

PARADISE CREEK RESTORATION PROJECT

MOSCOW SCHOOL DISTRICT SITE (prior to revegetation)

PARADISE CREEK is a 34.5 square mile priority interstate watershed that flows from Latah County, ID into Whitman County, WA. The watershed is part of the Eastern Columbia Plateau Aquifer System, which the EPA has designated "sole source" status. It is approximately 19 miles long and is a fourth order tributary of the South Fork of the Palouse River (which flows into the Columbia River). The upper portion of the watershed is forested with very steep slopes, while the middle and lower portions are largely dryland agriculture with moderately steep rolling hills. Paradise Creek flows through the City of Moscow, ID and into the South Fork of the Palouse River in the City of Pullman, WA. The DEQ has stated that if the water and habitat quality of Paradise Creek were



CHANNEL BEFORE EARTH WORK



CHANNEL AFTER EARTH WORK

improved it would be capable of supporting salmonid spawning and cold water biota. **THE PALOUSE-CLEARWATER ENVIRONMENTAL INSTITUTE (PCEI)** is a non-profit organization located in Moscow, Idaho. The mission of PCEI is to increase citizen involvement in the decisions that affect the regions' (Moscow-Pullman) environment and to provide leadership on projects that are affecting the social/environmental well being of the region; managing the Paradise Creek Restoration is an example.

MY INVOLVEMENT in the Paradise Creek project was supporting the project managers' activities in the areas of project

planning, tool/vendor identification and procurement, to learn about bioengineering techniques, and to observe design reviews. **PROJECT OBJECTIVE** is to reduce and quantify the pollution in the Paradise Creek Watershed by designing a multi-phase project and applying a watershed oriented approach to stop degradation represented by excess sediment, nutrients, and bacteria caused by urban and agricultural runoff.

MOSCOW SCHOOL DISTRICT SITE is Phase I of the Paradise Creek Watershed Restoration; so far, three phases have been planned and funded. This

site is a 1200-foot segment of Paradise Creek and the objective is, with a grant from the EPA and DEQ under the Clean Water Act, to restore the floodplain and the streambanks to fulfill goals of the overall project.

Aerial photos showing pre-1960 geomorphic conditions were used to guide the design, which resulted in the re-creation of a meandering streamway planted with native plants. **PHASE I GOALS INCLUDE**

- Cultivating public participation
- Creating a multi-objective stream corridor
- Educating schools and general public on the functions and values of riparian areas
- Improving water quality, habitat quality, flood storage capacity
- Using instream habitat improvement structures
- Using revegetation and soil bioengineering techniques to prevent accelerated streambank erosion
- Demonstrating and constructing relatively inexpensive technologies such as biofilters
- Establishing baseline data for toxics in Paradise Creek



ROOT WAD REVETMENT



LOG CRIB REVETMENT

Contributing Organizations

- City of Moscow
- (DEQ) Idaho Department of Environmental Quality
- (DOE) Washington St. Department of Ecology
- (PCMC) Paradise Creek Management Committee
- (PCD) Palouse Conservation District
- (EPA) Federal Environmental Protection Agency
- (IWRRI) Idaho Water Resources Research Institute (at Univ. of Idaho, Moscow ID)

Bradley Owens 12/27/95