

# The Riparian Zone

## Summary & Purpose

The riparian zone is the ecosystem alongside the river and is especially vulnerable to human and natural impacts. We can discuss the habitat revolving around the life of Cottonwoods. In the Western U.S., cottonwood forests support a higher diversity of breeding birds than all other western habitats combined. ([article](#))

## Objectives

### What will visitors learn?

- The inter-relation between the plants, animals and the river: birds nesting in cottonwoods, feeding on insects and fish.
- Riparian areas are affected by the river: changes in streamflow can cause erosion as can decreases in plant cover and depredation of wildfire.
- **DW:** Removal of plants and changes in plant cover type impact erosion.
- **DW:** Fires impact erosion (if desired, could discuss 'triple threat' of burn area runoff).
- Restoration of damaged riparian areas: cattle grazing on Butler Creek north of Rifle, how the banks were stabilized, native plants established.
- Biodiversity - Dragonflies are indicators of healthy riparian areas (pg. 346 Project Wet)
- **DW:** if burn area runoff discussion desired, could show 'burnt' hydrophobic soil, photos of burn area erosion.
- **MS:** How Flooding is necessary for maintaining healthy river ecosystems by looking at the growth process of Cottonwood trees.

## Related Themes and Messages

(2.1)(2.2)(2.3)

## Location

The top display area of the right bank and the multiple locations in the backdrop.

## Description and Conceptual Rendering

### South bank diorama top: Flooding and cottonwood tree

Describe the benefit of cyclical floods through the life cycle of Cottonwood trees. Dried Cottonwood seedlings are "sprouting" on the sand bar (the top of the diorama), and the scene extends to the backdrop. The backdrop shows the saplings — juvenile — mature trees as it gets further away. Also, the text refers to the main content about the trees on the tree columns themselves. See the illustrations below.

