

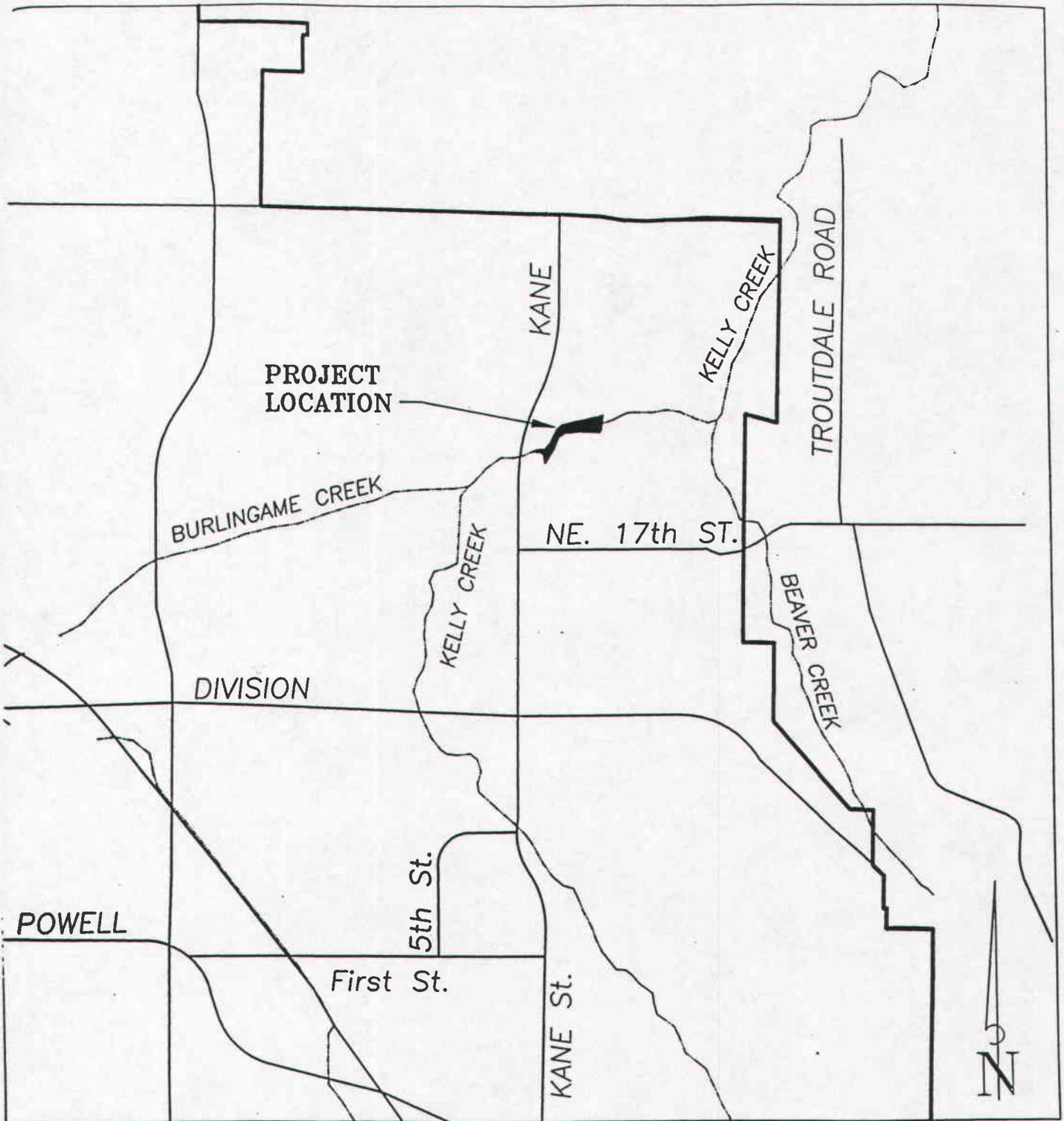
**Mt. Hood Community College Pond
Greenspaces Restoration Grant # 921041
Final Report**



