Improving Utah's Water Quality

Chalk Creek Watershed

Utah State University
WATER QUALITY EXTENSION

Revised November 2012

Major Waterbodies

- Echo Reservoir
- Weber River

Major Cities

- Coalville, UT
- Evanston, WY
- Ogden, UT

Major Land Uses

- Agriculture
- Oil
- Gas
- Coal Operations

Local Water Quality Issues

- Phosphorous
- Sediment
- Bank Erosion
- Loss of Riparian Vegetation and Aquatic Habitat

Local Contact:

USDA Service Center
30 Main Street
PO Box 526
Coalville, UT 84017-0437
Phone: (435) 336-5853

Watershed Description

The Chalk Creek watershed is located in Summit County 40 miles south of Ogden, Utah, and 4,000 acres of the watershed lies in Uinta County, Wyoming. The city of Coalville is located within the watershed on the western boundary at the point where Chalk Creek merges with the Weber River above Echo Reservoir. Chalk Creek receives water from three major tributaries: South Fork, Huff Creek, and East Fork.

The watershed encompasses 176,000 acres (275 square miles) and elevations range from 5,560 feet to over 10, 600 feet above sea level. Valley bottoms are relatively wide, supporting good quality pasture lands and the majority of the watershed is composed of mountainous rangeland.

The majority of the land within the watershed is privately owned, with a few exceptions, including 40 acres of BLM land and various small tracts of land adjacent to Echo Reservoir which are managed by the Weber Water Users and the Utah Division of Parks and Recreation. The land uses in Chalk Creek are as follows; 71% is mountain rangeland, 25% is woodland used for grazing, 2.5.% is pasture and hayland, 0.5% is urban, and 1% are oil and mining sites. The Chalk Creek watershed is a tributary to the Weber River system which provides municipal, industrial, agricultural, and recreational water to several thousand water users downstream.

Photo courtesy of the City of Coalville

Chalk Creek Water Quality Improvement

Project Description:

In 1991, the local soil conservation district, landowners, elected officials, water users, and resource managers engaged in the Chalk Creek Nonpoint Source Water Quality Project to address water quality impairments in the watershed. The primary goal of this project was to reduce bank erosion and sedimentation entering the creek. Best management practices (BMPs) were implemented to complete this goal. The practices included:

Chalk Creek Best Management Practices	
Brush Management	12,888 acres
Channel Vegetation	9,432 linear feet
Clearing and Snagging	340 feet
Critical Area Planting	4 acres
Pond	6 each
Fence	166,659 feet
Sprinkler Systems	1,024 acres
Drip Irrigation Systems	17 acres
Irrigation Water Management	1,041 acres
Use Exclusion	371 acres
Pasture and Hayland Management	206 acres
Stock Water Pipeline	5,585 feet
Prescribed Grazing	58,218 acres
Abandoned Mined Land Reconstruction	38 acres
Rangeland Planting	2,025 acres
Spring Developments	4 each
Streambank Protection	21,561 feet
Channel Stabilization	20 structures
Riparian Forest Buffer	13 acres
Livestock Watering Facility	9 each

The results of implementing BMPs in Chalk Creek included reducing total phosphorus, enhancing aquatic habitat, reducing sediment into the creek, and the finding of Bonneville cutthroat trout in the watershed.

Partners

Summit Soil Conservation District
Coalville City
Summit County
Chalk Creek Narrows Irrigation Company
Local hunting groups
Utah State University Extension
USDA Farm Service Agency
USDA Natural Resources Conservation Service
Utah Department of Agriculture and Food
Utah Department of Environmental Quality

Related Projects

Irrigation systems
Rangeland management
Pasture planting
Soil testing and training
Stream restoration
Outreach and education events
Water quality monitoring
Habitat evaluations

Funding

Total $4.1 million

For funding opportunities in the Chalk Creek Watershed, contact the Kamas Valley Conservation District.

To learn how you can participate or lend your support to Utah community water quality projects, please contact your local conservation district or county agent.

Produced by USU Water Quality Extension, Utah Watershed Coordinating Council, Utah Association of Conservation Districts, and Utah Division of Water Quality.

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