



**City of Bellevue
Development Services Department
Land Use Staff Report**

Proposal Name: Lewis Creek Park Vegetation Management and Nature Trail

Proposal Address: 5808 Lakemont Boulevard SE

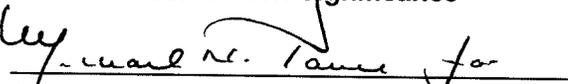
Proposal Description: The applicant requests a Critical Areas Land Use Permit for the management of native and invasive vegetation and the installation of approximately 800 linear feet of soft-surface trail within stream and wetland critical area buffers of Lewis Creek Park.

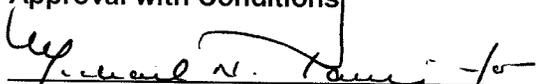
File Number: 10-126356-LO

Applicant: Bellevue Parks & Community Services Department

Decisions Included: Critical Areas Land Use Permit
(Process II. LUC 20.30P)

Planner: Kevin LeClair, Planner

**State Environmental Policy Act
Threshold Determination:** **Determination of Non-Significance**

Carol V. Helland, Environmental Coordinator
Development Services Department

Director's Decision: **Approval with Conditions**

Carol V. Helland, Land Use Director
Development Services Department

Application Date: November 17, 2010
Notice of Application Publication Date: December 16, 2010
Decision Publication Date: January 27, 2011
Project/SEPA Appeal Deadline: February 10, 2011

For information on how to appeal a proposal, visit Development Services Center at City Hall or call (425) 452-6800. Comments on State Environmental Policy Act (SEPA) Determinations can be made with or without appealing the proposal within the noted comment period for a SEPA Determination. Appeal of the Decision must be received in the City's Clerk's Office by 5 PM on the date noted for appeal of the decision.



DEVELOPMENT SERVICES DEPARTMENT
 ENVIRONMENTAL COORDINATOR
 450 100th Ave NE., P.O. BOX 90012
 BELLEVUE, WA 98009-9012

DETERMINATION OF NON-SIGNIFICANCE

PROPONENT: Jim Bennett, Parks and Community Services Department

LOCATION OF PROPOSAL: 5808 Lakemont Boulevard SE

NAME & DESCRIPTION OF PROPOSAL:

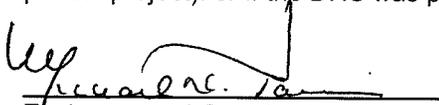
Critical Areas Land Use Permit for the management of native and invasive vegetation and the installation of approximately 800 linear feet of soft-surface trail within stream and wetland critical area buffers of Lewis Creek Park.

FILE NUMBER: 10-126356-LO

The Environmental Coordinator of the City of Bellevue has determined that this proposal does not have a probable significant adverse impact upon the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(C). This decision was made after the Bellevue Environmental Coordinator reviewed the completed environmental checklist and information filed with the Land Use Division of the Development Services Department. This information is available to the public on request.

- There is no comment period for this DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's office by 5:00 p.m. on _____.
- This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's Office by 5 p.m. on February 10, 2011.
- This DNS is issued under WAC 197-11-340(2) and is subject to a 14-day comment period from the date below. Comments must be submitted by 5 p.m. on _____. This DNS is also subject to appeal. A written appeal must be filed in the City Clerk's Office by 5 p.m. on _____.

This DNS may be withdrawn at any time if the proposal is modified so that it is likely to have significant adverse environmental impacts; if there is significant new information indicating, or on, a proposals probable significant adverse environmental impacts (unless a non-exempt license has been issued if the proposal is a private project); or if the DNS was procured by misrepresentation or lack of material disclosure.



