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Oregon Fish & Wildlife Office
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Final Report

1. Project/Program name: East Biddle Lake Restoration

Cooperator: Columbia Springs Environmental Education Center

Cooperative Agreement Number: 13420-4-J436

Date: July 2006

Report Period: January 2005 – July 2006

2. The East Biddle Lake Restoration Project is completed for now. The site was reviewed and the planting area delineated. A mixed placement AmeriCorps team removed blackberry in preparation for planting. All invasive control has been done by hand removal. In February 2005, some twenty volunteers planted the area with a variety of native trees and shrubs, including cedar, Douglas fir, vine maple, and big leaf maple. Volunteers included a local Girl Scout troop, neighborhood members, and students. We completed a second smaller planting this March. We used tree tubes for each plant.

Last winter we inventoried the trees for survival rates. Our survival rate was 57%.

The main problem for the project is that we planned to host a volunteer church group last summer and have them install the pipes and tubing to create a watering system. The overall group did not have enough volunteers, so they were not able to work at our site. This summer, a group did come and installed the watering system over part of the site. We were able to do some hand watering to compensate for this problem.

Compared to expected plans, we did not complete some of the items, such as surveying the current vegetation, a detailed site map, and detailed plant list.

Overall, we accomplished the central goal of replacing non-native invasives with native plants. Now that we have a watering system, we will be watering our plants. Also, we will continue to remove invasives.

3. The East Biddle Lake Restoration Project activities included invasives removal, primarily blackberries, planting over 500 trees and shrubs, laying out a watering system. We removed all invasives with hand tools, no herbicides were used.

4. Project Staff included Jane Van Dyke, Columbia Springs; Ed Maxwell, Evergreen Public Schools; and Erin Rowland and Sarah Kleven, AmeriCorps members. There were twenty volunteers for the main planting day; they

worked a total of 60.5 hours (60.5 x \$6.50= \$393.25). The second planting day there were eleven volunteers; who worked a total of 22 hours (22 x \$6.50= \$143). The seven person church group worked parts of four days at the site; for a total of 126 hours (126 x \$6.50= \$819).

5. The actual planting area was approximately 1.5 acres. See enclosed map.

6. To implement the project, we began with blackberry removal. Using the AmeriCorps team, we brought the plants, tools, flags, and tree tubes to the site. The team set out the flags for the main planting day. Lessons we learned: Planting with tree tubes is most effective because the trees can be easily found for determining survival rates, for watering, and for maintenance. Also, it is important to spend some time training volunteers on planting technique to improve survival rates.

7. On going tasks include continuing to remove invasives and water the trees. Also, we will probably plant more trees and then more understory plants as the trees get established.

8. Expenses

Budget Items	Greenspaces funding	Matching funds	In-Kind	Contributions	Total	Total Actual
Personnel			230	2,300	2,530	2,530
Volunteer Labor			1,250		1,250	1,355.25
Professional Services						
Materials/supplies	800 3,300	300	250		1,350 3,300	944.52 trees 885.89 supplies
Rental Fees						
Indirect/overhead			650		650	650
Other disposal	100				100	
Totals	4,200	300	2,380	2,300	9,180	6,365.66

We were able to reuse planting tubes and stakes, as well as some watering tubing. Also, for the March planting this year, the trees were donated. Our total expenses charged to the grant were \$1,830.41.

9. Summary: Restoration projects are very rewarding. It is great to see the beginning of change in an area. These projects work well with volunteers, however it is important to provide some training. Also, restoration projects are labor intensive, so it is important to schedule numerous and ongoing work activities. Having the blackberry removed and trees planted will lead to the next steps of a trail and an overlook being constructed.

The Greenspaces Program funded by USFWS and Metro provided Columbia Springs with the basics for our restoration activities. As provided in our Master Plan, we will continue to restore our site using native plants to improve the natural habitats in the area.

