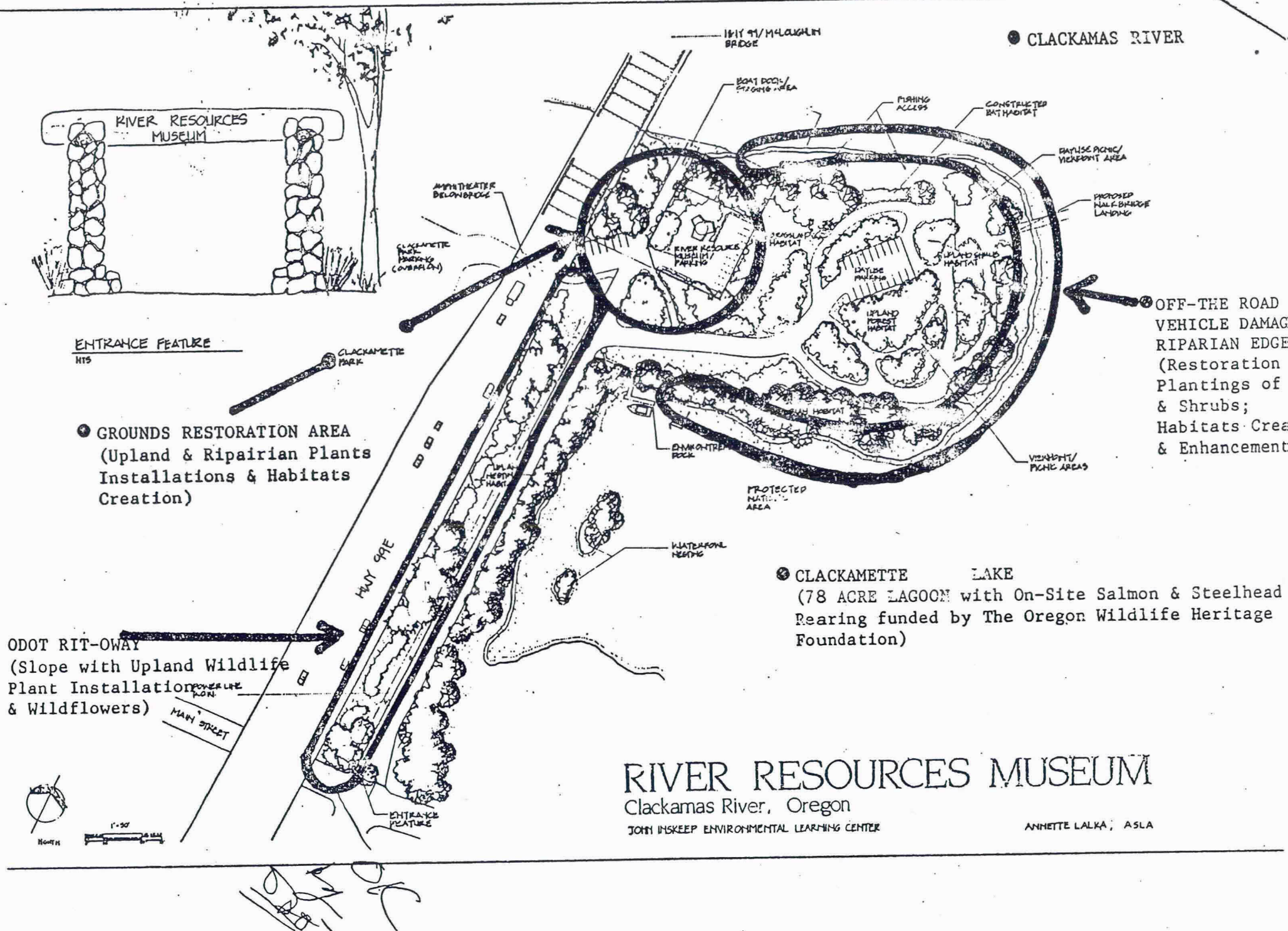


FINAL REPORT

CLACKAMAS RIVER RIPARIAN RESTORATION AND ENHANCEMENT PROJECT

JOHN INSKEEP
ENVIRONMENTAL LEARNING CENTER

July 1994



CLACKAMAS RIVER RIPARIAN RESTORATION AND ENHANCEMENT PROJECT PROJECT # 902786

PROJECT DESCRIPTION

The project will undertake the restoration of over 3 acres of severely damaged riparian habitat through the reestablishment of native plants and restoration of habitats by students, volunteers and others.

At the same time, the project will provide extensive riparian habitat monitoring through an assessment of over 35 miles of the Clackamas River from Oregon City and Gladstone to River Mill Dam, located near the city of Estacada. These restoration and demonstration plantings and enhancements will occur at the River Resources Center (formerly River Resources Museum) site and adjoining public lands owned by the Oregon Department of Transportation.

Components of the project include:

- grading of off-the-road vehicle damage to restore habitat
- reestablish wildflower plant communities
- create erosion barriers within the site
- utilizing volunteer labor from youth and community groups

GOALS AND BENEFITS OF THE PROJECT

This project sought to conduct intensive riparian habitat improvement at the River Resources Center and create a permanent education and awareness record of improvement through signage and exhibits. Exhibits focus on restoration and enhancement techniques as well as benefits of monitoring and preserving riparian habitats.

The project will convert heavily damaged riparian areas and adjoining upland areas to a high value functioning riparian and wildlife habitat.

WORK TASKS AND TIMELINE

Procure stock, features, soil amendments	September 1992
Commence Site Revegetation	November 1992
Complete revegetation, mulching and erosion control	November 1992
Design and develop project education exhibits	
Interior of museum exhibits	September 1992
Exterior site restoration exhibits	September 1992
Exhibits installations	October 1992
Outreach Assessment and Riparian areas surveys	
Conduct field survey and photo documentation	October 1992