 Environmental Coordinator

January 27, 2011

 Date

OTHERS TO RECEIVE THIS DOCUMENT:

- State Department of Fish and Wildlife
- State Department of Ecology,
- Army Corps of Engineers
- Attorney General
- Muckleshoot Indian Tribe

CONTENTS

I. Proposal Description	1
II. Site Description, Zoning, Land Use and Critical Areas	1
III. Consistency with Land Use Code Requirements:.....	5
IV. Public Notice and Comment.....	9
V. Summary of Technical Reviews	9
VI. State Environmental Policy Act (SEPA).....	9
VII. Changes to proposal as a result of city review	10
VIII. Decision Criteria.....	11
IX. Conclusion and Decision.....	12
X. Conditions of Approval	12

Attachments

1. Environmental Checklist
2. Vegetation Management Plan and Wetland and Stream Inventory
3. Trail Spur Plans – In file

I. Proposal Description

The applicant is requesting a Critical Areas Land Use Permit for the management of vegetation to improve the health of the forest, remove invasive exotic plants and increase species diversity; and the installation of approximately 800 lineal feet of 5-foot wide soft-surface trail and bridged stream crossing with the stream and wetland critical area buffers of Lewis Creek Park. Both vegetation management and the new non-motorized trails are considered “allowed uses” within critical areas and critical area buffers according to Land Use Code (LUC) 20.25H.055 provided that both general and specific performance standards are met, along with the critical areas land use permit decision criteria.

The objective of the vegetation management component of the proposal is improve ecological function and values of the forested portion of Lewis Creek Park by targeting specific areas of non-native exotic species monocultures for eradication or suppression. Once the invasive species are under control, these areas will be replanted with a diverse mixture of native trees, shrubs and ground covers. In addition to the invasive eradication efforts, in-fill conifer plantings will further diversify the vegetation communities in areas where native conifer regeneration is insufficient or lacking.

II. Site Description, Zoning, Land Use and Critical Areas

A. Site Description

Lewis Creek Park is a 56-acre community park located in Lakemont/Cougar Mountain area of southeastern Bellevue. The park serves as the trailhead for the South Bellevue Greenway system. A network of trails provides public access to the undeveloped forested portion of the park, located northeast of the visitor center. Perimeter trails are paved; interior trails are soft surface (gravel, dirt or wood chip mulch). Several existing footbridges accommodate stream and wetland crossings throughout the trail system.

In the 1990's the City of Bellevue purchased three farm properties for eventual use as a community park and in 2005 the Johnson property, located at the north end of the park, was acquired, completing the 56-acre park site. In 2002, before the acquisition of the Johnson property, the site underwent a Parks master planning process and the result was the Council-adopted *Lewis Creek Park Master Plan*. The *Master Plan* called for the development of the park in two phases. Phase 1, which was completed in 2005 included two sports fields, a playground, sport court, visitor center, parking lot and trails. Phase 2 is planned to include additional parking, picnic facilities, public restrooms and trails. The vegetation management and trail development are planned for the northern 25.8 acres of the park and are consistent with the *Master Plan*.

According to Natural Resources Conservation Service (NRCS) soil maps, the vegetation management area is comprised of Beausite gravelly sandy loam BeC), six to 15 percent slopes. BeC is a well-drained soil, but soils were saturated in several areas on the day of our site visit. Soils in the vegetation management area contain numerous hydric inclusions not captured by NRCS mapping.

The vegetation management area is primarily forested. Mixed conifer-deciduous stands are scattered throughout the deciduous forest cover, which is dominated by red

alder. Native plants identified in the management area include, but are not limited to the species listed in Table 1 below.

Table 1: Native plants identified in management area

	Common Name	Botanical Name
Trees	Big-leaf maple	<i>Acer macrophyllum</i>
	Black cottonwood	<i>Populus balsamifera</i>
	Douglas-fir	<i>Pseudotsuga menziesii</i>
	Red alder	<i>Alnus rubra</i>
	Western hemlock	<i>Tsuga heterophylla</i>
	Western red cedar	<i>Thuja plicata</i>
Shrubs	Beaked hazelnut	<i>Corylus cornuta</i>
	Hardhack spirea	<i>Spiraea douglasii</i>
	Nootka rose	<i>Rosa nutkana</i>
	Osoberry	<i>Oemleria cerasiformis</i>
	Pacific ninebark	<i>Physocarpus capitatus</i>
	Red elderberry	<i>Sambucus racemosa</i>
	Red huckleberry	<i>Vaccinium parvifolium</i>
	Red-osier dogwood	<i>Cornus sericea</i>
	Salmonberry	<i>Rubus spectabilis</i>
	Vine maple	<i>Acer circinatum</i>
Groundcover	Bedstraw	<i>Galium sp.</i>
	Bracken fern	<i>Pteridium aquilinum</i>
	Deer fern	<i>Blechnum spicant</i>
	Lady fern	<i>Athyrium filix-femina</i>
	Miners lettuce	<i>Claytonia sibirica</i>
	Pacific bleeding heart	<i>Dicentra formosa</i>
	Pacific waterleaf	<i>Hydrophyllum tenuipes</i>
	Salal	<i>Gaultheria shallon</i>
	Stinging nettle	<i>Urtica dioica</i>
	Sword fern	<i>Polystichum munitum</i>
	Tall Oregon grape	<i>Mahonia aquifolium</i>
	Trailing blackberry	<i>Rubus ursinus</i>