**Submitted to:
Lynn Wilson, Restoration & Education Grants Coordinator
Metro Regional Parks & Greenspaces**

**Submitted by:
City of Gresham Stormwater Division
June 16, 2000**

PROJECT AREA MAP



SCALE: 1"=1500'

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KELLY CREEK M.H.C.C. POND ENHANCEMENT

FIGURE 1
PROJ. CIP #9041
VICINITY MAP

PROJECT SITE MAP



Before photos of the site



Before planting



After planting





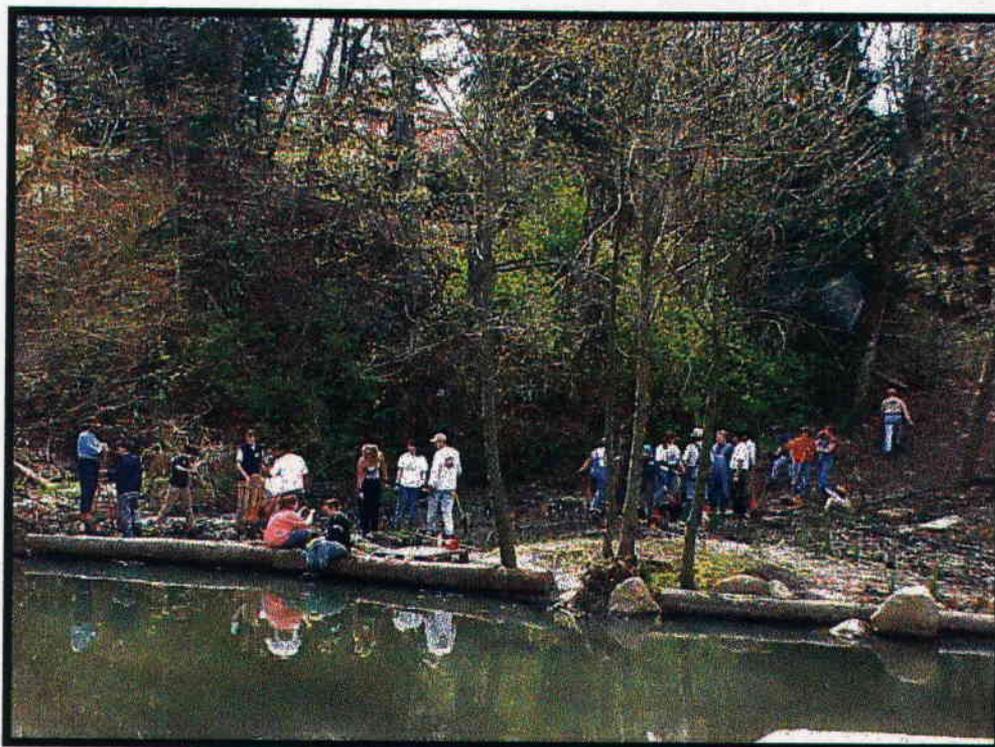
Steep banks proved challenging to volunteers

