

# **Colorado Healthy Rivers Fund**

## **2009 Annual Report**

**March 5, 2010**

The Colorado Healthy Rivers Fund (CHRF) received \$97,392 in donations in 2009 for the 2008 tax year. This represents the second largest grossing year for the fund since its inception in 2002. Nine new grants were approved for funding in September of 2009. Total 2009 grant funding is \$119,976. Staff has issued Purchase Orders for 6 of the projects. The other 3 are in the scoping process, and they should be contracted in the very near future. Table 1, attached at the end of the report, provides a brief description of each project.

Eight projects and planning efforts were completed in 2009. Project descriptions and links to the final reports are listed below. Currently, there are 18 active grants funded through CHRF. As stated above, nine of these were awarded in September. The other nine grants are at various levels of completion. A project description and brief progress report for each of these grants is also included below.

### **Completed Colorado Healthy Rivers Fund Grants - 2009**

#### **Grand County Water Information Network (GCWIN) – Algae Monitoring Project**

The purpose of this project was to quantify the extent of the existing algae problem and potential health risks in Grand County through a watershed specific approach. Objectives included algal productivity quantification and mapping the locations and concentrations of algae.

\$10,000 grant awarded September 2005. Final Report - GCWIN Algae Monitoring Project is available at: <http://cwcbweblink.state.co.us/weblink/0/doc/128075/Electronic.aspx?searchid=7df6a825-a308-458e-9cd4-8a3df812e8d9>

#### **Coalition for the Upper South Platte (CUSP) – River & Forest Restoration, Education & Outreach, Diversion Dam Reconstruction Design**

CUSP's project had several components including forest restoration, environmental education, diversion dam reconstruction design, and erosion control. The forest restoration component of the project primarily involved fuel reduction to reduce the risk of fires. CUSP's Environmental Education Coordinator worked with students throughout the Front Range on water quality monitoring and tree planting projects. The diversion dam reconstruction design is one component of a future river restoration project on the South Platte River near Lake George. Off Highway Vehicle (OHV) use in South Platte tributary watersheds led to the need to stabilize hillslopes and stream crossings to mitigate sediment runoff.

\$25,000 grant awarded September 2006. Final report available at: <http://cwcbweblink.state.co.us/weblink/0/doc/139342/Electronic.aspx?searchid=687f96f6-c221-482a-896e-68725be3f847>

### **Boulder Creek Watershed Initiative (BCWI) – Water Quality Monitoring**

This grant funded several volunteer water quality monitoring teams in the Boulder Creek Watershed. This involves volunteer recruitment, training, and certification. Volunteers measure flow, conductivity, dissolved oxygen, nitrogen, pH, phosphate, and temperature. The data is used to meet BCWI's mission to "protect and enhance the health of the Boulder Creek watershed by community based stewardship through education, information and action".

\$10,000 grant awarded September 2007. Final report - Boulder Creek Watershed 2008 Stream Team available at: <http://cwcbweblink.state.co.us/weblink/0/doc/128074/Electronic.aspx?searchid=679b6b4d-e880-494c-9aa7-4d4d4c41e22f>

### **Colorado Stormwater Council – E. Coli Assessment and Management Plan**

The objectives of Phases I and II of the Colorado E. coli assessment and management project were to assemble an annotated bibliography of existing E. coli resources, identify regulatory options to address E. coli listed streams, evaluate research related to E. coli sources, assemble data in an effort to standardize sampling protocol, and summarize Colorado case studies. These objectives were presented to various watershed groups and interested organizations, including the Water Quality Forum.

\$10,000 grant awarded September 2007. \$15,000 grant awarded September 2008. Final reports available at: <http://cwcbweblink.state.co.us/weblink/0/doc/130471/Electronic.aspx?searchid=687f96f6-c221-482a-896e-68725be3f847>

<http://cwcbweblink.state.co.us/weblink/0/doc/139347/Electronic.aspx?searchid=687f96f6-c221-482a-896e-68725be3f847>

### **North Fork River Improvement Association (NFRIA) – Irrigation Diversion Reconstruction**

NFRIA completed adaptive management actions of the Paonia Ditch Diversion on the North Fork of the Gunnison River. The Paonia Ditch Diversion was constructed in 2008 to eliminate annual gravel "push-up" diversion dams that have significant impacts on channel stability. The initial project was funded by the CWCB and the Gunnison Basin Roundtable. Subsequent high flows damaged the diversion structure; however, the newly installed headgates remained intact and functional. The objective of the adaptive management action was to stabilize the diversion structure for larger flows. The project still supports the original objectives by maintaining an efficient water-conserving diversion structure, improving fish habitat, and creating safer recreation by providing boat passage.

