



Healthy Colorado Rivers

What do our rivers need to thrive?

With ever increasing demands on our limited water supply, we must be an advocate for healthy *flowing* Colorado rivers. Our rivers support dynamic ecological functions, provide habitat for hundreds of species, and support a robust \$9 billion state recreation economy.



Where does our water come from? Snow melt and precipitation fill our rivers with water. The water we use for drinking, bathing, and irrigating is mostly river water.

Healthy rivers are dynamic! Rivers rely on flowing water. High and low water seasons are critical for river health. Annual spring runoff and high water flows are critical for flooding the riparian (riverside) vegetation, flushing sediment in riverbeds, mobilizing the riverbed, and recharging alluvial aquifers.

Healthy riparian corridors (i.e., rivers, streams, and adjacent land) provide:

- Sinuous channels
- Flood water storage
- Sediment control
- Aquifer recharge
- Filter water
- Valuable habitat residential migratory
- Connectivity of habitat
- Forage for wildlife
- Ecotone
- High biodiversity

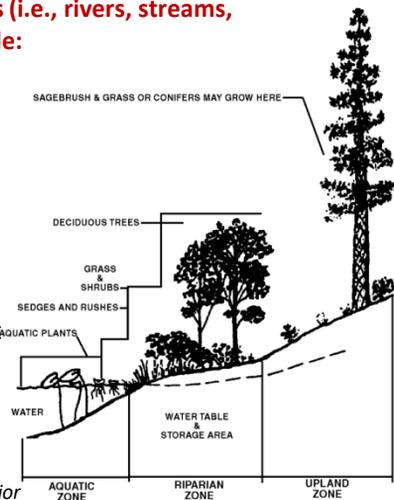


Diagram: U.S. Dept. of the Interior

THREATS TO COLORADO RIVERS

Colorado rivers are essential in supporting our natural landscape, wildlife communities, agriculture, industry, recreation, and our outdoor lifestyle. There are many threats to rivers in Colorado, here is a brief list:

Over Allocation: The Bureau of Reclamation in the “Colorado River Basin Water Supply and Demand Study” confirmed what most experts know: there are likely to be significant shortfalls between projected water supplies and demands in the Colorado River Basin in the coming decades.

Water Diversions: River water is taken permanently from the West Slope for front range storage and use. Diverting 20% or more from native flows greatly increases degradation risk (Richter, et al, 2011). Example, 60% of the Fraser River’s native flow is currently diverted to the front range. An additional 15-20% diversion is proposed through the Moffat Expansion Project (*Denver Water*). *Riparian habitats are significantly impaired below diversion structures (*WFET, CWCB*).

Contamination: There are potential risks to both ground and surface water through increased oil and gas activities. In addition, impervious surfaces create runoff during storm events. Contaminated runoff flows into nearby streams taking with it pollution and debris.

Consider These Facts About Colorado's Rivers:

In Colorado, rivers have no water rights of their own.

50% of Colorado's wetlands have been lost due to a variety of land-development pressures. (USGS)

Less water in a stream changes the stream:

- impacting fish and wildlife habits
- contaminants are more concentrated
- the stream is slower and warmer
- sediment accumulates as the flow slows.

Climate models predict CO will be warmer by 2.5°F by 2025 and 4°F by 2050 (CWCB). Timing of runoff is shifting earlier in the spring. Changing the timing of spring flushing flows impacts fish spawning and riparian habitat. Warmer temperatures will affect evaporation rates in our reservoirs and rivers.

Riparian ecosystems are fragile. Changes in the canopy cover over a stream due to the loss of plant cover can negatively alter the microclimate, jeopardize bank stability, and increase evaporative loss.

Over 90% of Colorado bird species rely on riparian zones for part of their annual life cycle for nesting, hunting, roosting, and/or resting during migration.

Riparian habitats contain up to 10 times as many migrant passerines (songbirds) per hectare compared to adjacent non-riparian habitats.

51% of all breeding avian species in the southwest United States are completely dependent upon riparian vegetation.

Nearly 400 avian species rely on the Colorado River basin during some part of their lifecycle (breeding, wintering, migration).

Instream Flow (ISF) water rights are managed by the Colorado Water Conservation Board. Currently, the flows established under the ISF program are often insufficient to be truly protective of sustainable healthy river ecosystems.

For More Information, Contact:

Abby Burk

Western Rivers Regional Program
Manager
Audubon Rockies
aburk@audubon.org

Alison Holloran

Executive Director
Audubon Rockies
aholloran@audubon.org



Blue Heron

HELP OUR RIVERS.

Join Audubon's Western Rivers Action Network
as we rise to this historic challenge to create
healthier western rivers for birds, wildlife, and
people.

Visit: rockies.audubon.org



River Otter

In Colorado water belongs to all the people.

"A river can be killed by treating it only as a commodity rather than the habitat of life itself. When we nurture our singing and working rivers, we celebrate the greater community in which we live." ~Gregory J. Hobbs, Jr.

Justice Gregory J. Hobbs, Jr. is a member of the Colorado Supreme Court. "Scarce and Dear" appears in Into the Grand 21 (Continuing Legal Education in Colorado, Inc. 2012).

Water Security for Birds and People

Audubon Rockies
116 N. College Avenue, Suite 1
Fort Collins, CO 80524
(970) 416-6931 | rockies.audubon.org

Rev. 7/2018