



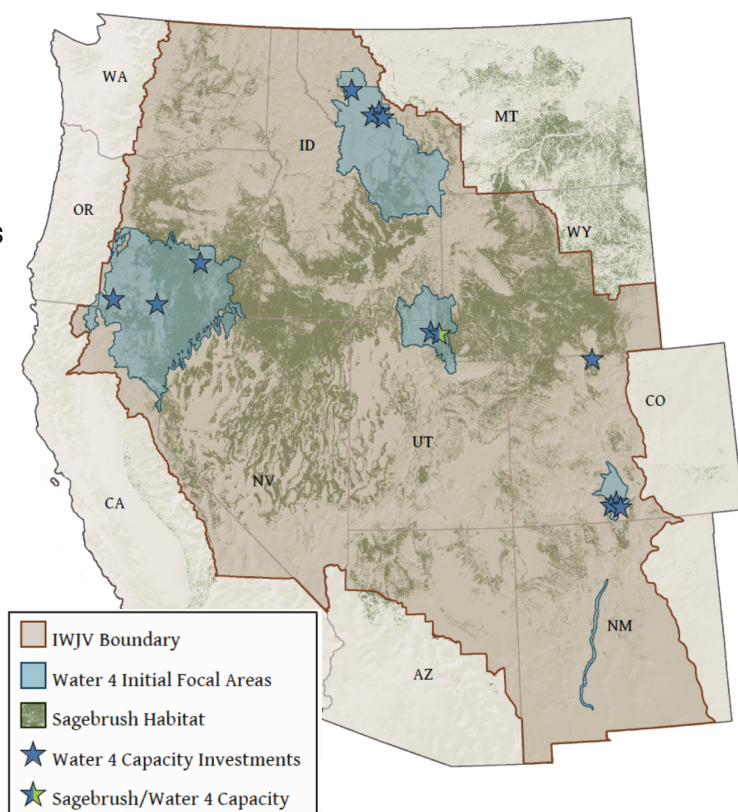
WATER 4

Conserving wet meadows and water for: irrigated agriculture, wildlife and fisheries habitat, groundwater recharge, and landscape resiliency in ways that matter to people

The arid Intermountain West is interspersed with a network of seasonally flooded and permanent wetlands that extend outward from the region's riparian corridors. These green ribbons of rich biodiversity, water, and food resources drew indigenous people, wildlife, and migratory birds for millennia before land settlement brought farmers and ranchers who were attracted by the reliable water for livestock and irrigation. Ultimately, this pattern concentrated private land ownership in water-rich valleys while the surrounding sea of sagebrush and forests—70 percent of the region's land—became publicly owned.

Wet meadows on irrigated agricultural lands now comprise 62 percent of the wetland habitat in snowpack-driven systems of the Intermountain West.

These irrigated lands provide key habitat for migratory birds, sustain floodplain function, recharge aquifers, and support agricultural communities but are threatened by rural subdivision, competing water demands, and the impacts of climate change.



Water 4 Toolbox

- **Modernization of Flood Irrigation Infrastructure**
- **Conservation Easements**
- **Low-Tech Riparian Restoration**
- **Wet Meadow Restoration**
- **Reconnecting Rivers to Floodplains**

The Intermountain West Joint Venture (IWJV) established Water 4 to conserve working wet meadows and water in ways that matter to people. The IWJV has developed spatial planning tools that track wetland dynamics and surface water trends—i.e. wetland habitat in space and time—by month, over 35+ years, across the 11 states of the Intermountain West. This powerful science enables strategic implementation of partner-driven tools like conservation easements, flood irrigation infrastructure modernization, low-tech riparian and wet meadow restoration, and reconnection of rivers to floodplains (see Water 4 Toolbox).



The Future of Water for People and Wildlife in the Intermountain West



Ranchers and farmers play a vital role in sustaining the wet meadow habitats that support migratory birds on their annual journeys from Canada to Mexico along the Pacific and Central Flyways. Flood irrigation mimics the historic natural snowmelt hydrology by filling the “sponge” of these wet meadows in spring for natural storage and release back into the rivers later in the growing season. Sandhill cranes, northern pintails, cinnamon teal, white-faced ibis, and a host of other species are highly dependent upon these habitats during spring migration, breeding, and fall migration. Likewise, these irrigated wet meadows provide forage that is crucial for ranching operations.

Managed wetlands on federal wildlife refuges and state wildlife areas are the other key piece to this puzzle. These public lands are “anchors” of the migratory network and are particularly important during fall migration when wetland habitat is most limited in the arid Intermountain West. Protecting, enhancing, and sustaining this remaining wetland network—across public-private ownership boundaries—is vital for wildlife and people in the West.

Water 4 focuses on achieving multiple benefits and “win-wins” for wildlife and people beyond silos that often exist in conservation. Water 4 is actively working in intact working landscapes to conserve agricultural lands for migratory birds, native fish, and big migration corridors, often involving **the same land, the same people, and the same water**.

In the future, Water 4 is poised to play a major role in:

- Sequestering carbon to address climate change,
- Strengthening rural economies, and
- Serving as a model for collaborative private lands conservation.

Partnerships in this Initiative

Water 4 is supported by Oregon NRCS; Montana NRCS; Colorado NRCS; New Mexico NRCS; FWS Interior Region 10 Regional Director, Partners for Fish and Wildlife Program, Science Applications, External Affairs, and Refuges; FWS Interior Region 5/7 Regional Director and Refuges; FWS Interior Region 9 Science Applications, Ecological Services, and Refuges; Mule Deer Foundation; Utah Division of Wildlife Resources; and Idaho Department of Fish and Game.

The IWJV continues to seek partner contributions for capacity building, communications, and science.

Water 4 Approach

- **Science to identify the most vital working wetlands.**
- **Capacity to identify the conservation bottlenecks and work through the existing partnerships to increase the pace of conservation, which often requires the right people with the right skills in the right place.**
- **Communications to tell the story of the role that flood irrigation plays in maintaining historic wetlands, that are now sustained as part of the agricultural network.**

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Learn more at
iwjv.org/water

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