Produce report to 7 cities and county	November 1992
Produce exhibit and survey brochure	November 1992
Review questionnaire follow-ups	March 1993
Tour of site with Metro representative	April 1994
Documentation photographs taken	May 1994
Final clean-up of site	June 1994
Complete program and evaluation	July 1994

PROJECT BUDGET

The total cost for the riparian enhancement project was \$40,256. The Metro Greenspaces Grant represents \$17,430 of this amount which funded the plant materials and equipment to preparing the site, as well as some supervisor wages. A detailed cost of riparian enhancement and a summary of project expenses has been submitted under separate cover.

PROJECT STAFF, WORKERS, VOLUNTEERS

Primary ELC staff included Gerald W. Herrmann, Project Coordinator; Donald Paul Shula, Outreach Field Study Coordinator; Doug Larios and Michael Huffman, On-site Project Coordination Managers. Personnel coordinated includes Boy Scout troops, Friend of Gladlands (a wetlands and streams advocacy group in Gladstone), the Oregon National Guard Construction Battalion in Lake Oswego, Stop Oregon Litter and Vandalism (SOLV), corrections crews, and volunteers from the local community.

PROJECT RELATION TO GREENSPACES PROGRAM

This project embodies the goals of the Metropolitan Greenspaces Program: by addressing a highly visible urban-impacted natural area that is a connected part of the Clackamas River watershed and a regional greenway system; by increasing the diversity of plants and habitats to foster and preserve a diversity of animal life; by using the assistance of other agencies and volunteer groups to help in the planting, maintenance and monitoring of native plants; and by encouraging environmental awareness through community involvement and educational outreach efforts.

WHAT WORKED/WHAT DIDN'T

This project was hindered by unforeseen problems with staff and some of the volunteer crews. Site supervision of work crews was not conducted properly, and timelines were extended as a result. Local scout groups and community volunteers were very helpful, but convict labor was inconsistent and disappointing.