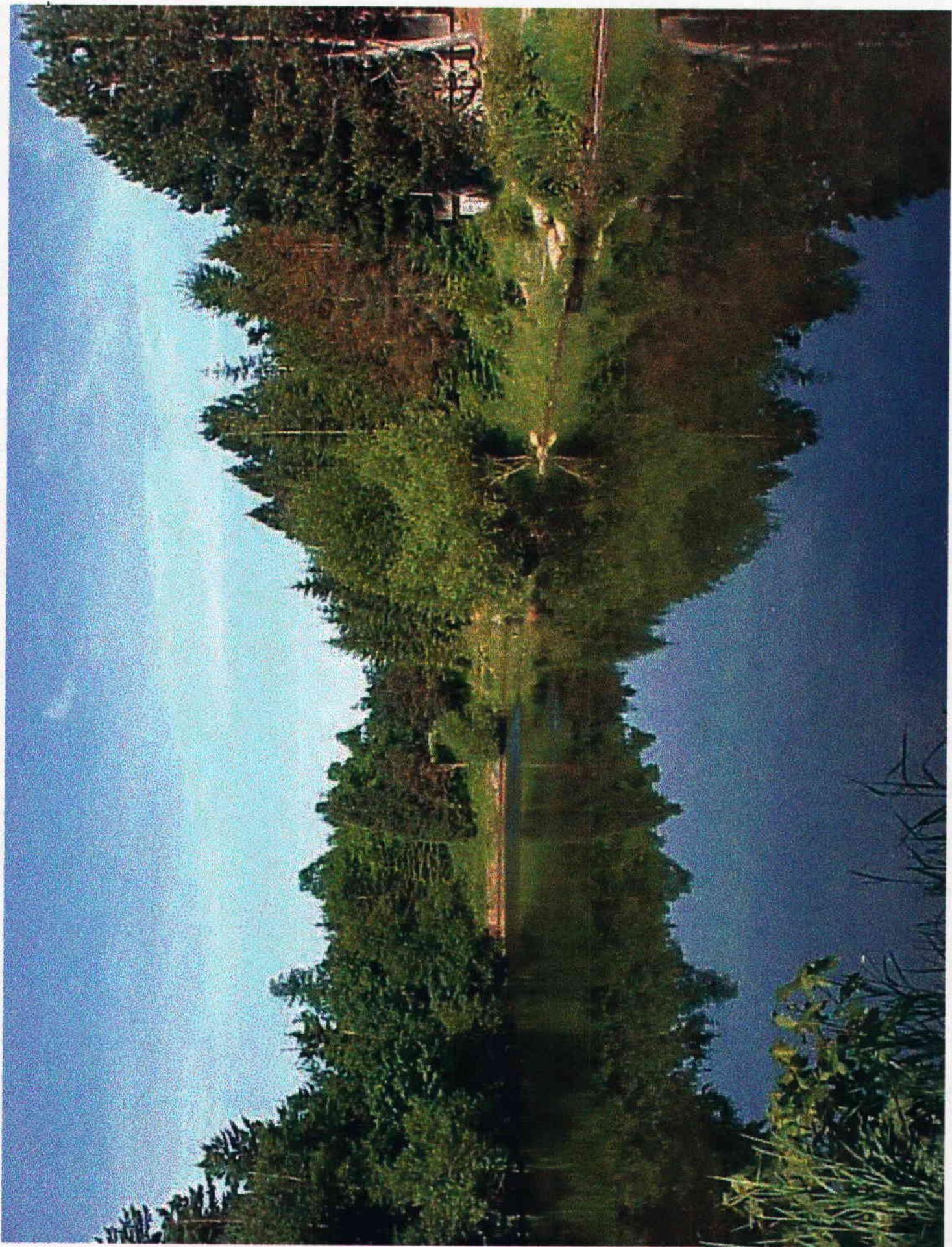


May 24, 2000



Wetland area before and during planting





Mt. Hood Community College Pond Greenspaces Restoration Grant #921041

Introduction

In November 1998, the City of Gresham Stormwater Division received a \$10,000 Habitat Restoration grant from the Metro Regional Parks & Greenspaces Program and the U.S. Fish & Wildlife Service. The project site was a pond on the Mt Hood Community College (MHCC) campus. Historically, the pond had been used for aesthetic and recreational uses. Fishing in the pond is extremely popular. Oregon Department of Fish & Wildlife annually stocks the pond with Rainbow Trout.

Project Description

The main goal of this project was to restore and enhance a 1.63-acre pond at MHCC that is located in Gresham on Kelly Creek. Kelly Creek is a tributary to Beaver Creek and the Sandy River. The pond experiences significantly high sediment loads from the watershed. The resultant sediment reduced its flood storage capacity; decreased its fishing, water quality, aesthetic and habitat value and has occasionally resulted in localized odor problems. The sediment removed totaled 20,000 cubic yards. Removal of the sediment from the pond was required to restore flood storage capacity and improve habitat conditions. The City of Gresham used Capital Improvement Funds for this portion of the project.

Grant funded activities included the construction of a wetland area on the east side of the pond at the upper end near the Kelly Creek inflow to the pond. This project was designed to utilize anchored log boles to hold sediment and provide protection from high-flow channel velocities. Grant funds were also used to provide in-water habitat structures for fish and wildlife and to purchase native plants which volunteers and students planted along the west bank of the pond to replace invasive Himalayan blackberries removed by the contractor.