Invasive weedy plant species within the management area are primarily nonnative blackberry, English holly, English ivy and reed canarygrass. Most of the invasive weedy brambles are mixed with native trees and shrubs. For a more detailed list of invasive plants observed, see Table 2 below. Significant occurrences of invasive plant infestations were mapped (see the Invasives Mapping in Appendix B, sheet 2).

Table 2. Invasive weeds identified and King County management status.

Common Name	Botanical Name	King County Status
Canada thistle	<i>Cirsium arvense</i>	non-regulated noxious weed
Creeping buttercup	<i>Ranunculus repens</i>	weed of concern
English holly	<i>Ilex aquifolium</i>	weed of concern
English ivy	<i>Hedera helix</i>	non-regulated noxious weed
English laurel	<i>Prunus laurocerasus</i>	weed of concern

Evergreen blackberry	<i>Rubus laciniatus</i>	non-regulated noxious weed
Himalayan blackberry	<i>Rubus armeniacus</i>	non-regulated noxious weed
Reed canarygrass	<i>Phalaris arundinacea</i>	non-regulated noxious weed
Robert's geranium	<i>Geranium robertianum</i>	non-regulated noxious weed
Scot's broom	<i>Cytisus scoparius</i>	non-regulated noxious weed

Given on-site conditions and landscape position, the management area is likely to provide habitat, primarily perching and foraging habitat, for the following species of local importance: red-tailed hawk, merlin, great blue heron, Pileated woodpecker, Vaux's swift, and purple martin. The site contains sparse snags suitable for nesting by pileated woodpecker or Vaux's swift. Bald eagles and osprey more commonly forage and nest next to large open waters, but may pass through the park. Habitat in the park may be suitable for Oregon spotted frog and western toad, but none were observed during our site visit.

B. Zoning

The property is zoned R-5 and PO. The property also contains stream and wetland critical areas and critical area buffers, so therefore is within the critical areas overlay district.

C. Land Use Context

Lewis Creek Park is located within the Newcastle Subarea and the Eastgate/Cougar Mountain Neighborhood Enhancement Area. As stated above, Lewis Creek Park serves the community as an active and passive recreation resource. The diversity of cover types on the property, from soccer field, playground parking lots and visitor center to wetlands, meadows and forested areas, provides a neighborhood gathering spot as well as neighborhood buffering between the adjacent neighborhoods of Lakemont on the east and Lakemont Highlands to the west.

D. Critical Areas Functions and Values

i. Streams and Riparian Areas

Riparian vegetation, particularly forested riparian areas, affect water temperature by providing shade to reduce solar exposure and regulate high ambient air temperatures, slowing or preventing increases in water temperature.

Upland and wetland riparian areas retain sediments, nutrients, pesticides, pathogens, and other pollutants that may be present in runoff, protecting water quality in streams. The roots of riparian plants also hold soil and prevent erosion and sedimentation that may affect spawning success or other behaviors, such as feeding.

Both upland and wetland riparian areas reduce the effects of flood flows. Riparian areas and wetlands reduce and desynchronize peak crests and flow rates of floods. Upland and wetland areas can infiltrate floodflows, which in turn, are

released to the stream as baseflow.

Stream riparian areas, or buffers, can be a significant factor in determining the quality of wildlife habitat. For example, buffers comprised of native vegetation with multi- canopy structure, snags, and down logs provide habitat for the greatest range of wildlife species. Vegetated riparian areas also provide a source of large woody debris that helps create and maintain diverse in-stream habitat, as well as create woody debris jams that store sediments and moderate flood velocities.