In an effort to maximize the impact of this grant, some procedural shortcuts were taken, which ultimately resulted in a less than effective final product. Subsequent follow-up work attempted to resolve some of these problems, including the replacement of non-native vegetation with native species.

Some problems were created by indigenous wildlife eating or otherwise destroying newly planted vegetation. Better use of barriers and shields would prevent this problem in the future.

We were able to halt the problem of off-road vehicle destruction of riparian vegetation through the use of barriers and fences.

This project offered a much-needed restoration of a vital wildlife and riparian habitat area. Unfortunately, personnel problems limited the effectiveness of the initial effort. However, in time, this area will be the subject of on-going improvement and restoration activities, and the ultimate goals of the grant proposal will be adequately fulfilled.

ADVICE FOR OTHER PROJECT MANAGERS

Plants need continuous monitoring for the first year after planting to assure they are well established. Streamside vegetation is a delicate part of the riparian ecosystem, and needs to be carefully planned in order to get the highest survival rate for new vegetation.

Greater internal controls need to be placed on personnel decisions and crew responsibilities when work is taking place off site. Financial oversight of project activities by organization directors is vital.

MONITORING AND MAINTENANCE

The River Resources Museum and adjoining riparian enhancement demonstration project will be monitored and maintained by the John Inskeep Environmental Learning Center, in cooperation with the City of Gladstone. The Center will be in charge of day-to-day operations and will assist in the maintenance of access roads. Trails and access areas will be maintained by the Center, including all interpretive signs and structures throughout the complex.



Metro Grant
River/Resource/Museum
P. Bradbury MZR n. # 04940002
(C) 1994 All Rights Reserved

Picnic area (inside fence)
planting, signs, picnic tables
trash cans



Metro Grant
Driver/Resources/Museum
P. 864bury M78 n. # 04940001
(C) 1994 All Rights Reserved

Program area (inside fence)
Landscape planting

4-17-00



Metro Grant
River/Resource Museum
66 Bradbury MZR n. # 04940003
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Program area (inside fence)
Program platform, landscaping,
bird houses, signs

1994-07-02



Metro Grant
River Resources Museum
P. Bradbury WZB # 04940005
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Pathway to river landscape,
hand rail (Plastic lumber
posts) (Looking up trail)

17-50



Metro Grant
River/Resource Museum
P. Bradbury MZB n # 04940004
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Pathway to river landscape.
Hand rail (Plastic lumber
posts) (Looking down trail)



Metro Grant
River/Resource/Museum
P. Braggury NZR n. # 04940007
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Wildlife area, path, clearing,
barkdust



Metro Grant
Driver/Resource/Museum
PL Brachury NZR n # 04940008
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Wildlife area, path, clearing,
barkdust



Metro Grant
River/Resource/Museum
P. Brachury M76 n # 04940009
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Water feature, landscape with
wetlands plants and native
plants, barkdust

W. 07-001



Metro Grant
River/Resouces/Museum
P. Bradbury HZB n. # 04940010
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Water feature, landscape with
wetlands plants and native
plants, barkdust



