

Improving Utah's Water Quality

Spanish Fork Watershed



Revised November 2012

MAJOR WATERBODIES

Thistle Creek
Nebo Creek

MAJOR CITIES

Birdseye
Thistle

MAJOR LAND USES

Agriculture
Recreation

LOCAL WATER QUALITY ISSUES

Temperature
Phosphorus
Bank Erosion

LOCAL CONTACT:

Timp/Nebo Conservation
District
302 E. 1860 S.
Provo, UT 84606
(801) 377-5580 ext. 32

Watershed Description:

Thistle Creek is one of six sub-watersheds in the Spanish Fork River watershed. This sub-watershed lies 21 miles southeast of Provo, Utah, in the Wasatch Mountains. Thistle Creek flows north along Highway 89 from Hilltop, five miles south of Indianola, to its junction with Soldier Creek, near the old Thistle town site. Twenty-one miles long and 19 miles wide, the sub-watershed encompasses 138,401 acres of multi-jurisdiction land. The majority of the sub-watershed falls within Utah County, with the southern one-third extending into Sanpete County, and less than 2,000 acres falling within Juab County. The elevation ranges from 10,500 feet at Santaquin Peak to 5,100 feet at Thistle Creek's confluence with Soldier Creek. The combination of steep slopes, shallow soils, and clay substrate make landslides more prevalent in this watershed. The Atepic soil series only encompasses 1.5% of the area, but, contributes substantial amount of sediment during storm events. There are 106 miles of perennial and 313 miles of intermittent streams in this sub-watershed, with Thistle Creek being the major water body. The average annual precipitation is 16 inches, with the majority coming between October and April. Hay is the dominant crop along the river bottoms and grazing is prevalent in the uplands. Wildlife species vary with the watershed having nine threatened, endangered, or sensitive species present.



Spanish Fork Water Quality Improvement

Project Description:

Projects in this watershed have focused on eight water quality issues: stream channel conditions, stream corridor and riparian conditions, rangeland and wildlife habitat conditions, noxious weed populations, agricultural land conditions, animal feedlots, recreation, and housing and urban development. Actual project work began in 1999 with upland juniper control and reseeding in several locations within the sub-watershed. This work has continued along Thistle Creek including stream channel stabilization, willow plantings, planting root wads, upland water development to divert livestock off the riparian areas, and the Division of Wildlife Resources has completed fish habitat assessments and population trends.

The Natural Resource Conservation Service has written several EQIP contracts with producers to control animal waste from running or leaching into Thistle Creek. A highlight of this project was the manner in which the partners effectively applied

conservation and best management practices. These practices resulted in a decrease in nutrients and sediments which were previously entering the stream.



Partners

Utah County
Timp/Nebo Conservation District
Local landowners
Utah Division of Water Quality
Utah Division of Water Resources
Utah State University Extension
Utah Association of Conservation Districts
Utah Division of Wildlife Resources
Bureau of Reclamation
Natural Resources Conservation Service
Environmental Protection Agency
Utah Valley University
UDOT
U.S. Forest Service
Utah Department of Agriculture and Food

Related Projects

Irrigation systems efficiency
Range and pasture planting
Manure management; AFO/CAFO
Water quality monitoring
Stream stabilization
Chaining
Fencing
Willow planting
Creating rock jetties

Funding

Total (through 2008) \$640,000

For funding opportunities in the Spanish Fork River Watershed, contact the Timp/Nebo 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.

Utah State University is committed to providing an environment free from harassment and other forms of illegal discrimination based on race, color, religion, sex, national origin, age (40 and older), disability, and veteran's status. USU's policy also prohibits discrimination on the basis of sexual orientation in employment and academic related practices and decisions. Utah State University employees and students cannot, because of race, color, religion, sex, national origin, age, disability, or veteran's status, refuse to hire; discharge; promote; demote; terminate; discriminate in compensation; or discriminate regarding terms, privileges, or conditions of employment, against any person otherwise qualified. Employees and students also cannot discriminate in the classroom, residence halls, or in on/off campus, USU-sponsored events and activities. This publication is issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Noelle E. Cockett, Vice President for Extension and Agriculture, Utah State University.