Sparsely vegetated or vegetated buffers with non-native species may not perform the needed functions of stream buffers. In cases where the buffer is not well vegetated, it is necessary to either increase the buffer width or require that the standard buffer width be restored or revegetated. Until the newly planted buffer is established the near term goals for buffer functions may not be attained.

Riparian areas often have shallow groundwater tables, as well as areas where groundwater and surface waters interact. Groundwater flows out of riparian wetlands, seeps, and springs to support stream baseflows. Surface water that flows into riparian areas during floods or as direct precipitation infiltrates into groundwater in riparian areas and is stored for later discharge to the stream.

ii. Wetlands

Wetlands provide important functions and values for both the human and biological environment—these functions include flood control, water quality improvement, and nutrient production. These “functions and values” to both the environment and the citizens of Bellevue depend on their size and location within a basin, as well as their diversity and quality. While Bellevue’s wetlands provides various beneficial functions, not all wetlands perform all functions, nor do they perform all functions equally well. However, the combined effect of functional processes of wetlands within basins provides benefits to both natural and human environments. For example, wetlands provide significant stormwater control, even if they are degraded and comprise only a small percentage of area within a basin.

iii. Habitat Associated with Species of Local Importance

Urbanization, the increase in human settlement density and associated intensification of land use, has a profound and lasting effect on the natural environment and wildlife habitat, is a major cause of native species local extinctions, and is likely to become the primary cause of extinctions in the coming century. Cities are typically located along rivers, on coastlines, or near large bodies of water. The associated floodplains and riparian systems make up a relatively small percentage of land cover in the western United States, yet they provide habitat for rich wildlife communities, which in turn provide a source for urban habitat patches or reserves. Consequently, urban areas can support rich wildlife communities. In fact, species richness peaks for some groups, including songbirds, at an intermediate level of development. Protected wild areas alone

cannot be depended on to conserve wildlife species. Impacts from catastrophic events, environmental changes, and evolutionary processes can be magnified when a taxonomic group or unit is confined to a specific area, and no one area or group of areas is likely to support the biological processes necessary to maintain biodiversity over a range of geographic scales. As well, typological approaches to taxonomy or the use of indicators present the risk that evolutionary potential will be lost when depending on reserves for preservation. Urban habitat is a vital link in the process of wildlife conservation in the U.S.

III. Consistency with Land Use Code Requirements:

A. Zoning District Dimensional Requirements:

The site is located in both the R-5 and PO land use zoning districts. The bridge is the only structure proposed as part of this project. The total height of the structure will be a maximum of 4 feet above grade for the railings. The bridge decking is designed to have a ¼-inch gap between the boards and therefore is considered a pervious surface.

B. Critical Areas Requirements LUC 20.25H:

i. Performance standards for new public trails LUC 20.25H.055.C.3.g

a. Trail location and design shall result in the least impacts on the critical area or critical area buffer;

The trail spur is designed to result in the least impact by meandering across the site to take advantage of existing contours and avoid desirable vegetation. The trail route is within wetland and stream critical area buffers, but is designed to be covered with wood chips on top of native soils. The crossing of Lewis Creek bridges the channel at a nearly perpendicular angle to the stream and is designed so that the footings are well outside of the stream critical area and the ordinary high water mark.

b. Trails shall be designed to complement and enhance the environmental, educational, and social functions and values of the critical area with trail design and construction focused on managing and controlling public access and limiting uncontrolled access;

Presently, the proposal includes a circular bump-out that overlooks wetland J (see stream and wetland report). The applicant intends to install an interpretive sign at this location to educate park and trail users about the benefits of preserving wetlands and the functions that they provide.

c. Trails shall be designed to avoid disturbance of significant trees and to limit disturbance of native understory vegetation;

The trail layout is currently envisioned to take a meandering path through the stream and wetland critical area buffer and will avoid the removal of significant trees and native understory vegetation.

d. Trails shall be designed to avoid disturbance of habitat used for salmonid rearing or spawning or by any species of local importance;

