

## **PROJECT ABSTRACTS**

### Information needed in Project Abstract

- General cost information
- General schedule
- General tasks involved in project
- Applicant partners
- Discussion of specific injury
- Discussion of benefits

### **Examples abstracts:**

#### **Upper Willow Creek Project Development Grant (2002)**

Montana Fish, Wildlife and Parks seeks a Project Development Grant of \$25,000 for design of stream restoration activities on a 13,700 foot reach of Upper Willow Creek, a tributary of Rock Creek near Philipsburg. The project area covers 3 miles of Upper Willow Creek that starts about 4 miles upstream of its confluence with Rock Creek. The Project Development Grant focuses on field data collection to develop a stream re-naturalization design and a wetland enhancement design for this reach of Upper Willow Creek. Long-term, the project's implementation activities focus on stream channel restoration and riparian management. These actions seek to create and enhance fish, wildlife and water quality resources equivalent to those that were injured. Hence, the project would replace injured resources and lost services by enhancing Upper Willow Creek fish populations and habitat and increasing trout recruitment to the Rock Creek fishery. Upper Willow Creek contains genetically pure populations of bull trout and westslope cutthroat trout and is a spawning and rearing tributary for these species in Rock Creek. It also supports populations of non-native rainbow, brook, and brown trout.

The \$25,000 requested in Restoration funds would be used to collect field data necessary for project design and to design the project (i.e. irrigation head structures, bank stabilization features, etc.). Total design costs are \$37,330, with matching funds of \$12,330. For project implementation, Montana Fish, Wildlife and Parks intend to seek funding from a number of sources, including possibly from the Natural Resource Damage Program.

## **Bonner Bridge Project (2006)**

Missoula County proposes to remove and replace a county-owned pedestrian bridge over the Blackfoot River arm of the Milltown Reservoir known as the Bonner Bridge. The project will restore aquatic and riparian habitat resources. Replacement of the existing bridge will maintain the baseline level of transportation services for the local community. The project will also replace lost recreational resources by linking to pedestrian and recreational trails planned by the Milltown Superfund Site Redevelopment Working Group.

The Bonner Bridge is located within the Milltown Reservoir area, as defined in the *UCFRB Restoration Plan Procedures and Criteria*, and within the State Milltown Restoration Plan's project area. The bridge was built in 1921 in the tail water of the Milltown Dam. The Bonner Bridge served as a State highway bridge until 1977, when it was turned over to the County after completion of the new Highway 200 Bridge. It is a two-span bridge with a concrete center pier, two concrete piers in the river channel under the bridge, and two approach piers near each river bank.

When the Milltown Reservoir is drawn down by 29 feet in fall, 2008 as part of Superfund site remediation, the river bed elevation will drop and reservoir sediments will be scoured from the bed of the Blackfoot River channel of the reservoir. As this occurs, the Bonner Bridge piers and abutments will be stressed due to increased river velocity, and may be undermined as the river cuts down to its new bed elevation, resulting in the need to replace the bridge if it is to provide for safe pedestrian passage over the Blackfoot River. Under the Milltown Reservoir Site Consent Decree, impacts to the Interstate 90 and Highway 200 bridges will be mitigated by the United States Environmental Protection Agency. Missoula County is responsible for costs associated with the Bonner Bridge.

Removal of the existing pedestrian bridge and three concrete piers from the restored river bed will restore aquatic resources and riparian habitat and allow restoration of a naturally functioning river channel as part of the restoration of the Clark Fork and Blackfoot Rivers following removal of the Milltown Dam. The existing bridge will be replaced with a three span pedestrian bridge with no piers constraining the river channel.

The project is designed and scheduled to coordinate and integrate with the EPA Superfund actions at Milltown, the plans of the Milltown Redevelopment Working Group, and the State's Restoration planning for the Clark Fork River and Blackfoot River near the Milltown Dam. Demolition of the existing bridge and construction of the new bridge would be completed prior to the third week of August 2007 because the bridge is used by Bonner School (K-8) students who reside west of the Milltown Reservoir. Streambanks and the right-of-way disturbed by removal and installation of the bridges will be restored using plant species consistent with revegetation plans for the State Restoration Plan.

Total project cost is \$1,300,870. The County requests a grant of \$975,652 from the Natural Resource Damage Program, and will provide \$325,218 in matching funds (25% match).

## **Watershed Land Acquisition Project (2001)**

The Rocky Mountain Elk Foundation (RMEF) holds a purchase option to acquire approximately 32,500 acres of land in the Upper Clark Fork River Basin from the YT Timber Company. The property is located between Anaconda, Mt., and Georgetown Lake and makes up the bulk of the Warm Springs Creek drainage not already in public ownership. The property has high public values including habitat for native fish (bull trout and westslope cutthroat trout), critical big game winter range, alpine lakes and wetlands.

RMEF applied for a \$6.075 million grant from the Upper Clark Fork River Basin (UCFRB) Restoration Fund in April of 2000 to acquire nearly 9,000 acres of the property for the State of Montana. The UCFRB Advisory Council and initially, the NRD staff, recommended funding the entire \$6.075 million, however, based on financial constraints, the Trustee Council recommended, and the Trustee awarded, \$3.764 million in December, 2000. RMEF conveyed 5,790 acres to the State of Montana in February, 2001. RMEF is now applying for \$2.066 million from the UCFRB to acquire approximately 3,178 acres and complete the State portion of the acquisition. The remaining 23,500 acres is targeted for purchase by the U.S. Forest Service (U.S.F.S.) using Federal Land and Water Conservation Fund (LWCF) dollars. Five million dollars has been appropriated from the LWCF program for 2001 and will be available in the spring of 2001.

