

Newell Creek Watershed Wetlands

at the convergence of the Clackamas Community College parking lot, John Inskeep Environmental Learning Center and Newell Creek headwaters



AFTER

Leaf filter is used to capture runoff from parking lot

BEFORE



The project was designed to reduce the adverse effects of stormwater contaminants on the upper watershed areas of Newell Creek, Oregon City's largest drainage basin. The project also expanded and reestablished a wetland site for wildlife and educational benefits. In order to adequately deal with stormwater contaminants from the nearby Clackamas Community College parking lots and other sources, the project was to develop an attractive "natural-appearing method" of containing and filtering such runoff. The most creative and time-efficient model was to develop a weir-type structure using various graded gravels and selected types of organic composts. The result was the evolution of a structure much like a beaver dam. It was hoped that the 30-foot structure would reduce the amounts of land area required to effectively settle sediments and bio-filter the remaining contaminants of an oil based nature.

Since the project was fully contained within a long-term permanent facility for environmental education, the John Inskeep Environmental Learning Center, there were hopes of long-term monitoring and evaluation. In addition, the college has a fully developed water-quality technology

program (for more than 15 years); the completion of the project adds new capabilities to the program. Students from that program use stormwater testing techniques at the ELC waterways and stream courses. With national pollution discharge permitting and regulatory requirements of the EPA coming into force, this project served as a model training and resource area for technician and professional advancement.

Wildlife inventories were conducted to determine if:

- ♦ water quality has aided fish success in rearing and maturation
- ♦ the greater diversity of habitat created has resulted in an increase of wildlife use and diversity of wildlife
- ♦ stormwater improvements now being experienced by the project and system can be sustained over long periods.

Benefits

The ELC and Clackamas Community College now have a fully developed wetland complex. The area can provide user-group education and specialized classes and workshops in stormwater management.

College parking and rooftop drain sources of oils and other adverse substances (i.e., tars from roofing) have been contained and absorbed in the wier/compost filtering area.

Public interest in the graphic and educational stations relating to all project features has been very high.

Wildlife values have been significantly enhanced through the creation of an enlarged wetlands area, the introduction of wetland plant and animal species and the resulting habitat diversity.

Budget

Proposed – \$30,000

Actual – \$38,390

Metro/US Fish and Wildlife grant award – \$14,925

Helpful hints – what worked, what didn't

- Monitoring program without supervision and interest from ELC has been ineffective.
- Maintenance of weir structure, replacement of compost needs priority to continue water quality features.
- Partners need to be in constant communication to make this a viable learning experience.
- Changing of supervisory positions can make projects hard to track and maintain.

Timeline and tasks

May 1992	Ordered plants
Summer 1992	Worked progressed: planting, dredging, weir structure
October 1992	Project dedication

Partners

Oregon State Corrections –
Columbia Corrections Institution
Oregon Youth Conservation Corps
Oregon City Municipal Court
Oregon Department of Fish and Wildlife
Wichita Nursery
City of West Linn
Larry Skou Excavating

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