Construction

Sediment removal occurred during the low flow summer months of 1999 when flows to the pond were minimal. All inflows to the pond were pumped and diverted around the construction area so that sediment resulting from the dredging operation did not significantly impact downstream waterbodies.

During construction Gresham Stormwater Division's Project Engineer coordinated work tasks with the college on a daily basis. Student volunteers worked with contractors to remove any valued fish while the pond was drained. To everyone's surprise, there were only a handful of very small warm-water fish species left in the pond. This was due in part to a successful free volunteer fishing day earlier in the month.

Some minor changes were made to the plan once construction began. Several faculty at the college were concerned about having floating logs connected to the bottom of the pond, so the contractor submerged six of the log boles and attached them directly to the bottom of the pond for fish habitat. The remaining two log boles were placed off the edge of the pond for use by turtles and other wildlife.

Preparation for Planting Day

Linda Hochman, Horticulture Instructor at MHCC, was hired to design the wetland and bank planting plans and order all plants for the event. She worked with Susandales Pond & Bog Plants, Balance Restoration Nursery, and Tuck Clinehens, of Friends of Trees. Students at the college also propagated plants for the site. Tuck Clinehens recruited volunteers and provided crew leaders for the event.

Planting Day

Saturday, April 1st was chosen for our planting day. Friends of Trees arrived with nine crew leaders, tools and morning snacks for participants. Before the volunteers arrived, Tuck Clinehens and Linda Hochman staked the site with color-coded flags indicating the location to plant each species. A total of 116 volunteers participated in one or both of the sessions. The first session ran from 9:00 to 12:00 and the second ran from 1:00 to 3:00.

The volunteers were divided into groups and dispersed with their crew leaders for instruction. The wetland crew was especially speedy, planting all plants in little over an hour. By the end of our second planting session, some plants remained. Students and faculty in the Horticulture Program have agreed to care for these plants until a fall planting event can be arranged.

Goals and Benefits of Project (e.g. primarily intent and associated benefits)

The goals of this project were to enhance and restore fish and wildlife habitat, to strengthen community partnerships and to increase public awareness of the value of this special urban open space/rural fishing area.

As a result of Gresham's work with MHCC, Metro, and the U.S. Fish & Wildlife Service, the restoration of a community amenity has begun. Complete restoration of this site is an immense job and will continue, but with the removal of sediment, the largest obstacle has been overcome.

This restoration grant has allowed project partnerships to be established and has enabled students and faculty alike to gain an appreciation for, and greater awareness of this human-constructed wetland ecosystem. This will hopefully result in long-term hands-on ownership, responsibility and stewardship. The enhanced

wetland area will serve as a living laboratory for years to come. Future students will continue to propagate native plants for use along the ponds edge, and throughout the campus.

Actual Work Tasks and Timelines

TASK	DATE
Obtained Department of State Lands; U.S. Army Corps of Engineers and City of Gresham Permits	April 1999
Prepared Construction Plans	April 15, 1999
Advertised Construction Contract	April 19, 1999
Obtained City Council and MHCC approval of contract	June 1, 1999
Awarded Contract	June 1, 1999
Construction Project	July – September 1999
Designed wetland and pond bank restoration including native and wetland plants planting plan. Includes in-water structures for wildlife and fish	February 2000
Planted native and wetland plants	April 1, 2000

Project Budget

Match	Cost	Request of Metro	Cost
Lash Enterprises	\$1,180	Lash Enterprises	\$500
Emerald Hydro-Turf	\$2,475	Susandales Pond & Bog Plants Wetland Plants	\$1,210
Oregon Underground (Contractor for City of Gresham)	\$196,058 (\$200,618 - \$4,560 for log boles)	Nursery Supplies West (10,000 1-gallon pots)	\$1,100
WRG Design Surveying Services	\$2,400	Phillips Soil (35 yd.)	\$1,008
Hollywood Signs (Habitat Recovery Area signs)	\$100	Phillips Soil (20 yd.)	\$645
Friends of Trees	\$279.72	Balance Restoration Nursery Native Trees & Shrubs	\$435.25
Student volunteer time in preparation for event 135 hours x \$6.50 hour	\$877.50	Oregon Underground (8 Log Boles)	\$4,560
Volunteer time at event 116 volunteers – 9 crew leaders, 9 kids and 98 adults. 116 x 3 hrs. x \$6.50	\$2,262		
Total	\$205,632.22		\$9,458.25

Project Staff / Workers / Volunteers

Primary City Staff included Denise Cazares, Grant Project Manager, Gary Flightner, Stormwater Engineer & Construction Project Manager, and Bob Storer, Water Resources Coordinator.