East Biddle Lake Before
1

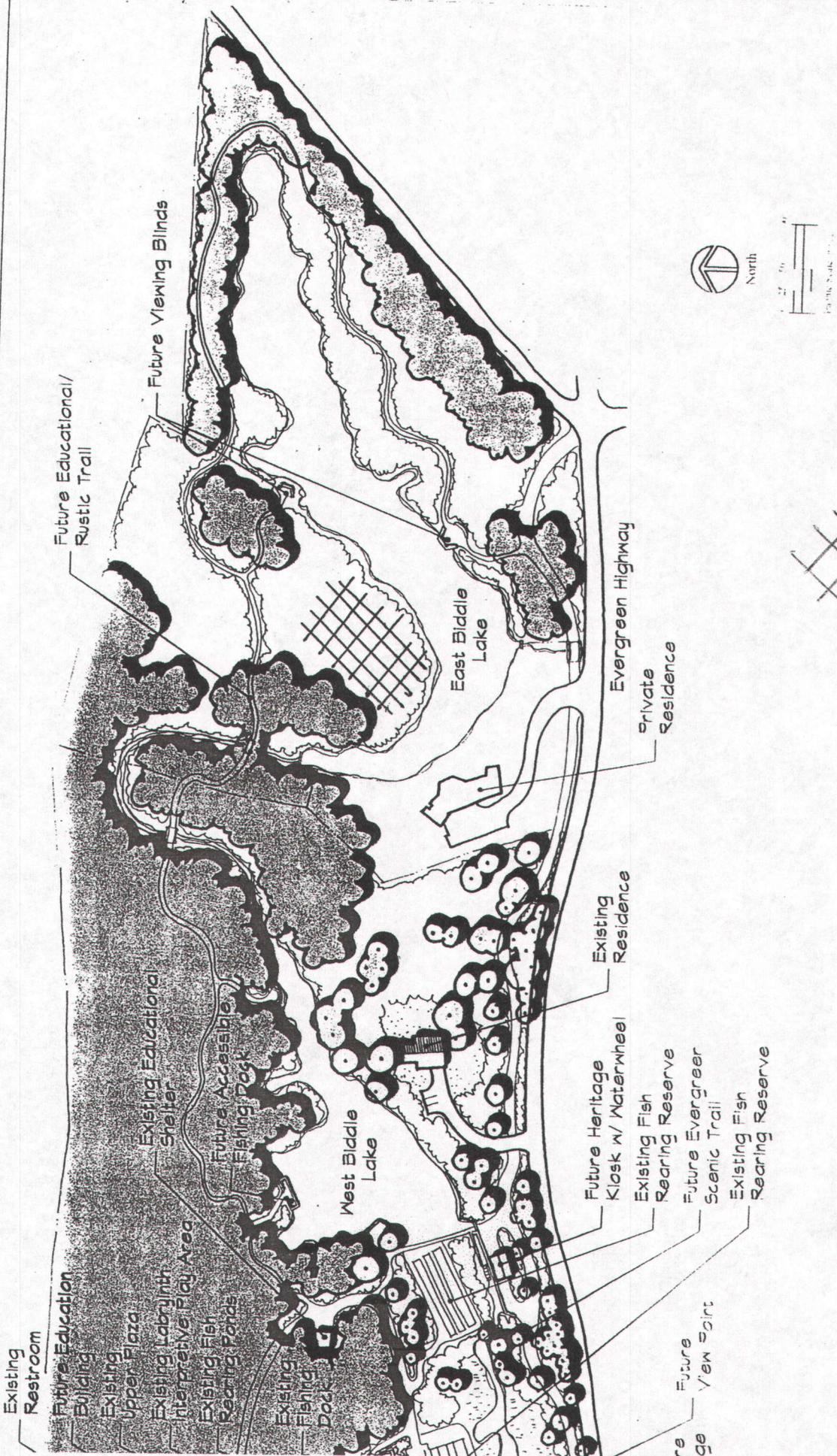


Getting Ready for Planting 1



Planting
1





Existing Restroom

Future Education Building

Existing Upper Plaza

Existing Labyrinth

Existing Interpretive Play Area

Existing Fish Rearing Ponds

Existing Fishing Dock

Existing Educational Shelter

Future Accessible Fishing Post

West Biddle Lake

East Biddle Lake

Future Heritageloss w/ Waterwheel

Existing Fish Rearing Reserve

Future Evergreer Scenic Trail

Existing Fish Rearing Reserve

Existing Residence

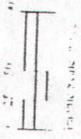
Private Residence

Evergreen Highway

Future Educational/Rustic Trail

Future Viewing Blinds

Future View Point



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Project site

Master Plan
Columbia Springs
Environmental Education Center
Vancouver, Washington
Prepared By: J.D. Walsh & Associates, P.S.