By avoiding the removal of significant trees and understory vegetation and the bridging of the stream with a design that places the footings outside of

the ordinary high water mark, the project is not likely to have any significant impact on salmonid habitat or species of local importance.

e. The trail shall be the minimum width necessary to accommodate the intended function or objective;

The soft-surface trail is proposed to be 5 feet in width and covered with bark mulch or wood chips. This width allows for comfortable passing distance. When considering the likely amount of pedestrian traffic in this area. In addition, the proposed width allows for two adults to walk comfortably side-by-side, which promotes a feeling of safety and ultimately use by the public.

f. All work shall be consistent with the City of Bellevue's "Environmental Best Management Practices" and all applicable City of Bellevue codes and standards, now or as hereafter amended;

The proposed trail is designed consistent with the design standards contained in the "Environmental Best Management Practices Manual.

g. The facility shall not significantly change or diminish overall aquatic area flow peaks, duration or volume or flood storage capacity, or hydroperiod;

The facility is proposed to be covered with pervious wood chips or bark mulch which has been shown to have little or no impact on hydrology. The bridge crossing is designed to have footings outside of the stream critical area and above the ordinary high water mark, which will prevent it from having any impact on the peak flows of Lewis Creek.

h. Where feasible and consistent with any accessibility requirements, any trail shall be constructed of pervious materials;

The trail is designed to be pervious. It is not required to be ADA accessible.

i. Crossings over and penetrations into wetlands and streams shall be generally perpendicular to the critical area, and shall be accomplished by bridging or other technique designed to minimize critical area disturbance considering the entire trail segment and function; and

The trail is not proposed to enter any wetland critical areas. The single crossing over the stream critical area is perpendicular to the flow of the stream and will bridge well above the peak flow elevation of the stream.

j. Areas of new permanent disturbance and all areas of temporary disturbance shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC 20.25H.210.

The proposed trail will result in the 5,482 square feet of total clearing within the buffer and in one area will cross over a portion a wetland and a section of Lewis Creek. An area of enhancement, approximately 5,600 square feet in size, is proposed as mitigation for the buffer impacts associated with trail construction. Enhancement will involve the planting of native trees and shrubs within a degraded wetland and wetland buffer area.

ii. Performance standards for vegetation management LUC

20.25H.055.C.3.i.v

Vegetation may be periodically removed from the critical area or critical area buffer as part of an ongoing routine maintenance plan for utility, transportation, park and other public facility projects allowed pursuant to a Vegetation Management Plan meeting the following requirements.

a. The Vegetation Management Plan shall be prepared by a qualified professional.

The vegetation management plan was prepared by a landscape architect and ecologist with The Watershed Company for the Bellevue Parks and Community Services Department's Forest Management Program.

b. The Vegetation Management Plan elements.

The applicant's submitted Vegetation Management Plan included all of the elements required in LUC 20.25H.055.C.3.i.v. A complete copy of the Vegetation Management Plan and supporting wetland and stream delineation study are attached to this staff report. See Attachment 2.

iii. Performance standards for streams LUC 20.25H.080

a. Lights shall be directed away from the stream.

No lights are proposed.

b. Activity that generates noise such as parking lots, generators, and residential uses shall be located away from the stream or any noise shall be minimized through use of design and insulation techniques.

There will be temporary noise associated with the trail construction and vegetation management activities. There may be noise impacts from trail users, but these impacts will be minor and transitory.

c. Toxic runoff from new impervious area shall be routed away from the stream.

There will be no new impervious surfaces created as part of this project.

d. Treated water may be allowed to enter the stream critical area buffer.

There will be no water treatment required as no new storm water management systems will be developed as part of this project.

e. The outer edge of the stream critical area buffer shall be planted with dense vegetation to limit pet or human use.

Vegetation management activities are planned throughout areas of wetland buffer. Areas that have invasive species removed will be replanted with native vegetation.

f. Use of pesticides, insecticides and fertilizers within 150 feet of the edge of the stream critical area buffer shall be in accordance with the City of Bellevue's "Environmental Best Management Practices," now or as hereafter amended.