Consultant Services for preparation of planting plan and recruitment and direction of event volunteers included Linda Hochman, MHCC Horticulture Program Instructor and Tuck Clinehens, Natural Area Program Manager, Friends of Trees.

Volunteers included:

Dr. Andrew Jackman, Ph.D. Dean, MHCC Science Division

Project oversight and coordination of college participation

Friends of Trees Crew Leaders

Direction of event volunteers on planting day

MHCC Students

Propagation of native plants, labor on planting day, maintenance & monitoring of site

Relation to the Greenspaces Program

This project meshes completely with the goals of the Greenspaces Program. The goal of this project was to enhance and restore fish and wildlife habitat associated with the pond dredging and flood storage capacity restoration project. Additionally, the project helped to establish and strengthen community partnerships and increase public awareness surrounding the pond's function and the values of this special urban open space.

What Worked / What Didn't / Helpful Hints

Originally Gresham Stormwater Staff had hoped to work with students at the college in the design of the planting plan. Due to summer vacations and scheduling conflicts, we were unable to find a MHCC staff member willing to take on the project as a whole. Many MHCC staff members were willing to participate on the planting day, however, and this is where we obtained most of our volunteers. Fortunately, we were able to contract with Linda Hochman of the MHCC Horticulture Program and have her design the planting plans and order the plants.

In order to maximize the number of volunteers, our planting event was conducted during two shifts: 9:00 – 12:00 and 1:00 – 3:00. It was a beautiful spring day, and although we had a great turnout in the morning, our afternoon volunteer turnout was disappointing. Having a second shift also made for a very long day.

Advice for Other Project Managers

Create a large binder for each grant project. This enables quick and easy access to information and great organization for the **significant amount** of necessary paperwork. Never throw anything out, find a place in the folder, and file it away.

Keep your volunteer planting event to one session in the morning. Be sure to provide morning refreshments if possible and have snacks and water available while planting.

Place a disclosure statement on volunteer waivers so photos can be used at a later date.

When partnering with several agencies or organizations, find one contact you can check in with on a regular basis to make sure the project is progressing as you specified in the grant application. Unfortunately, we were unaware of plans for a Trout Derby Day until two days prior to the event. This prevented the City of Gresham and Metro from contacting the media and being involved.

Monitoring and Maintenance Plan

Students and faculty of MHCC will complete the following monitoring and maintenance plan.

Monitoring: Vegetation coverage and survival of planted species and pioneer species will be monitored on a quarterly basis. Individual native plants will be counted for survival during the first two years of the establishment period. Percent coverage will be monitored in years two through four. Herbaceous vegetation (i.e. hydroseeding) will be measured by percent coverage. The specific measurement will be selected during the first monitoring period.

A plant diversity list (including exotic and native colonizer species) will be generated to see if the plant community changes over time, and will record the dominant species (by coverage) from each vegetation strata (e.g. tree, sapling, shrub, and herbaceous). Photographs will be taken during the four-year monitoring period to create a visual log.

As a contingency, areas needing additional vegetation to restore the site will be replanted with native species to accelerate the restoration effort.

Maintenance: Monthly site visits will be performed during the four-year monitoring period for weeding and removal of non-native and exotic plant species. Provisions for long-term maintenance are included in the MHCC budgets and the college will encourage participation by students and community groups in the maintenance of the site. Structural measures such as the installation of large

woody debris and log boles are covered by the contractor's two-year maintenance guarantee.

