



Date: March 15, 2010; updated March 26, 2010
To: Kevin Stoops, Director, Planning & Development Division
From: David Graves, AICP, Senior Planner
Subject: Kiwanis Ravine Restoration - SEPA Exempt

The City of Seattle is proposing to remove invasive species and restore areas within Kiwanis Ravine as follows (see also the attached map).

Background

Seattle Parks and Recreation (Parks) in cooperation with Cascade Land Conservancy has created the Green Seattle Partnership (GSP) to restore 2500 acres of forested park property in recognition of the benefits that healthy urban forests provide. These benefits include reduced storm water runoff, improved water quality, reduced erosion, increased property values, improved air quality, more attractive neighborhoods, reduced global warming, and increased wildlife habitat and noise buffering.

On November 4, 2008 community groups and citizens helped pass the new 2008 Parks and Green Spaces Levy with the support of 59% of Seattle voters. Kiwanis Ravine has been allocated \$600K of these funds to restore habitat. In June 2009, the Heron Habitat Helpers (HHH) Restoration Committee developed a prioritized list (below) of projects. The list identifies specific sites with a location reference code that corresponds to the attached Kiwanis Ravine Pro Parks Levy 2008/2009 map.

Priority	Project Description*
1	Restore the lands between the Kiwanis Wildlife Corridor (KWC) and the Sound Transit mitigation (KRM 1) project and extend south to include the heron nesting trees. These are zones KRM 4 and KRM 5 which total approximately 1.1 acres.
2	Restore the east side of the main stem of Wolfe Creek. Zone KRM 3 is 1.7 acres.
3	Restore the zone (KRE 7) between the Stevens parcel (KRS) and the confluence of the east and west forks. KRE 7 is 0.5 acres.
4	Restore portions of the headwaters of the west fork (KRW 5 & KRW 6) not restored during previous projects. KRW 5 and KRW 6 total 0.4 acres.

5	Restore the west side of the main stem of Wolfe Creek (KRM 2 & KRW 9), which total 1.7 acres
6	Restore a portion of the headwaters of the east fork of Wolfe Creek (KRE 2) not restored in previous projects. KRE 2 is 0.1 acre.

* All acreage is rounded to the nearest tenth/acre.

Project Description

Parks is proposing to restore a regenerative, self-sustaining native forest to the Kiwanis Ravine site. The proposal is for a phased restoration approach beginning in 2010 and ending approximately 2011 followed by ongoing maintenance for a period of five years ending in 2014.

The project includes: removing invasive vegetation and replanting/reseeding with native species; planting native coniferous trees; protecting the slope from erosion; and providing follow-up invasive plant control and establishment watering. Four volunteer events will also be scheduled and are described below.

With the exception of the four volunteer work parties, the proposed work will occur on steep slopes within Kiwanis Ravine. A total of 5.4 acres will be brought into restoration (2.8 acres in Phase I and 2.7 acres in Phase II).

Site Preparation

Site preparation would precede implementation of the phased work and would consist of:

- Designating a staging area and access route approved by the project engineer for each zone.
- Providing erosion protection in the form of sterile wheat grass (if needed), jute mesh, and wood chip mulch, and
- Using on-site woody debris and coir logs to further control erosion.

Schedule

Phase I (See map for locations)

1. KRM 4 & KRM 5: Restore zones between the Kiwanis Wildlife Corridor (KWC) and the Sound Transit Mitigation Project (KRM 1) and extend south to include the heron nesting trees. Zones KRM4 and KRM 5 total approximately 1.1 acres.
2. KRM 3: Restore the east side of the main stem of Wolfe Creek. Zone KRM 3 is approximately 1.7 acres.
3. Hold two public volunteer events during Fall 2009. Work parties will take place within the Kiwanis Wildlife Corridor (KWC) along Gilman Ave W. and will be limited to 30 volunteers. Tasks may include invasive removal, planting, or maintenance to existing plantings. Volunteers will not work on steep slopes or other critical areas and will not be involved with the use of any herbicide.

