we manage it rationally. The problem is waste. A new California law will reduce water consumption 20% by 2020, which could help a once-mighty delta recover.

The hub of California's ailing water system is the Sacramento-San Joaquin River Delta. The Delta is an ecological treasure—the largest estuary on the West Coast and the primary source of fresh water for 25 million Californians. But decades of excessive pumping and pollution have brought it to the brink of ecological collapse.

More than half its water is diverted south and its marsh habitat is mostly gone. The resulting disappearance of Chinook salmon has led to closures of the fishery, costing the economy \$250 million annually. Meanwhile, farms and cities are unsure how much water they'll get each year.

This summer has brought hope for a solution. The California Water Resources Control Board was tasked with finding a way to provide for the state's drought-stricken farms and growing population while leaving enough water in the Delta for wildlife to thrive.

EDF had a seat at the table. Our prescription: To free up water for the environment through conservation and water marketing. Decades of leadership by Tom Graff, the late founder of our California office, had won the respect of opponents. We reached out to two big water users representing cities and agriculture—Metropolitan Water District and Westlands Water District—and worked with them to outline a sustainable water future.

Using science to build consensus, EDF biologists testified at hearings on the amount of water needed to restore wildlife habitat. Then we organized a Salmon Summit, where salmon fishermen and elected officials called for increased flows to save wild salmon runs and fishing jobs.

In August, we and our partners won reforms that solidify protection of the Delta as a fundamental goal in California water planning. The State Board recommended changes that will put more water back into the ecosystem and address toxic chemical pollution and invasive species—all vital steps in ensuring the Delta's stabilization.

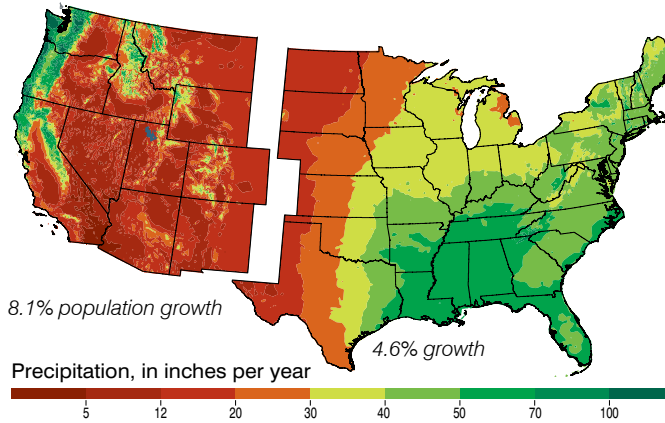
"In protecting the Delta, California is opening the door to a future of innovation and greater efficiency in the use of water," says our regional director Laura Harnish. Other Western states confronting their own water crises are keeping a close watch.

**VIDEO** [A common-sense plan for tackling the water crisis: edf.org/watersolutions](https://www.edf.org/watersolutions)

**"By promoting agricultural reform and partnering with landowners to protect habitat, EDF is helping us all."**

**Barbara Kingsolver, Author**

## THE WEST'S POWERFUL THIRST



The fastest-growing region in the United States—the arid West—is also the driest. [Growth: U.S. Census Bureau, 2000–2005]

## PARTNERS TO SAVE AMERICA'S PRAIRIES

Across the West, EDF is helping ranchers revive habitat for livestock and wildlife. Our focus in 2010 was the thousands of miles of fencing that can snare wildlife and block migration. EDF proposed a simple, affordable solution. Some unnecessary fencing is being removed, while reflective strips are being added elsewhere to help two rare prairie birds—the low-flying greater sage grouse and the lesser prairie-chicken—avoid fatal collisions with barbed wire. We teamed up with groups of ranchers and state agencies who realize that aiding the birds could avert the need for future regulation under the Endangered Species Act.

EDF also suggested raising the bottom wires of fences to allow pronghorn antelope to squeeze underneath, reopening blocked migration routes. Antelope traverse hundreds of miles of prairie each year to reach seasonal grazing grounds. These migration corridors are becoming a lifeline for wildlife as habitat shifts due to global warming and human population pressure.

Following EDF's research and advice, the federal Bureau of Land Management issued a directive to its field offices to make fences friendlier to wildlife. The directive applies to 170 million acres of federal land across the West.

**4 million** acres enrolled in EDF partnerships with private landowners to protect wildlife



## ECOSYSTEMS GOALS

EDF seeks to preserve critical land and freshwater ecosystems for the benefit of people and wildlife.

- Conserve land and protect endangered wildlife
- Protect water supplies and freshwater ecosystems
- Reduce corporate water use

## BEST PRACTICES ON THE FARM

In coastal areas, fish are dying when excess nitrogen from farm fertilizer and sewage runs down rivers to the sea and creates suffocating algae blooms.

Through the On-Farm Network, EDF is working with 830 farmers in ten states to reduce fertilizer use. This benefits rivers and estuaries, protects drinking water—and saves farmers the cost of excess fertilizer. The On-Farm Network encompasses nearly one million acres.

Around the Chesapeake Bay, Lake Erie and the upper Mississippi River basin, participating farmers have maintained crop yields while cutting fertilizer use an average of 25%. Our next step is to build this approach into federal programs.