

# Improving Utah's Water Quality

## Spanish Fork Watershed



### 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:

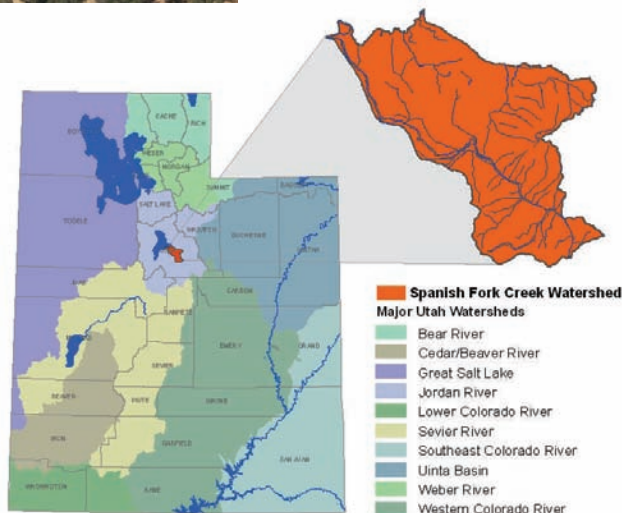
Timp/Nebo Conservation District  
302 E. 1860 S.  
Provo, UT 84606  
(801) 377-5580 ext. 32

### 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, 5 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. The growing season is from the end of May



through mid-September. 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 reseedling 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 result 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.

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