\$15,000 grant awarded September 2008. Final report available at: <http://cwcbweblink.state.co.us/weblink/0/doc/139340/Electronic.aspx?searchid=70938aee-ba2a-4152-860b-e55d24b8a458>

## **Park County & Colorado Open Lands – Channel Stability & Sediment Supply Assessment**

Sediment pollution and the need for action were recognized in Park County; however, the extent of the problem and locations of primary concern were not well documented. This assessment identified locations where restoration activities can produce improvements. The objective of the study was a systematic assessment of all reaches in the watershed. This resulted in prioritization for stream improvements using a Watershed Assessment of River Stability and Sediment Supply (WARSSS).

\$12,000 grant awarded September 2008. Final Report - Priorities for Improving Sediment Pollution in the South Platte Headwaters Watershed, Results of a Watershed Assessment of River Stability and Sediment Supply (WARSSS) Study & Watershed Assessment of River Stability and Sediment Supply (WARSSS) Rapid Resource Inventory for Sediment and Stability Consequences (RRISSC) available at:

<http://cwcwweblink.state.co.us/weblink/0/doc/139056/Electronic.aspx?searchid=0c5ffac0-6c19-43ed-8fbc-2ad1fed191f8>

<http://cwcwweblink.state.co.us/weblink/0/doc/139057/Electronic.aspx?searchid=0c5ffac0-6c19-43ed-8fbc-2ad1fed191f8>

## **Rocky Mountain Field Institute (RMFI) – Stream Restoration**

RMFI and its partners successfully completed the second and final phase of an erosion control and restoration project within the upper Ski Creek Watershed, Pikes Peak, Co. This is the fourth project to be completed as part of the Pikes Peak Watershed Restoration Project, a large-scale, multi year effort to address severe sedimentation and erosion impacts caused by stormwater runoff from the Pikes Peak Highway.

\$25,000 grant awarded September 2008. Final Report - Upper Ski Creek Watershed Erosion Control and Restoration Project Phase 2 available at:

<http://cwcwweblink.state.co.us/weblink/0/doc/139055/Electronic.aspx?searchid=0c5ffac0-6c19-43ed-8fbc-2ad1fed191f8>

## **Fountain Creek Restoration Committee & City of Manitou Springs – Stream Restoration**

The Shryver Park Reach Restoration Project was designed to restore a small fishing pond and reach of Fountain Creek in Manitou Springs. The river restoration effort included elimination of a fish (trout) migration barrier, bank stabilization, riparian re-vegetation, and construction of in-stream habitat features. The pond restoration included a rebuilt inlet structure and dredging. The project was designed to improve the connectivity between the pond and creek and within the creek ecosystem.

\$50,000 grant awarded September 2008. Final Report - Fountain Creek, Shryver Park Reach Restoration Project available at:

<http://cwcwweblink.state.co.us/weblink/0/doc/139053/Electronic.aspx?searchid=0c5ffac0-6c19-43ed-8fbc-2ad1fed191f8>

## **Active Colorado Healthy Rivers Fund Grants**

### **San Juan Resource Conservation & Development Council – Animas River Watershed Plan**

\$15,000 grant awarded September 2005, extensions approved August 2006 & April 2008. \$8,502 invoiced.

The San Juan Resource Conservation & Development Council includes the Animas River Nutrient Work Group. The Work Group has identified nutrients enrichment in the Animas Basin by sampling low water from 2003 – 2005. The grant focus is to expand the base of stakeholders and develop a geographic database. Both of these objectives are complete. The grant was also awarded to develop a draft watershed plan under EPA guidelines. The grantee has an extension because of project management staffing issues. Ecosphere Environmental Services is effectively managing the project as of spring 2008.

Ecosphere Environmental Services currently has the contract to coordinate stakeholder meetings and maintains a subcontract agreement with BUGS Consulting to complete the watershed management plan. To date, BUGS has completed the watershed management plan through a draft of Section 2. A water quality data and land use GIS database is complete. The Sampling and Analysis Plan (SAP) for the Animas River is also complete. The final Watershed Plan is expected in July 2010.

### **Uncompahgre River Stewardship Alliance – Uncompahgre River Watershed Plan**

\$10,000 grant awarded September 2007. \$7,000 invoiced.

