Yankee-Vukonich Reclamation Project

Summary and Photographs

The Yankee-Vukonich Reclamation Project is located about eight miles east of Raton in Colfax County, New Mexico. The project area is on public and private land.

The project site consisted of eight coal gob sites, totaling 2.9 acres of gob, and adjacent areas. The gob piles were steep and sodic where the gob was clayey, acidic where the gob is sandy or coarse, and actively eroding. The goals of the project was to establish vegetation on the gob piles in order to reduce erosion and subsequent turbidity and sedimentation in downstream watercourses and to restore meanders and dynamic stability to a reach of stream straightened and degraded by the adverse effects of historic mining practices.

The project included the following work:

Construction of straw bale terraces (two types depending on steepness of slope), coir-roll terraces, sediment barrier dams, shade fencing, stabilization fencing, straw wattles and gully branch packing. Earthmoving to reshape indicated mine waste piles, including the salvaging, temporary stockpiling and placement of topsoil and subsoil as specified.

Restoration of meanders to the indicated reach of stream by excavation and fill, including construction of two culverts, two rock- and soil-filled revet mattresses, coir rolls with live brushlayer for stream bank protection, wicker weirs for grade control, straw wattles for erosion control, and relocation of a residential and project access road.

Incorporation of gypsum, lime, wood waste, organic fertilizer, compost, mycorrhizal inoculum, and coversoil as specified into indicated areas.

Planting of seedlings including maintenance and protection for six months.

Reclamation of all temporary construction access roads by grading and ripping, where indicated, and constructing diversion ditches and berms as indicated.

Grading, decompacting, amending and seeding of one access road.

Sediment and erosion control measures, including monitoring and maintenance.

Mucking open, as required, and backfilling two adit entries near the private residence.

Hydroseeding using a bonded-fiber matrix at designated areas and areas disturbed by construction, including closed access roads.

A water quality permit was obtained from the Army Corps of Engineers to conduct the stream restoration work.

The contractor was St. Cloud Mining Company, Truth or Consequences, NM

Year Completed: 2005
Cost: $542,772.74
Project Engineer: John Kretzmann, P.E.
Project Manager: Randall Armijo

BEFORE **AFTER**

Stream Restoration

Gob Pile D

Gob Pile G