The State portion of the acquisition is located in close proximity (less than five miles) to the damaged Anaconda Uplands and Opportunity Ponds. Acquisition of the State portion of the property will replace soil, vegetation and wildlife habitat related services lost in the Upper Clark Fork Basin including services lost in the Anaconda Uplands from smelter emissions and lost in and beneath the Opportunity Ponds from hazardous materials. Acquisition of the Watershed Property by public entities will benefit water quality in Warm Springs Creek, the major tributary of the Upper Clark Fork River and aid in the restoration of the river. Habitat for the endangered bull trout and the westslope cutthroat trout and spawning areas for brown trout will be enhanced or maintained with the Watershed Land Acquisition. A critical linkage for wildlife between the Flint Range and the Pintlar Range will also be protected from development.

The Watershed Land Acquisition project is a partnership between the RMEF, the State of Montana and the U.S.F.S. The first phase of the purchase option was exercised in December of 2000, which required RMEF to borrow \$2 million until the UCFRB Restoration Fund dollars became available and transactional details were worked out. Funding of the acquisition of the remaining land targeted for state ownership will be crucial to exercising the next phase of the option.

## **Anaconda Waterline Project (2004)**

Anaconda-Deer Lodge County (ADLC), as the owner/operator of its municipal water system since 1992, has made steady progress in upgrading its dilapidated water mains. This is a critical endeavor, given that options for additional water supply for the community are seriously curtailed by surrounding groundwater contamination from mining and smelting activity. ADLC installed six new wells and a 3.5-million-gallon storage tank in the 1994, but was forced to eliminate a “peaking” supply connection to the Silver Lake Pipeline due to regulatory non-compliance of that source under the federal Safe Drinking Water Act. With its current water supply maximized and no practical options for expansion, Anaconda has focused on replacing leaking water mains as a surrogate for additional water sources.

UCFRB Restoration Funds continue to be critical to ADLC’s efforts. With an initial objective to replace larger diameter transmission mains, Restoration Funds have allowed the City-County to replace the 10-inch Main Street transmission main in 2003, followed by the scheduled replacement of the 14-inch East Fourth Street main in 2004. ADLC’s current proposal is to complete the replacement of the 14-inch main along the west portion of the Fourth Street corridor, between Hickory Street and the Junction Valve House at Tamarack Street. This Fourth Street transmission main is the single critical link in conveying water from the well field and storage tank, into central and eastern Anaconda. The western portion of this main is thin-walled steel pipe dating from 1900. It suffers from ongoing leakage, and its condition and critical service invite catastrophic failure that could render the bulk of Anaconda without water.

The West Fourth Street transmission main upgrade will entail approximately 8,000 feet of 14-inch pipe replacement. Three known leaks along on the existing main were estimated to be leaking 6.3 million gallons of water per year, and undetected leakage from observed pipe corrosion in the Kalimane steel pipe is likely many times that amount. A conservative estimate of 26 million gallons per year of water savings resulting from replacement of this line represents \$28,000 in annual savings in water production costs. The proposed West Fourth street main replacement is estimated to cost \$1,532,591. ADLC is proposing \$250,000 in cash and \$59,217 in staff in-kind services as a 20.2 percent match to the requested UCFRB Restoration Funds.

The project is a beneficial, cost-effective candidate for UCFRB Restoration Funds for several reasons:

- A new transmission main is critical for reliable water service to the bulk of the community.
- By eliminating leakage, estimated water savings extend ADLC’s existing 6.6 mgd water supply by 1.1 percent, an important supplemental contribution in the face of the inability to drill additional wells.
- By conserving its limited uncontaminated water resources, the project provides a significant increment of mitigation for Anaconda’s lost groundwater resources rendered unusable by past mining-related environmental degradation.

## **Thompson Park Improvement Project (2007)**

Butte-Silver Bow City/County, in cooperation with the U.S. Forest Service, requests \$988,402 in Restoration Funds to improve recreational opportunities in Thompson Park near Butte and to improve natural resources along Blacktail Creek, a tributary of Silver Bow Creek that borders Thompson Park. Total project costs are estimated at \$1,617,158, with \$628,756 proposed in matching funds.

Thompson Park is a 3,454-acre municipal park, located about 10 miles south of Butte in the Beaverhead-Deerlodge National Forest. Butte-Silver Bow and the U.S. Forest Service jointly manage the park. The Works Progress Administration built the majority of the park roads and recreation sites in the 1930's and 1960's respectively. The park historically was a popular recreational area for the community of Butte and area visitors. However, over time the park's infrastructure has greatly deteriorated and the poor condition of the Park's roads, trails, and bridges causes sedimentation to Blacktail Creek.

The four major components of the Restoration Fund involve: 1) improvements to nine dilapidated recreation sites, such as adding toilets and picnic tables; 2) replacement of three road access bridges and rehabilitation of 2.25 miles of road; 3) improvements to 2.5 miles of trail and abandoned railroad tunnel and trestle structures; and 4) land acquisition and easements. Most tasks are proposed to be designed and started in 2008 and completed in 2009. Almost all components of this project are within Thompson Park; several small projects are within a half mile of the Park.

In 2003, Butte-Silver Bow and the U.S. Forest Service applied to the NRDP for funding for improvements to trails and recreation facilities at Thompson Park and for natural resource enhancements both in and outside of the Park. Some of the project components proposed in 2003 are similar to the present requests; however, many components proposed then are not part of the present proposal. The 2003 project was not approved for funding.