

CITY OF FORT COLLINS NATURAL AREAS DEPARTMENT POUDRE RIVER PROJECTS

GO WITH THE FLOW

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Front Range communities and agriculture use water to sustain themselves so the Cache la Poudre River serves as both a water delivery mechanism and an ecological system. Unfortunately, aquatic life is challenged by dry-up points and rapid changes in flows due to water delivery practices. The City of Fort Collins Natural Areas Department is working to identify management options that reduce or eliminate low flows as well as moderate low-flow volatility while still providing water—the life blood of communities and agriculture. In addition, the City is working to establish a dedicated minimum instream flow within Fort Collins.

POUDRE RIVER DOWNTOWN PROJECT



This extensive project will improve

in-river and bankside recreation, habitat connectivity through restoration and rehabilitation, bank protection, stormwater /floodplain management, water quality, public safety and access, and transportation in and adjacent to the Poudre River from Shields Street to Mulberry Street. Three City departments (Parks, Stormwater, and Natural Areas) are collaborating throughout the process from planning to implementation to make this complex effort a success.

UNDERSTANDING THE RIVER



The Natural Areas Department is improving understanding of the urban stretch of the Cache la Poudre River by creating an interdisciplinary ecological model. The Ecological Response Model (ERM) is based on a wealth of expert scientific knowledge combined with local data. Preliminary results of the ERM indicate the river has been changing for some time and is already greatly impacted by the combination of land use and water management. The model indicates that current flows are approaching the low end of flow thresholds necessary to sustain higher quality aquatic and riparian habitats. The ERM will foster a more informed dialog with stakeholders about the current and anticipated use and condition of the river.



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CITY OF FORT COLLINS NATURAL AREAS DEPARTMENT

POUDRE RIVER PROJECTS

Creating a healthier river environment for people and nature.

The City of Fort Collins Natural Areas Department is sponsoring or collaborating on many projects along the Cache la Poudre River. The projects will cause trail closures and construction over the next few years. Areas of the river will be disturbed during construction. Ultimately, the projects will create a healthier river environment as well as enhanced recreation opportunities.



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CHALLENGES AND OPPORTUNITIES

The Cache la Poudre is, in part, a "working river" and it delivers water to thirsty communities and agriculture. Over the past 150 years, the Poudre River has undergone significant alterations to make life on the arid Front Range possible. Even with these alterations, there are opportunities to enhance the remaining plant and wildlife habitat while meeting the community's water supply and recreational needs.

Challenges to the ecology of the river include barriers within the river and low flows, which cause habitat fragmentation and restrict wildlife movement. Water quality is threatened by urban and agricultural run-off and sediment from areas burnt by wildfires upstream. It's difficult for native aquatic species to thrive with high temperatures from low flows and lack of high water flows that scour and renew the river bed. Flows are carefully managed and diverted for agriculture and municipal use, like a plumbing system. The river can no longer freely move across the floodplain because its banks have been altered by mining and flood control activities.

In a more natural river system, high spring flows spill beyond the river banks creating a mosaic of aquatic, wetland and riparian habitats. The riparian forest is especially important because most wildlife depend on it at some point in their life cycle.



GOALS

Despite fundamental changes and challenges, many positive elements of the river can be supported or improved. The following goals are compatible with the limitations of an urban environment:

Removing or altering physical barriers within the river channel to improve habitat connectivity.

Understanding and eliminating low flow issues to reduce aquatic habitat fragmentation.

Connecting river and floodplain habitats to provide refuge for fish and insects.

Lowering steep and unnatural riverbanks to safely expand the reach of high spring flows.

Creating and managing a mosaic of wetland habitats within the floodplain.

Supporting and enhancing terrestrial habitats and connectivity throughout the corridor.

Improve recreational opportunities.



NORTH SHIELDS PONDS NATURAL AREA



Restoration work will create in-river habitat, reconnect the Poudre River with its adjacent floodplain through bank lowering, and expand the river's native cottonwood floodplain forests. The abandoned in-river Josh Ames diversion structure will be removed in collaboration with the Colorado Water Trust to permit fish passage, reduce downstream "dry-up," and improve river-based recreation such as fishing and floating.

RECONNECTING THE RIVER WITH ITS FLOODPLAIN



Ecological restoration work at McMurry Natural Area will lower a quarter mile of the north riverbank and restore the historic floodplain. A century's worth of concrete rubble, automobiles, and other debris will be excavated from the riverbank and transformed with native willows, shrubs, and cottonwood trees. The physical lowering of the riverbank will permit higher river flows to safely spill onto adjacent low-lying areas within the natural area. This will revitalize, invigorate, and mimic the natural and historic interaction between the river and its floodplain.

TRANSFORMATION

The Link-N-Greens golf course will

be transformed into Woodward Inc.'s headquarters and a riverside natural area. As part of the development project, 31 acres along the Poudre River adjoining Woodward's office will be dedicated to the Natural Areas Department. The new natural area will include a variety of floodplain habitats and feature a re-designed Poudre Trail that will provide an engaging experience for visitors.

TRAILHEAD