All activities associated with vegetation management and trail construction

and operation activities, including pesticide, insecticide and fertilizer usage, will be in compliance with the City of Bellevue's "Environmental Best Management Practices".

iv. Performance standards for wetlands LUC 20.25H.100

a. Lights shall be directed away from the wetland.

No lights are proposed.

b. Activity that generates noise such as parking lots, generators, and residential uses, shall be located away from the wetland, or any noise shall be minimized through use of design and insulation techniques.

There will be temporary noise associated with the trail construction and vegetation management activities. There may be noise impacts from trail users, but these impacts will be minor and transitory.

c. Toxic runoff from new impervious area shall be routed away from the wetlands.

There will be no new impervious surfaces created as part of this project.

d. Treated water may be allowed to enter the wetland critical area buffer.

There will be no water treatment required as no new storm water management systems will be developed as part of this project.

e. The outer edge of the wetland critical area buffer shall be planted with dense vegetation to limit pet or human use.

Vegetation management activities are planned throughout areas of wetland buffer. Areas that have invasive species removed will be replanted with native vegetation.

f. Use of pesticides, insecticides and fertilizers within 150 feet of the edge of the wetland buffer shall be in accordance with the City of Bellevue's "Environmental Best Management Practices," now or as hereafter amended.

All activities associated with vegetation management and trail construction and operation activities, including pesticide, insecticide and fertilizer usage, will be in compliance with the City of Bellevue's "Environmental Best Management Practices".

v. Performance standards for habitat associated with species of local importance LUC 20.25H.160

Vegetation management and trail construction activities are not expected to impact species of local importance. Rather, proposed activities are likely to increase plant density and diversity within the park, thereby providing more habitat niches for species of local importance. As described in Section 3.5.1 of the attached Vegetation Management Plan (see Attachment 2), the park has potential habitat for several species of local importance. Increased native plant coverage will provide improved food and cover opportunities for wildlife.

IV. Public Notice and Comment

Application Date:	November 17, 2010
Public Notice (500 feet):	December 16, 2010
Minimum Comment Period:	December 30, 2010

The Notice of Application for this project was published in the City of Bellevue weekly permit bulletin on December 16, 2010. It was mailed to property owners within 500 feet of the project site. One comment was received from Karen Walter with the Muckleshoot Indian Tribe Fisheries Division as of the writing of this staff report.

Karen Walter's comments focused on the amount and type of trees that will be removed in the construction of the proposed trail and bridge and during the proposed vegetation management operations. Jim Bennett responded to her question by stating that efforts will be made to avoid significant trees during the trail construction operations. The vegetation management activities are primarily directed at the removal of non-native exotic plants and the restoration of those areas with appropriate native species. There are areas where trees, primarily alder and bigleaf maple trees will be removed to improve light penetration to the forest floor to aid in the establishment of native plantings.

I added additional comments to the response to state that the applicant will be required keep any significant trees felled from with the stream or wetland critical area buffers in the stream or wetland critical area buffer to serve as habitat structure on the forest floor and serve as large woody debris in the riparian zone.

No further comments or questions were received.

V. Summary of Technical Reviews

Clearing and Grading:

The Clearing and Grading Division of the Development Services Department has reviewed the proposed development for compliance with Clearing and Grading codes and standards. The Clearing and Grading staff found no issues with the proposed development.

VI. State Environmental Policy Act (SEPA)

The environmental review indicates no probability of significant adverse environmental impacts occurring as a result of the proposal. The Environmental Checklist submitted with the application adequately discloses expected environmental impacts associated with the project. The City codes and requirements, including the Clear and Grade Code, Utility Code, Land Use Code, Noise Ordinance, Building Code and other

construction codes are expected to mitigate potential environmental impacts. Therefore, issuance of a Determination of Non-Significance (DNS) is the appropriate threshold determination under the State Environmental Policy Act (SEPA) requirements.

A. Earth and Water

A clearing and grading permit will be required to be review and approved for the vegetation management activities and the majority of the trail construction project. As part of these permits, a construction stormwater pollution prevention plan that include temporary erosion and sedimentation control plans will be required that addresses all erosion and sedimentation management practices. In addition, this is the time that requirements for restoring the site to its current condition or improvements as proposed will be enforced. The applicant will also be required to submit information regarding the use of pesticides, insecticides, and fertilizers to avoid impacts to water resources. See Section X for a related condition of approval.