The primary goal of this planning effort is to address the need for greater understanding of water-quality and riparian habitat issues within the Uncompahgre basin through continued community involvement and the development of a comprehensive watershed plan.

The watershed plan is designed to be a model planning process that will develop and strengthen collaborative ties between citizen groups and more traditional water user groups such as the water conservancy district, the water users association, the conservation districts, local governments and several state and federal agencies. The plan will be used to identify new partnerships to improve water quality, conservation, and environmental health. The plan is scheduled for completion in December 2010.

### **Friends of Bear Creek – Bear Creek Watershed Plan**

\$10,000 grant awarded September 2007, extension approved September 2008. \$1,000 invoiced.

The key of this planning effort is to reach out to all major conservation and recreational groups, civic and merchant groups, parks, open-space, and transportation agencies to focus them on collaborative watershed planning. The stakeholder group will work together to develop common goals in watershed planning and create a procedure and database for a future full scale watershed plan.

Progress has been made towards assembling a stakeholder group united under common goals. An extension was granted so the funds can be used as match in an EPA 319 grant application. The decision

on the EPA 319 grant is pending. An alternative study, i.e. Riparian & Geomorphic Stability Assessment, is being discussed if the EPA grant request is unsuccessful.

### **Roaring Fork Conservancy – Roaring Fork River Watershed Plan (Phase II)**

\$10,000 grant awarded September 2007. \$7,420 invoiced.

Building on the work completed in Phase I-fostering stakeholder involvement and the State of the Watershed Report, Phase II will cultivate discussion among Roaring Fork citizens and stakeholders, and technical advisors to develop a comprehensive and prioritized set of goals and objectives and strategies and recommendations, which will be used to protect and sustain the economic and ecological resources provided by the watershed. The success of Phase II depends on the involvement of a diverse range of stakeholders and technical advisors.

Phase II began late in early 2009 in cooperation with the Ruedi Water and Power Authority. The Authority received a \$40,000 grant through the Colorado River Basin Roundtable, in cooperation with the CWCB Water Supply Reserve Account. The Roaring Fork Conservancy and the Authority have completed the public outreach and involvement element of Phase II. They have compiled a catalogue of recommended actions which they are currently analyzing for feasibility, effectiveness, cost, legal implications, etc. They expect to take these recommendations to the various responsible jurisdictions and agencies by the end of this year.

### **Rio Grande Headwaters Land Trust (RiGHT) – Education and Outreach**

\$15,000 grant awarded September 2008. \$7,905 invoiced.

The objective of this planning grant is to increase knowledge of conservation easements in the Rio Grande Watershed. RiGHT is achieving this objective by sponsoring workshops that detail conservation easements, including the process of completing an easement and the benefits for landowners. RiGHT is also hosting presentations designed to reach a broad audience. The presentations highlight RiGHT's work and accomplishments, and they are designed to increase partnerships with local & state government, community organizations, the public, and potential funders. RiGHT communicates to a wider audience through newsletters in both print and electronic format.

RiGHT has created two newsletters and held two presentations with grant funds. Staff has designed presentation materials as well as purchased a power point projector to more effectively communicate during workshops and presentations. Two workshops are scheduled for early 2010.

### **Boulder Creek Watershed Initiative (BCWI) – Water Quality Stream Teams**

\$12,750 grant awarded September 2008. \$9,438 invoiced.

This grant was awarded to create two additional citizen volunteer water quality monitoring "Stream Teams" and to purchase four sets of water quality sampling equipment. Data collected will be available on the Stream Team web site located at [keepitcleanpartnership.org](http://keepitcleanpartnership.org) and at [basin.org/bcwi](http://basin.org/bcwi). The parameters

currently being monitored are flow, temperature, pH, dissolved oxygen, conductivity, phosphate and nitrate. In addition to water quality monitoring, BCWI will offer two advanced water quality training sessions to each Stream Team.

BCWI has recruited one volunteer Stream Team and held one volunteer training/certification session. The new Stream Team represents members of a local Patagonia store. Patagonia also contributed \$1,500 to initiate a QA/QC piece of the program. The Stream Team has held sampling sessions monthly since they were organized. BCWI is in the process of merging with Colorado River Watch, a much larger organization utilizing volunteers for water quality monitoring throughout the state.

### **Institute for Environmental Solutions (IES) – Clear Creek Emerging Contaminants (EC) Project**

\$15,205 grant awarded September 2008. \$5,273 invoiced.