Number and Species of Native Trees and Shrubs Planted

<u>Wetland Plants</u>	<u>Quantity</u>
American Water-Plantain (<i>Alisma Plantago-Aquatica</i>)	32
American Slough Grass (<i>Beckmannia Syziagachne</i>)	16
Yellow Marsh Marigold (<i>Caltha Palustris</i>)	16
Great Camas (<i>Camassia Leichtlinii</i>)	2
Common Camas (<i>Camassia Quamash</i>)	2
Slough Sedge (<i>Carex Obnupta</i>)	16
Awl-Fruited Sedge (<i>Carex Stipata</i>)	32
Horsetail Sedge (<i>Dulichium Arundinaceum</i>)	32
Common Spike Rush (<i>Eleocharis Palustris</i>)	32
Horsetail (<i>Equisetum Hymale</i>)	16
Soft Rush (<i>Juncus Effusus</i>)	32
Dagger Leaf-Rush (<i>Juncu Ensifolius</i>)	32
Blue Spreading Rush (<i>Juncus Patens</i>)	32
Wild Water Mint (<i>Metha Avenis</i>)	16
Yellow Monkey Flower (<i>Mimulus Guttatus</i>)	16
Skunk Cabbage (<i>Lysichiton Americanum</i>)	10
Giant Arrowhead (Wapato) (<i>Sagittaria latifolia</i>)	32
Small Fruited Bulrush (<i>Scirpus Microcarpus</i>)	32
Softstem Bulrush (<i>Scirpus Validus</i>)	32
Golden-eyed grass (<i>Sisyrinchium Californicum</i>)	16
Common Cattail (<i>Typha Latifolia</i>)	20
Total	466

<u>Trees & Shrubs</u>	<u>Quantity</u>
Native Creek dogwood (<i>Cornus stolo. Var occidentalis</i>)	20
Cream bush (<i>Holodiscus discolor</i>)	25
Black twinberry (<i>Lonicera involucrata</i>)	50
Pacific nine bark (<i>Physocarpus catitatus</i>)	50
Chokecherry (<i>Prunus virginiana</i>)	50
Nootka rose (<i>Rosa nutkana</i>)	50
Salmonberry (<i>Rubus spectabilis</i>)	25
Columbia River Willow (<i>Salix fluviatilis</i>)	25
Pacific Red Willow (<i>Salix lasiandra</i>)	20
Sitka Willow (<i>Salix sitchensis</i>)	25
Red Elderberry (<i>Sambucus racemosa</i>)	50
Snowberry (<i>Symphoricarpos albus</i>)	100
Douglas Spiraea (<i>Spiraea douglasii</i>)	50
Black Hawthorne (<i>Crataegus douglasii</i>)	15
Total	555

Approximately 80 % of purchased plants were put in the ground on April 1, 2000. The remainder of the plants will be planted during fall 2000. Horticulture students will maintain plants until that time.



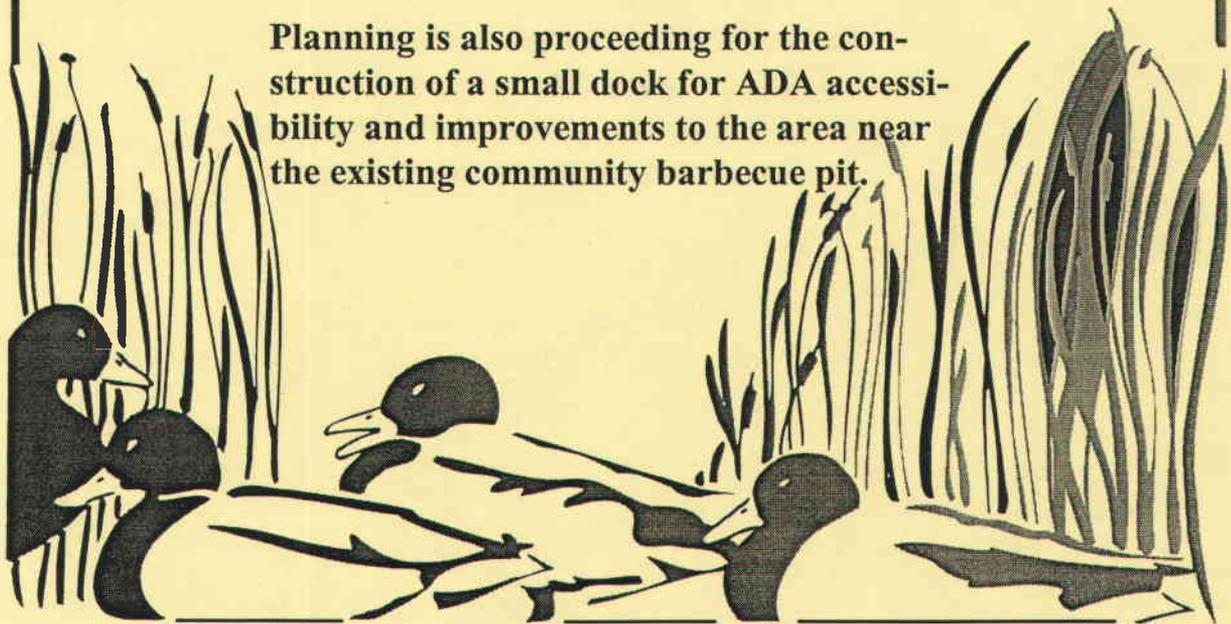
Enhancement to Mt. Hood Community College Pond