Metro Grant
River/Resource Museum
P. Bradbury M/R # 04940013
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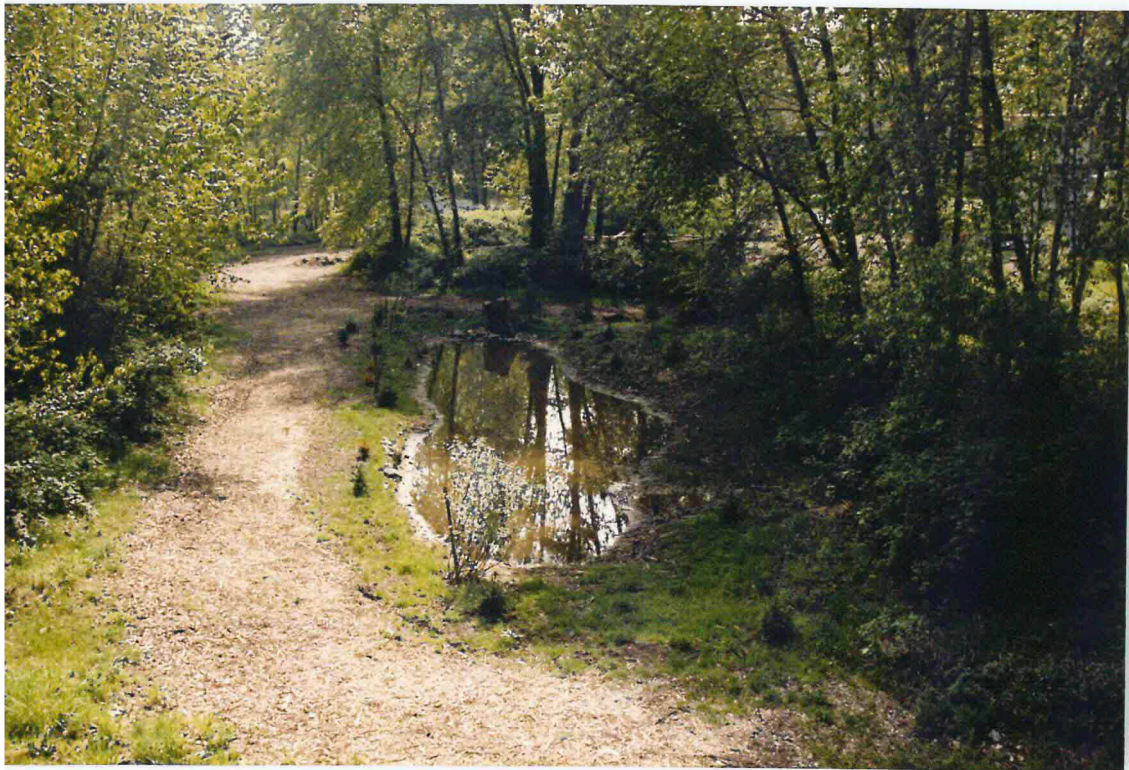
path to high point viewing,
barkdust

15-000



Metro Grant
River/Resouces\Museum
P. Bradbury MZR p.# 04940011
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wildlife, viewing paths, Osprey
nest, barkdust, and native
plants



Metro Grant
Driver/Resources/Museum
A. Bradbury, HZB n # 04940014
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water feature, wetland plants,
native plants, barkdust trail

1994 07 02



\\Metro_Grant
River/resources\Museum
P. Bradley MZA n # 04940015
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water feature, wetland plants,
native plants, barkdust trail,



Metro Grant
River/Resource/Museum
P. Bradbury, AZR # D4940016
(C) 1994 All Rights Reserved

water feature, wetland plants,
native plants, barkdust trail



Netro Grant
River Resources Museum
Essex, MA 04940017
(C) 1994 All Rights Reserved

water feature, wetland, plants,
native plants, barkdust trail

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Metro Grant
River Resources Museum
P. Bradbury MZA n # 04940018
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trails to viewing areas
barkdust



Metrol Grant
River/Resouces\Museum
P. Braggury, M78, n # 04940019
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Entrance to park area, planting
native trees and shrubs,
barkdust

1994 12 14



Metro Grant
River/Resource/Museum
PA. Bradbury, MZB p. # 04940020
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Access road, clearing, and
grading, broadcast wildflower
seeds, cutting back trees



\Metro Grant
River/Resources\Museum
P. Bradbury M76 p. # 04240021
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Entrance area, osprey nest,
landscaping, signs



Metro Grant
River/Resource Museum
P. Braggury MZR # 04940022
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Access area to beach and
Clackamette Park (work in
progress)



Metro Grant
River/Resource Museum
P. Bradbury MZR n # 04940023
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Entrance area and parking

17-004