The pilot phase of the Clear Creek Emerging Contaminants (EC) project has two major goals: to reduce the amount of ECs that people contribute to local waterways and to increase their awareness about ECs. The pilot includes analysis of the water to see what ECs are currently being contributed in what amounts, and conducting surveys of Golden's citizens to determine which products (e.g., shampoo, detergent, medication) are being consumed in what quantities. IES will implement an Education and Outreach Campaign, designed to inform the citizens of Golden about ECs in waterways, where they come from, and their environmental consequences.

IES began by writing a scientifically accurate yet easily readable EC guidebook to introduce any interested party to all aspects of the EC issue. IES formed a Steering Committee to guide the project, and an extensive Stakeholder Group to disseminate project information. IES has sampled drinking water and municipal wastewater to determine EC levels. IES has also conducted community surveys.

### **Coal Creek Watershed Coalition (CCWC) – Water Quality Monitoring, Education & Outreach**

\$8,395 grant awarded September 2008. \$6,870 invoiced.

CCWC objectives include evaluation of Individual Sewer Distribution Systems (ISDS), Macroinvertebrate Assessments, Educational Signage, and Americorps Office of Surface Mining VISTA support. CCWC will locate all ISDSs in the watershed and identify those out of compliance with new health codes. CCWC will also use grant funds to analyze macroinvertebrate samples collected from 12 sites. Educational signage will be placed throughout the watershed at parking areas, trailheads, and high traffic areas to educate the public about issues and efforts taking place in the area. The Colorado Healthy Rivers Fund will be highlighted as a partner on these signs. CCWC will also use grant funds to support a VISTA volunteer. The VISTA will work to build the capacity of the watershed group.

CCWC has a full time VISTA on staff performing office duties, including grant writing. CCWC has released a Water Quality Report that highlights contaminants of concern in the watershed and the results of the macroinvertebrate sampling. The two variables are correlated to identify stream segments of

concern. Heavy metals are a primary concern in the watershed. The effects of heavy metal contamination on macroinvertebrates are well documented.

### **Arkansas Headwaters Recreation Area (AHRA), Colorado State Parks – Hecla Wash Restoration and Sediment Reduction**

\$25,000 grant awarded September 2009.

The Hecla Wash project aims to work with a partnership to implement ecologically sustainable watershed restoration measures to reduce sediment loading and achieve improved water quality and habitat in an impaired reach of the upper Arkansas River. The proposed project is also meant to serve as a pilot project for the larger area of interest which includes numerous tributaries within Brown's Canyon and adjacent reaches including Loggie Gulch, Squaw Creek, and Droney Gulch to name a few. Hecla Wash was selected as the pilot watershed due to the significant sources of sedimentation and water quality impairment. Sediment sources include a county road and vehicular traffic, extremely high recreational use, irrigation structures and spills, and some amount of ranching and grazing. Project success will be measured through robust monitoring and evaluation, and should set the stage for additional watershed planning in the future. BMPs, vegetative plantings, stabilization techniques and other engineered and soft features will be incorporated into the overall project to achieve desired goals.

This grant required an Intergovernmental Agreement between the CWCB and Colorado State Parks. The contract was recently executed. The project is scheduled to begin in June 2010. Project completion is scheduled for June 2011.

**Table 1****2009 Colorado Healthy Rivers Fund Grant Recipients**

<u>Grant Recipient</u>	<u>Project</u>	<u>Amount</u>	<u>Invoiced</u>
Wildlands Restoration Volunteers	Riparian Re-vegetation	\$19,220	
Coal Creek Watershed Coalition	Stormwater Management & VISTA Support	\$10,756	\$5,068
Coalition for the Upper S. Platte	Upper South Platte Mine Assessment Project	\$15,000	
Friends of the River Uncompahgre	Uncompahgre River Watershed Plan	\$15,000	
Roaring Fork Conservancy	Education & Outreach for Roaring Fork Watershed Plan	\$18,000	
Colorado River Water Conservation District	Lower Gunnison Basin Salinity and Se Water Quality Monitoring Station	\$16,000	
Tamarisk Coalition	Ecotype Specific Riparian Plants	\$10,000	
Eagle River Watershed Council	Edwards Eagle River Restoration, Phase II Riparian Re-vegetation	\$10,000	
Town of Vail	Gore Creek Restoration/Channel Stabilization	\$6,000	