Mt. Hood Community College and the City of Gresham are working in partnership to restore and enhance the existing pond, east of Kane Road near Stark Street. The 1.6 acre pond, located on the Mt. Hood College campus, is getting a \$220,000 makeover. Years of erosion, silt, and weeds have all but filled up the pond; thereby reducing the livability of the local birds and fish and becoming an eyesore for visitors.

During this summer, when flows to the pond are low, 20,000 cubic yards of sediment will be removed. Kelly Creek waterflow will be re-routed around the pond area during construction. All game fish will be removed by the Oregon Fish and Wildlife and will be relocated to Blue Lake. Any remaining fish will be donated to the Audubon Society.

Enhancements to the pond include new fish and wildlife habitats, and replacement of invasive Himalayan blackberries with native plants and wetland plantings. Restoration of the pond is expected to be completed by Mid-September 1999.

Planning is also proceeding for the construction of a small dock for ADA accessibility and improvements to the area near the existing community barbecue pit.





NEWS RELEASE

FOR IMMEDIATE RELEASE from the OFFICE OF COLLEGE ADVANCEMENT

DATE May 28, 1999

CONTACT AL SIGALA (503)491-7214

MHCC CAMPUS POND GETS REMODELED TO BENEFIT WILDLIFE, COMMUNITY

Mt. Hood Community College will begin restoration of the 1.6-acre campus pond next week, ultimately creating a deeper, cleaner pond that will be inviting to both wildlife and members of the MHCC community.

"Over the years, the pond has silted up so that the deepest point, which at one point was 22 feet, is now only about 7 feet," says Dr. Andrew Jackman, Dean of the MHCC Science Division. "We are going to remove approximately 20,000 cubic yards of silt from the water, which works out to about 2,000 dump truck loads."

In order for this process to be completed, the trout that currently stock the pond will be trap netted on June 1-4 and moved to Blue Lake Park for angling. The plans for the pond restoration have been finalized, and bids have been put out for public response. "The pond will begin to drain after June 15, and the actual dredging process will begin after July 4," continues Dr. Jackman.

The next phase will include "remodeling" the pond area, adding boulder outcroppings for pedestrian/angling access along the north side to encourage fishing, and creating various habitats to attract wildlife and help it thrive. "Log boles will be brought in and wired down to form a wetlands development, a project funded by a \$10,000 grant from Metro," says Dr. Jackman. "MHCC students will help develop the area, creating wood duck boxes and other animal accommodations." Other log boles will be placed around the perimeter of the pond to attract amphibians, and several will be anchored into a section of the lake as a fish habitat. A barbecue pit will also encourage visitors to the area.

"By September, the pond will be stopped up again, and Kelly Creek will refill it," says Dr. Jackman. "We will work with the Oregon Department of Fish and Wildlife to get the pond restocked with trout after that time." Students and community members arriving at the campus in late September will be pleasantly surprised by the beautiful and wildlife-friendly environment found on their campus. It will truly be a labor of love on the part of MHCC employees and students, with the help of local organizations. "This was all made possible by a cooperative venture between the City of Gresham and the college," says Dr. Jackman.