Phase II (See map for locations)

1. KRE 7: Restore zone KRE 7 between the Stevens parcel (KRS) and the confluence of the east and west forks. This area is approximately 0.5 acres.
2. Zones KRW 5 and KRW 6: Restore portions of the headwaters of the west fork not included in previous projects. Zones KRW 5 and KRW 6 total approximately 0.4 acres.
3. KRM 2 and KRW9: Restore the west side of the main stem of Wolfe Creek. KRM 2 and KRW 9 total approximately 1.7 acres.
4. KRE 2: Restore a portion of the headwaters of the east fork of Wolf Creek not restored in previous projects. KRE 2 is 0.1 acre.
5. Hold two public volunteer events. Work parties will take place within the Kiwanis Wildlife Corridor (KWC) along Gilman Ave W. and will be limited to 30 volunteers. Tasks may include invasive removal, planting, or maintenance to existing plantings. Volunteers will not work on steep slopes and will not be involved with the use of any herbicide.

Phase III: Long-Term Maintenance and Monitoring - Ongoing as needed (approximately 5 years)

Annual maintenance would require:

- Physical and/or chemical removal of weeds.
- Continued watering of plants to ensure survival
- Management of exposed soil with additional planting, erosion control matting and mulching
- Vegetation management
- Removal of dead, declining and diseased trees

Note: Due to the nature of restoration work as well as site restrictions specific to Kiwanis Ravine, certain tasks proposed for Phases I and II may not be completed within the proposed timelines. If this occurs tasks will be rolled over into the next phase without incurring any other modifications.

Methods

Vegetation Removal: All work proposed in this document will focus on hand removing invasive species on steep slopes. Removal of invasive species on slopes will be done by hand cutting stems and grubbing or pulling roots. On slopes where the removal of roots might cause excessive erosion potential, the practice will shift to cutting and treating plants with an approved herbicide. This would allow roots to remain in the ground and continue to help stabilize the slope. The SPR project lead will determine where the use of an herbicide to minimize soil disturbance outweighs agency commitment to decrease herbicide use throughout the Parks system.

Temporary Erosion and Sedimentation Control: This work will require the use of erosion and sediment controls. In addition to the installation of native woody and herbaceous plants, a combination of jute or coir mesh, sterile wheat grass, straw logs, and/or coarse woody debris (arranged horizontally to the slope) will be installed on steep slopes where vegetation has been removed. Mulch will also be placed on steep slopes to reduce erosion.

Planting: Planting in Phases I and II will focus on establishing a native canopy and shrub layer to help stabilize banks and provide an array of ecological benefits. Where slopes are determined to be too steep to install potted plants (typically 1 gallon pots), live stake cuttings and/or bare root seedling trees and shrubs will be planted. Sterile wheat grass seed will be applied as determined to be necessary by project lead. On less severe slopes, a mix of potted and bare-root or live-stake plants will be planted. Considerations of slope steepness (erosion), soil moisture (erosion and stock-type survival), available sunlight (stock-type survival), and ease or difficulty of access (stock-type mobilization) will be evaluated by project lead and will be used to determine the exact stock of plant material most appropriate for each site.

Portions of the proposed work area included some and/or all of the following Environmentally Critical Areas (ECA) that covers the bulk of Kiwanis Ravine, as indicated on the City's GIS database: Steep Slope, Potential Slide, Riparian Corridor (Wolf Creek), Wetlands and Wildlife Habitat. No work will occur within Wolf Creek; limited work may occur in the wetland/wetland buffer area(s) as necessary to remove the invasive species.

SEPA

The Seattle Municipal Code (SMC) section 25.05.800.Y. Natural Resource Management provides that:

In addition to the other exemptions contained in this section, the following natural resources management activities shall be exempt:

9. Periodic use of chemical or mechanical means to maintain public park and recreational land; provided, that chemicals used are approved by the Washington State Department of Agriculture and applied by licensed personnel. This exemption shall not apply to the use of chemicals within watersheds that are controlled for the purpose of drinking water quality in accordance with WAC 248-54-660;

Pursuant to SMC 25.05.800.Y, the subject proposal to remove invasive species and plant native vegetation, including any limited use of herbicides is exempt from requiring a SEPA threshold determination because the work is natural resource management of public park lands. Invasive species will be removed by hand and/or by hand tools and limited use of herbicide(s) may occur. Wolf Creek is not a watershed that is controlled for drinking water. Any herbicide use would be with an approved herbicide by a licensed applicator. The removal work is periodic use of mechanical means. "Mechanical means" is not define in the SMC or in the State regulations but hand/tool removal would be within this category and less potentially damaging than machine work.

