GREENSPACES RESTORATION PROJECT 1992-93
BEGGARS-TICK WILDLIFE REFUGE
WETLAND ENHANCEMENT PROJECT
MULTNOMAH COUNTY PARK SERVICES DIVISION
FINAL REPORT

PROJECT DESCRIPTION

The project entailed wetland enhancement to approximately 1.75 acres of natural wetlands at Beggars-tick Wildlife Refuge, a 20 acre wildlife refuge, located in Southeast Portland on SE 111th Avenue between Foster Road and Harold Street. Project components included:

1) Clearing the site of debris and exotic/invasive weeds, shrubs and trees.

2) Excavating 5,000 cubic yards of undesirable fill/deposited material (boulders, gypsum board and small to large chunks of concrete and asphalt) and soils to restore part of the wetland area to its previous condition.

3) Grading and recontouring the area and filling some upland areas to create viewing points.

4) Constructing a 750 ft. gravel pathway with a 5 ft. x 30 ft. wood foot bridge and two (2) view points.

5) Installing 780 ft. of cyclone fencing on the south perimeter adjacent to Springwater Trail.

6) Hydroseeding graded area and the planting of native trees, shrubs and wetland plants.

WORK TASKS AND TIME LINES

The initial project design was done by J. D. Walsh & Associates, Inc. in June 1992. A restoration grant to Metro was submitted in August of 1992 and formally approved December 3, 1992.

Park staff was involved in the site clearing and preparation stage of this project in late spring 1993. J. D. Walsh & Associates, Inc. was hired to prepare the grading and construction plans and retained as project manager. Final designs were completed in June 1993. After this phase was done detailed project specifications were prepared, then bid advertisement, solicitation, and construction contract awarding took place.

A single contractor, Berning Construction, was selected through a competitive bid process to do the excavation, grading, trail, viewpoint and bridge construction, fence installation and hydroseeding. The construction phase started in September of 1993 and was completed the following December. Fire set by vandals destroyed approximately 50% of the bridge in November and was completely reconstructed by the contractor.

- Initial site design 05-06-92 to 06-14-92
- Metro grant application and approval 08-16-92 to 12-03-92
- Corps of Engineers and DSL excavation permit process 01-11-93 to 03-18-93
- Site clearing and preparation 04-12-93 to 06-04-93
- Excavation, grading and construction plans development 05/03/93 to 06-11-93
- Plant list developed 05-27-93 to 06-07-93
- Contractual bid process 06-25-93 to 07-13-93
- Contractor selected 07-13-93
- Excavating, grading and trail, viewpoints and bridge construction 09-13-93 to 11-11-93
- Plant material ordered 10-05-93
- Planting 10-22-93 to 10-29-93
- Bridge fire damage repair 12-08-93 to 12-28-93
- Project completed 12-28-93

PROJECT BUDGET

The project budget costs consisted of:

1)	Site design and construction plans-	$ 5,443
2)	Excavation, grading, trails, viewpoints and bridge construction	$58,015
3)	Fencing	$ 702
4)	Hydroseeding (seed, fertilizer and mulch)	$ 1,890
5)	Plant material	$ 1,893
6)	Bridge fire damage repairs	$ 5,300
7)	Required City permits	$ 1,672
7)	Multnomah County equipment usage cost for site clearing and prep.	$ 4,244
8)	Parks staff (up to 12-28-93)	$ 9,393
9)	Volunteers (David Douglas Ecology Club)	$ 1,074
	TOTAL PROJECT COST UP TO 12-28-93	$89,626

PROJECT FUNDING

The Metro Grant was for $25,845. This funding was used to pay for part of the costs associated with the excavation and grading. The City of Portland Bureau of Environmental Services allocated $10,000 and Multnomah County Transportation Division contributed $5,503. Multnomah County Park Services Division paid for the remainder of the project costs($48,278). Estimated (12-28-93) project cost was $89,626.