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Send comments to: webmaster@mhcc.cc.or.us

Last modified: 11/04/99 20:08:50

URL: <http://www.mhcc.cc.or.us/ci/news/newsreleases/nrarchives/nr052899c.htm>

Outlook 12/26/98

Grant to aid in restoring MHCC pond

A grant from Metro will help the city of Gresham and Mt. Hood Community College restore the college's sediment-filled pond.

The \$10,000 habitat restoration grant awarded to the city's stormwater division will pay for the removal of sediment and creation of a wetland area near the pond, just off Kane Road on the college campus.

The cash also will buy large boulders, nesting boxes and floating logs, which are expected to enhance the pond's wildlife habitat.

Blackberry bushes around the pond will be replaced by native plants.

MHCC students will take part in the landscape plan for the site, which eventually will be used in college-level classes on the propagation of native plants.

The college also may use the site for fisheries studies after the project is complete.

The restoration is expected to begin in June and be completed by the end of September.

For more information, contact project manager Gary Flightner at 618-2488 or Denise Cazares, stormwater division administrative analyst, at 618-2657.

April 7, 2000



DENISE CAZARES / CONTRIBUTED PHOTO

People from around the community planted trees at the MHCC pond last Saturday.

Community members pitch in to keep MHCC green

BARBARA PERRY

Staff Writer

Re-initiating native species was the idea behind tree planting activities last Saturday at the pond at Mt. Hood Community College.

"More than 120 volunteers helped put hundreds of plants in the wetlands and around the perimeter of the pond," dean of science Andrew Jackman said, in an all-staff e-mail. Some of the people involved were Jackman, biology instructor Nancy Smith and electronics instructor Linda Hochman, as well as other faculty and many

students.

The project was a product of partnerships between MHCC, the City of Gresham, Metro Parks, Greenspace and Friends of Trees.

This activity was a part of the Save the Planet activities. Students enrolled in Biology Lab at MHCC were involved as well.

Smith said, "We like to plant trees that are native species for many different reasons; some of them being: less pests, a better chance of survival and natural habitat—besides educating people about native species."

The wetland area near the pond is a very important part of our ecology, according to Smith. "It's just like a big sponge," she said, "and it's so important for all of us to preserve it as best we can."

About 900 trees and plants were planted near the pond, including Red Alder, Kinnikinnica, Creek Dogwood, Ocean Spray, Twinberry and several species of willow trees. Water plants included marsh marigold, water mint, and giant arrowhead.

"Thanks to each and everyone who gave their time to help," said Jackman.

ASG unmeet for consecutive

NICK HALL

Copyeditor

For the second consecutive week, the Associated Student Government Executive Board was unable to meet because they could not declare a quorum.

Two members, Ka Saechoa, vice president for legislation and Monica Davis, vice president for student activities reported they would attend the meeting said ASG President Craig Zielinski, but did not show

All other members were present, but both secretary Tricia Draper and vice president for communication Jonathan Smith must be ratified to become voting members of ASG. All members must be present to declare a quorum in these cir

• BURN

From Page 1

Melanoma. While the first two have a high-cure rate, Melanoma, the most dangerous form, shows up as dark brown or black mole-like lesions and is the most difficult to treat according to the American Academy of Dermatology. Health and wellness coordinator Bloome said the best way to avoid sunburn and skin cancer is "don't get burned in the first place. Protect yourself."

But protection doesn't just mean a slimy layer of SPF 15 Hawaiian Tropic, it means putting on sunblock 30 minutes before sun exposure and re

Ever Wonder Why You Learned The Five W's? Let Us Tell You About Them...

The college, Greenspace and Friends of Trees are planning another tree planting session. For information, call lab instructor Nancy Smith at ext. 7382.



Project is more than academic exercise

Mt. Hood Community College students and faculty joined volunteers from Friends of Trees and the city of Gresham on Saturday to plant native plants and trees around the college's 1.6-acre pond. The groups have worked together since last spring to eliminate sludge and improve the habitat.

4/3/00

L.E. BASKOW
THE OREGONIAN