



RIO GRANDE BASIN ROUNDTABLE



American bittern in the spring at Rio Grande State Wildlife Area



Key Wetland Facts

- 80% of wildlife utilize wetlands and/or riparian areas during some portion the year
- Wetlands and Riparian areas represent 2% of the landscape in Colorado
- The SLV has lost over half of its wetlands since the mid 1980's
- 75% of seasonal wetlands occur on private lands in the San Luis Valley as native hay meadows
- Wetlands filter water and improve water quality
- Wetlands are a natural buffer that help mitigate floods and maintain water tables

Wetland Importance for Wildlife

- There are 7 Audubon Important Bird Areas in the SLV
- The SLV is the southernmost significant waterbird production area in the Central Flyway and the most important waterfowl production area in Colorado
- The entire population (~20,000) of Rocky Mountain Greater Sandhill Cranes migrates through in spring and fall

Important Wetland Complexes

- USFWS: Baca, Alamosa, and Monte Vista National Wildlife Refuges – 116,000 acres
- BLM: Blanca Wetlands, McIntire/Simpson, Rio Grande Natural Area
- CPW: Russell Lakes, Rio Grande, Higel, San Luis Lakes, Sego Springs State Wildlife Areas
- NPS: Great Sand Dunes National Park

Conservation and Restoration

- Wetland and Riparian Conservation, Restoration, and Enhancement projects on over 350,000 acres and 125 miles of riparian habitat utilizing over \$73 million in funding.
- Partners include Colorado Wetlands and Wildlife Program, North American Wetlands Conservation Act, Partners for Fish and Wildlife, Land and Water Conservation Fund, Western Rivers Conservancy, Ducks Unlimited, Trout Unlimited, Bird Conservancy of the Rockies, Rio Grande Headwaters Land Trust, Colorado Open Lands, Colorado Cattleman's Agricultural Land Trust, Intermountain West Joint Venture, USFWS, BLM, CPW, CWCB, NRCS, CWCB, and private landowners (and many more!)

Challenges

- Drought conditions and climate change
- Limited water resources
- Changes to irrigation season
- Change in groundwater withdrawals and declining aquifer levels
- Changes in agriculture

Wetlands 101

Wetland and riparian systems are vital life zones in our dry landscape. They are created, maintained, and affected by natural processes such as climate, flood events, wind, winter sheet ice, wildlife (beavers), and geologic events such as the rise and fall of the historic Lake Alamosa. Wet and dry cycles are necessary for the health and productivity of every wetland. Wetlands can be described in many ways based on how long they hold water, by vegetation characteristics, by their connection to surface and groundwater, or by their location in the landscape. The table below summarizes wetland types and Figure 1 is a cross section of a river and floodplain, like the Rio Grande, showing where wetlands exist based on a combination of factors. Wildlife species are adapted to the seasonal fluctuations of wetlands. While most waterfowl, waterbirds, and shorebirds use San Luis Valley (SLV) wetlands during spring and fall migration, local breeding populations are also important.

Since the settlement of the SLV in the 1800s, wetlands have been affected by human development. Such changes include roads,

urbanization, irrigation delivery infrastructure, timing and duration of water delivery, reservoirs, agriculture, and groundwater withdrawals, along with climate change. As a result, less than half of the former wetlands are still present today and many of these are artificially managed or manipulated. The SLV Wetland and Wildlife Conservation Assessment, a recent project completed by conservation partners in 2019, noted that 75% of the remaining seasonal wetlands are located on private lands. These seasonal wetlands are commonly known as native hay meadows and are supported by flood irrigation. Although agricultural modifications have altered many wetlands, flood irrigation, which often includes utilization of backwater sloughs for water delivery, is integral to the continued existence of many wetlands in the SLV.

Through groundwater adjudications for wildlife, public lands like the Monte Vista National Wildlife Refuge and Russell Lakes State Wildlife Area utilize wells to provide water for wetland habitat from late fall through the early spring, a time when other wetland areas typically lose their water resources outside of the irrigation season. Public land managers and private landowners maintain and sustain wetlands through using water resources to grow wetland plants as a crop for both livestock and wildlife. Among the over 80% of species that depend on wetlands and riparian areas are many threatened and endangered species like the southwestern willow flycatcher and yellow-billed cuckoo. They require

these habitats along river corridors to breed and migrate annually. With water resources becoming ever more limited over time, it is crucial to conserve and restore areas that are resilient to drought and climatic changes. Supporting wetland systems, and the agricultural practices that sustain them, are one of the most important keys to preserving the future of the SLV for both humans and wildlife.