PROJECT STAFF/WORKERS/VOLUNTEERS

Project staff and volunteers were comprised of the following individuals and companies:

Park Services Division Staff

- Charles Ciecko, Director
- Dan Kromer, Maintenance Supervisor
- Pete Scheideman, Arborist
- Dale Vasnik, Senior Gardener
- Rick Scrivens, Park Ranger
- Mary McGaughey, Gardener
- several seasonal staff members

Volunteer Staff (two day planting project)

- David Douglas Ecology Club

Contractor

- Berning Construction
- Harold M. Miller Landscape Nursery

BENEFITS OF THE PROJECT

There were numerous benefits of this wetland restoration/enhancement project. The excavation area removed approximately 5,000 cubic yards of the undesirable fill material such as boulders, gypsum board, small to large chunks of concrete and asphalt that had been illegal dumped creating additional wetlands. The site was then recontoured restoring it to its previous condition.

The project also included a five foot wide gravel trail and bridge along the southeastern section of the refuge to provide limited pedestrian access to the area. Some of the excavated material was used as a sub base to create two viewpoints directly north and west of the new wetland for wildlife and wetland viewing. A fence was installed along the southern perimeter and a portion of the eastern perimeter to prevent vehicular access. Exotic vegetation such as himalayan blackberry dominated the site and was cleared prior to excavation. This area was replanted with native grasses, shrubs, and trees found within the refuge (i.e. common rush, slough sedge, serviceberry, thimbleberry, nootka rose, red alder, oregon ash, mock orange and hogan cedar).

The project also assisted in storm water retention by increasing the water storage capacity of the wetland.

HOW PROJECT RELATES TO THE GREENSPACES PROGRAM

This project is consistent with the objectives of the Greenspace demonstration/restoration grant program by: allowing a desirable wetland enhancement and restoration project to be carried out that due to insufficient funds would otherwise not have been attempted; increasing public

awareness of the significance of wetlands; using the assistance of other agencies and volunteer groups to help in the design, planting and maintenance of native plant material; and by offering an unique opportunity to learn about the historical significance of our natural heritage by providing a site to view a diverse range of native wildlife, wetlands, and upland plant material. Program and project goals were consistent with the management plan for Beggars-tick that was adopted by Multnomah County Board of County Commissioners in June of 1991.

HELPFUL HINTS AND ADVICE

Experience gained from previous restoration projects assisted in the development and planning process for this project. For example, it was determined that the best time to do excavation and grading would be during the dryer summer months followed be a fall planting to allow material to establish themselves before the next growing season. Polymers were used to assist plants retain water during their root development stage.

The permit process with the Corps of Engineers, DSL (excavation and fill permits) and the City of Portland (land use applications) took longer than anticipated. Project managers should allow plenty of time when dealing with these types of permits.

Vandalism (arson) occurred to the wooden foot bridge just prior to the final inspection causing the structure to be destroyed. The City of Portland Police Bureau "Crime Stoppers" program assisted in publicizing the act but no "leads" came about. If there was anything fortunate about this it was that the contractor was able to do the repairs within a very short period of time and all we had to do was a contract change order (for $5,300) instead of going through the whole construction bid process again. A fire retardant was applied to the new structure.

Survival rate of plant material going into the following summer was about 80%. However, that particular summer was extremely dry and deep root watering only occurred on one occasion (mid-August), due to limited staff time, causing a high fall and spring plant mortality rate. Also, there was a possibility that the polymers may not have been added properly as the majority of planting was done by volunteers. The plant material used may have been in their containers longer than they should have prior to purchase causing a root bound problem. Replanting was scheduled for fall of 1995.

The soil that was left on the site after grading was rocky and extremely low in nutrients. No new top soil was imported which may have attributed to the high mortality rate in the second year even though compost was mixed with this soil when material was planted. A three (3) inch layer of new top soil will be added to the site prior to replanting.

Exotic plants (blackberries) along with other types of weeds need to be controlled at the site on a regular basis. An aquatic safe herbicide, Rodeo, is being used to control these exotics.