

Healthy Rivers Grant Final Report

Project Overview

The urbanized section of Bear Creek has been identified in the State's list of impaired water bodies with high priority for E. coli contamination. This eight-mile stretch of the river runs through the cities of Lakewood, Denver, and Sheridan and is not included in the purview of the existing Bear Creek Watershed Association. As such, there is no coordinated education or action to address the water pollution, invasive species, stream bank erosion, or general watershed and river stewardship. This project focused on developing stewardship through restoration projects, and building stakeholder collaboration for the implementation of a watershed planning effort.

Activities Completed

1. Invasive species control:



Our youth green team members worked with 60 volunteers in the Denver section of Bear Creek in June 2011. They focused on invasive species removal and native tree protection.

15 truckloads of Russian olive trees were removed from a two mile stretch of Bear Creek (approximately 40 acres). Natural Areas staff applied herbicide to prevent the Russian olive trees from re-establishing.

In the fall of 2011, our youth Green Team members worked with Denver Natural

Areas to inventory Purple Loosestrife over approximately 20 acres in Bear Creek Natural Area as a part of their invasive management control planning.

2. Native Tree Protection:

In June 2011, the Green Team and volunteers worked to protect native trees from Beaver in the two mile Denver section of Bear Creek.

- Over 150 native trees were painted with a sand/paint mixture to protect them from beavers
- Five truckloads of wire was removed from native trees (the wire previously protected the trees from beavers, but was starting to damage the trees)
- Data on size and health was collected on 219 native cottonwood trees



In fall of 2011, the Green Team spent two additional days, protecting another 40 trees with the sand/paint mixture.

In April 2012, the Green Team and AmeriCorps National Civilian Conservation Corps (NCCC) members removed old wire and installed new beaver cages around 22 native Cottonwood trees in the Sheridan section of Bear Creek.

3. Stream Bank Stabilization:

In April 2011, we worked with Urban Drainage and Flood Control District (UDFCD) and the City of Sheridan to develop a plan for stream bank stabilization for approximately 2,000 feet of Bear Creek. Green Team youth and AmeriCorps NCCC members planted approximately 2,500 coyote will stakes along this stretch.



4. Stakeholder Engagement



Throughout the course of the grant we engaged stakeholders in various ways. In April 2012, 60 youth from local Boys and Girls Clubs and the Peace Jam organization conducted outreach to approximately 1,000 households in the Bear Valley neighborhood (the Denver section of Bear Creek). They educated community stakeholders on ways that they impact Bear Creek water quality and how they can reduce their impact.

Groundwork Denver also continued to build stakeholder engagement around the watershed planning effort. We

worked on projects with Denver Environmental Health (DEH), Denver Natural Areas, City of

Sheridan and UDFCD. We have been working with the National Park Service Rivers Trails and Conservation Assistance (RTCA) on the development of a steering committee and public meetings. We worked with Barr Milton Watershed Association and Denver Wastewater Management to develop an outreach packet to ensure consistent messaging. We became part of the Urban Waters Federal Partnership and have advocated for Bear Creek Watershed Planning as a demonstration project for the Partnership. The contract with Colorado Department of Public Health and Environment (CDPHE) for the watershed planning effort is signed and the project is fully underway.

5. Water Quality Testing and Watershed Inventory



Our youth program director, Shane Wright was trained by staff from DEH on the water quality testing that has been ongoing in Bear Creek. DEH provided us with all of their past water quality data, which we are analyzing for data gaps to develop a testing plan going forward.

In May 2011, our youth Green Team members met with high school students from local Green Mountain High School to teach them about water quality testing and watershed issues.

In June 2011, 15 volunteers started a watershed inventory. They surveyed the riparian areas in Sheridan and Denver to document areas of concern, such as trash, erosion, and other potential pollutants. The information was mapped using Geographical Information Systems (GIS).

6. Trash Pickup

Volunteer groups and the Green Team have conducted several trash pickup projects in Bear Creek. Trash pickups were conducted by volunteers in June 2011 and April 2012 and by the Green Team in fall of 2011. We estimate that 2,000 lbs of trash was removed from the Bear Creek riparian areas.



Project Final Accounting

	Healthy Rivers	Match	Total
Staff (adult and youth)	\$12,124	\$3,034	\$15,158
Fringe	\$1,825	\$485	\$2,310
Printing	\$305	\$0	\$0
Travel	\$32	\$74	\$106
Supplies/Materials			
wire and rebar for beaver cages	\$493	\$0	\$493
paint, gloves, tools for Deloitte volunteer day	\$0	\$1,253	\$1,253
Allocated office expenses	\$221	\$1,598	\$1,819
Volunteers (\$21.62/hr as per http://www.independentsector.org/volunteer_time)			
Deloitte (60 people x 6 hrs x \$21.62/hr)	\$0	\$7,783	\$7,783
AmeriCorps NCCC (8 people for 40 hrs x \$21.62/hr)	\$0	\$6,918	\$6,918
Boys&Girls Club (15 people for 6 hrs x \$7.70/hr)	\$0	\$693	\$693
	\$15,000	\$21,839	\$36,534