Heron Glen Wetland Buffer Enhancement Project

Progress Report

August 10, 2004 (resent October 19, 2004)

Summary of Activity Since Last Report (July 2003)

Weed Control

Himalayan blackberry (*Rubus discolor*) and Scots broom (*Cytisus scoparius*) continue to be the most common and persistent undesirable plants on the project site. The Scots broom is being effectively controlled through hand-pulling in the spring, before the plant flowers and sets seed. The site probably has a large Scots broom seed bank, and an undeveloped lot in the development adjacent to the project site has a dense stand of broom that is a continuing source of new seeds. Though we did not attempt to quantify the occurrence of Scots broom, the number of new Scots broom plants on-site appears to have decreased from last year. Once the vacant lot is developed, the major near-by seed source will be eliminated. A single day devoted to the land each year should be adequate to keep the Scots broom under control.

Himalayan blackberry is the most troubling plant on-site. Last year, the majority of blackberry control was done by pulling of plants. This resulted in a large amount of re-growth from the roots, and was disruptive to the soil structure. Blackberry plants are currently being pulled only if the plant is very small; all other canes are cut near the ground and daubed with glyphosate. Glyphosate-treated canes have shown little to no re-growth (See Attachment 1, Photo 1). In 2004 the eastern portion of the site has been cleared of blackberry, we are currently working on the western portion. If the glyphosate treatment is as effective as we anticipate, there should be a significant reduction in blackberries next year.

Last year the site contained significant "bare" areas; the ground was covered with only wood chips. These areas have now been extensively covered by grasses and other herbaceous species. Bracken fern (*Pteridium aquilinum*) and bed straw (*Galium* sp.) have been particularly successful. Areas with large amounts of bracken ferns are showing reduced weed species. Small numbers of tansy ragwort (*Senacio jacobaea*) and St. John's wort (*Hypericum perforatum* L.) have been removed.

Tree Survival

There appears to be no additional loss of planted trees since the 2003 survey. Many of the trees planted in 2001 are between 15 and 20 feet in height. The red alder (*Alnus rubra*) trees have been growing particularly well; in some locations they are starting to create a closed canopy. The surviving black cottonwood (*Populus trichocarpa*) trees, planted in 2002, appear to be establishing well; several are between 15 and 20 feet in height.

The two locations where tree growth is the slowest are the northwest corner of the site (north of observation site) and the project's eastern edge. In these areas, there was a higher than average initial tree mortality, and growth has been slow. Compared to the rest of the site, these areas are slightly higher in elevation, and more exposed to the sun. So we would expect slower growth, given the lack of summer soil moisture. The eastern edge was also the last area to be planted.

We are continuing to find volunteer trees on-site.

Oregon ash (*Fraxinus latifolia*): 17
Oregon oak (Garry oak, *Quercus garryana*): 23
Black cottonwood (*Populus nigra*): 5
Douglas fir (*Pseudotsuga menziesii*): 2
Vine maple (*Acer circinatum)*: several located in the center of the site (South of observation site 1)

Additionally, there are a number of volunteer shrub species starting to appear. We have seen several snowberry (*Symphoricarpos alba*), and rose (*Rosa nutkana*). There are also a few native honeysuckle (*Lonicara involucrata.*) and elderberry (*Sambucus* sp.).

Proposed Activities for the Coming Year

1. Removal of weedy species. We will return to the site frequently to remove blackberry and Scots broom plants before they become established.

2. Planting oak trees. We have a source for Oregon oak acorns from native trees growing nearby. We will spread these within the buffer area in late October. The large oak within the development was recently removed by the owner (along with the large Douglas fir), so we want to supplement the number of acorns on-site.

3. Given the very dry conditions in the northwest and northeast portions of the site, we propose to plant Douglas fir in these areas.

Photographs of the project area from the 2004 site visit are included as attachment 2.

Respectfully submitted,

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Attachment 1

Photo 1. Blackberry canes cut and painted with a glyphosate solution.

Photo 2. Volunteer Snowberry (*Symphoricarpos alba*)

Photo 3. Snowberry fruit

Photo 4. *Quercus garryana* volunteer

Attachment 2

Monitoring Site 1. Facing North into subdivision area.

Monitoring Site 1. Facing East.

Monitoring Site 1. Facing South into wetland area.

Monitoring Site 1. Facing West.

Monitoring Site 2. Facing North into subdivision area.

Monitoring Site 2. Facing East into subdivision area.

Monitoring Site 2. Facing South toward wetland.

Monitoring Site 2. Facing west into neighboring property.

Monitoring Site 3. Facing North (toward Monitoring Site 2).

Monitoring Site 3. Facing East.

Monitoring Site 3. Facing South into wetland.

Monitoring Site 3. Facing West into adjacent property.

Monitoring Site 4. Facing North toward subdivision area.

Monitoring Site 4. Facing East.

Monitoring Site 4. Facing South into wetland area.

Monitoring Site 4. Facing West.

Monitoring Site 5. Facing North toward the subdivision area.

Monitoring Site 5. Facing West.

Monitoring Site 5. Facing South into wetland area.

Monitoring Site 5. Facing East