

ABSTRACT

THOMAS FORK STREAMBANK STABILIZATION EFFORT

Mitch Poulsen, Bear Lake Regional Commission, P.O. Box 26, Fish Haven, Idaho 83287-0026, (208) 945-2333, blrc@dcdi.net; Allen Harrison, Bear Lake Regional Commission, Fish Haven, Idaho

The Bear Lake Regional Commission has been committed to improving water quality in the Central Bear River Watershed for thirty years. The past seven years have been focused on Thomas Fork Creek, a tributary to the Bear River. Thomas Fork has been identified as a significant contributor of sediment and nutrients to the Bear River and Bear Lake. The Bear River flows through Wyoming, Idaho and Utah and is diverted into Bear Lake.

The location of Thomas Fork Creek presents some unique challenges to stream bank stabilization. The elevation of Thomas Fork Valley is between 6000 and 9000 feet above sea level and is punctuated by long cold winters and short cool summers. Precipitation falls mainly in the form of snow with the valley floor receiving an average of 14 inches per year. Soils are predominantly fine-grained and non-cohesive. Vegetation is sparse except in the immediate vicinity of the creek. This combination of factors is less than ideal for vegetation establishment.

NPS 319 monies have been used to apply Best Management Practices to Thomas Fork Creek. Over 10,000 linear feet of stream bank have been stabilized using these treatments. Treatments include: bank shaping, rip-wrap, revetments, manure management facilities and wetland establishment and others. Treatments applied are dependent upon suitability and materials available.

Success of each project has been evaluated from water quality monitoring and landowner support. Water quality monitoring has been performed on Thomas Fork at each project. Nitrogen and phosphorus samples have been taken at points at each project on Thomas Fork and compared with background. Cross-sections of the creek have been surveyed at each project. Bear Lake has been monitored for over 25 years as part of an on-going study. The results from these monitoring efforts have been encouraging. Landowners have helped meet match requirement with in-kind and cash donations. Coordination with landowners is the key to the success of these projects. Landowners who contribute have expressed their gratitude for the Non-Point Source program and the benefit they receive from stabilized banks. Skepticism from other landowners is directly related to their awareness and exposure to positive results.

The Bear Lake Regional Commission has been engaged in improving water quality for many years. Working on Thomas Fork has been a wonderful opportunity to further the mission of the regional commission by working with landowners interested in improving water quality. The physical and demographic characteristics of the area have presented obstacles that have been learned from.