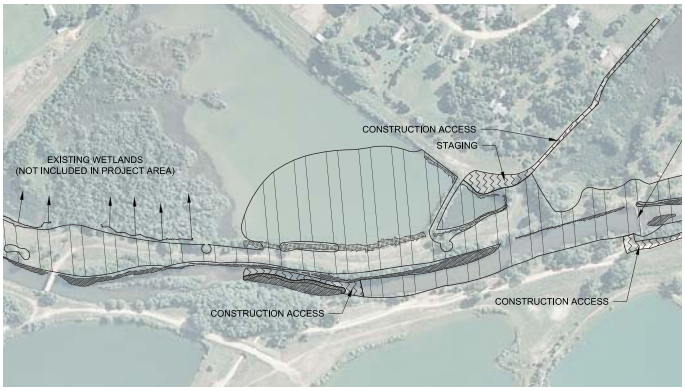
CITY OF FORT COLLINS

Sterling Pond and Josh Ames Structure Ecological Restoration Design-Build

Larimer County, Colorado



Biohabitats is transforming a mining scar into a vibrant mosaic of wetland habitat.

Throughout the early 20th century, Colorado's Poudre River was heavily manipulated for irrigation and mining, particularly in the Fort Collins area. Today, the City of Fort Collins is taking steps to restore natural flow, fish passage, and ecological function to the river.

After working with the City to assess its natural areas and identify opportunities for restoration, Biohabitats implemented the restoration of priority site: a 2,000-foot reach of the Poudre that had been disconnected from its floodplain by a high berm that was originally constructed to protect an adjacent gravel pit. With mining operations long since completed, the pit had become a pond that offered habitat but did not meet its ecological potential in terms of ecosystem processes. In separating the river from its floodplain, the berm diminished the river's ecological function and value, and prevented the regeneration of cottonwood, a keystone species that was disappearing from the site. To make matters worse, a defunct, abandoned, concrete diversion structure for irrigation was located just upstream.

Biohabitats' approach to this design-build project involved three key strategies: widening the riparian zone along the Poudre, creating additional shallow wetland habitat in the pond, and working with The Colorado Water Trust to remove the abandoned dam.

Biohabitats first lowered the steep berm on the river bank, creating shallow river habitat that is valued by fish, birds, and other wildlife. The berm material was then placed in the adjacent pond to create a four-acre mosaic of riparian woodland, wet meadow and emergent wetland. The finished pond site mimics the scars from natural meanders of a river as it winds across a floodplain.

Following the dam removal, Biohabitats will restore the channel to create a stable, 1000-foot-long drop in elevation. Instead of plunging over concrete, the water will fall more slowly through a pool and riffle system that offers improved aquatic habitat and fish passage and allows sediment transport. Using the sediment from behind the dam, Biohabitats will also create benches along the banks, which will not only restore a more natural channel width, but also create additional riparian habitat. The project has garnered the support of environmental groups such as Save the Poudre as well as from the boaters who no longer have to portage past the dam.

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