ECA

The proposed restoration activities are also exempt from ECA review (but not any applicable construction related requirements of the ECA Code) and no application for an ECA exemption to the Department of Planning & Development is necessary, as follows. Generally, public agency activities in an ECA are addressed in SMC 25.09.045 *Exemptions*, which states in sub-section A.1.b and B that:

A.1.b. City agencies taking the action under any subsection of this section and the public agency taking the action under subsection J do not need to make an application to the Director provided that if no application is made, they shall comply with all provisions of this Section 25.09.045, make all determinations required to be made by the Director, including required conditions, and shall maintain records documenting compliance with all provisions.

B. All exempt activities shall be undertaken using best management practices; the applicant shall maintain records documenting compliance with this subsection B.

The above project description documents the proposal and Parks staff will further document the project upon completion. Parks will also implement best management practices (BMPs) associated with temporary erosion and sediment controls to reduce the impacts on the earth that the project may create. Temporary Erosion and Sedimentation Controls (TESC) include:

- Installation of erosion control blankets, straw logs, and silt fences as needed.
- Arrangement of woody debris horizontal to slope.
- Placement of straw logs where silt fencing would interrupt tree roots.

In addition:

- The TESC practices will be installed in such a manner as to ensure that sediment-laden water does not enter the public drainage system or flow off site.
- Any area stripped of vegetation where no further work is anticipated for a period of 15 days shall be immediately stabilized with approved TESC methods such as mulching, erosion blankets, plastic sheeting or as approved by the engineer.
- All catch basins in the vicinity of construction will be protected with filter fabric placed between the frame and grate or as approved. Filter fabric will be cleaned regularly. No more than 1 inch of sediment would be allowed to accumulate over filter fabric.
- Spoils piles not used after 1 day will be covered with visqueen (plastic) to keep sediment under control.
- The contractor will appoint one person to be in control of all TESC inspection and repair with a 24-hour call number.

Specifically, the proposed work is addressed in SMC 25.09.045.J as follows:

J. Normal and routine (a) pruning, (b) tree and vegetation maintenance and management, and (c) revegetation are exempt from the provisions of this chapter when they do not result in substantial disturbance of environmentally critical areas or buffers and when they are carried out in parks, public utility right of ways, and publicly owned open spaces by the public agencies, including City agencies, that are responsible for them.

Parks owns the subject property and the invasive removal will be done by hand and/or with hand tools to minimize the disturbance in the ECAs. Once the invasive plants have been removed new native plants appropriate to the site will be planted. Disturbed

areas will be mulched and/or otherwise stabilized using the above noted TESC measures.

Great Blue Heron

The Kiwanis Ravine hosts one of the largest Great blue heron rookeries in the Seattle area. Herons are regulated under Washington State law and are listed as a Priority Species by the Washington State Department of Fish & Wildlife (WDFW). Additionally, the Seattle Department of Planning & Development issued Director's Rule (DR) 5-2007 which also addresses development activities in proximity to great blue heron nesting colonies. DR 5-2007 requires a 500-foot buffer around all great blue heron nesting colonies; no clearing or grading activities may occur within this buffer area between February 1st and July 31st.

Conclusion

Parks intends to comply with all the applicable provisions of the Seattle Municipal Code during the removal, restoration and replanting activities. Parks' work will also be consistent with the "Kiwanis Ravine Management and Monitoring Plan/Report" (KRMMP) which was adopted by Parks on June 24, 2003.

The proposal is exempt from requiring a SEPA threshold determination and from ECA review by the Department of Planning & Development; activities must comply with all provisions of SMC Section 25.09.045 and shall be undertaken using best management practices. Additionally, consistent with DR 5-2007, no clearing activities will occur within 500 feet of the Great blue heron nesting colony between February 1st and July 31st of any year.