B. Animals

The project site is part of a larger natural area that contains quality habitat for birds and mammals. The proposed trail is designed to snake through existing mature vegetation, and no significant trees will be removed with this proposal. The mature vegetation on the site could provide potential habitat to red-tail hawks and pileated woodpeckers, both of which are known to be in the vicinity. However, no impacts are anticipated since significant tree removal is not anticipated and all temporary impacts will be restored and permanent impacts associated with the trail construction will be fully mitigated.

C. Plants

Mitigation for temporary and permanent disturbance will be approved pursuant to an approved re-vegetation and monitoring plan. See Section X for related conditions of approval.

D. Noise

The site is adjacent to single-family residences whose residents are most sensitive to disturbance from noise during evening, late night and weekend hours when they are likely to be at home. Construction noise will be limited by the City's Noise Ordinance (Chapter 9.18 BCC) which regulates construction hours and noise levels. See Section X for a related condition of approval.

VII. Changes to proposal as a result of city review

No changes were made to the proposal as a result of city review.

VIII. Decision Criteria

A. Critical Areas Land Use Permit Decision Criteria 20.30P

The Director may approve or approve with modifications an application for a critical areas land use permit if:

1. The proposal obtains all other permits required by the Land Use Code;

Finding: At a minimum the proposed vegetation management and trail construction is required to obtain a clearing and grading permit. The construction of the trail bridge requires a building permit.

2. The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer;

Finding: The proposed project involves the management of existing vegetation and the addition of a new trail segment within Lewis Creek Park. Management activities include removal of non-native/invasive vegetation, native restoration, and in-fill planting. All activities will be carried out utilizing best management practices for work in critical areas and critical area buffers. Overall, invasive removal and native restoration is expected to result in an increase in ecological function of the project area, and is expected to improve ecological function over the long-term.

3. The proposal incorporates the performance standards of Part 20.25H to the maximum extent applicable, and ;

Finding: The proposal incorporates and complies with all of the applicable performance standards for the development activities, as well as the critical areas in the project area.

4. The proposal will be served by adequate public facilities including street, fire protection, and utilities; and;

Finding: The proposed project will not alter existing utilities and it will not result in the need for additional public facilities.

5. The proposal includes a mitigation or restoration plan consistent with the requirements of LUC Section 20.25H.210; and

Finding: The proposal includes a mitigation or restoration plan consistent with the requirements of LUC 20.25H.210; except that a proposal to modify or remove vegetation pursuant to an approved Vegetation Management Plan under LUC 20.25H.055.C.3.i shall not require a mitigation or restoration plan.

6. The proposal complies with other applicable requirements of this code.

Finding: As discussed in Section III and V of this report, the proposal complies with all other applicable requirements of the Land Use Code.

IX. Conclusion and Decision

After conducting the various administrative reviews associated with this proposal, including Land Use Code consistency, SEPA, City Code and Standard compliance reviews, the Director of Planning and Community Development does hereby **approve with conditions** the proposal for vegetation management and construction of a soft-surface trail and bridged stream crossing within the stream and wetland critical area buffers at Lewis Creek Park.

Note- Expiration of Approval: In accordance with LUC 20.30P.150 a Critical Areas Land Use Permit automatically expires and is void if the applicant fails to file for a Clearing and Grading Permit or other necessary development permits within one year of the effective date of the approval.

X. Conditions of Approval

The applicant shall comply with all applicable Bellevue City Codes and Ordinances including but not limited to:

<u>Applicable Ordinances</u>	<u>Contact Person</u>
Clearing and Grading Code- BCC 23.76	Savina Uzunow, 425-452-7860
Land Use Code- BCC 20.25H	Kevin LeClair, 425-452-2928
Noise Control- BCC 9.18	Kevin LeClair, 425-452-2928

The following conditions are imposed under the Bellevue City Code or SEPA authority referenced:

1. Restoration for Areas of Temporary Disturbance: A restoration plan for all areas of temporary disturbance is required to be submitted for review and approval by the City of Bellevue prior to the issuance of the Clearing and Grading Permit. The plan shall include documentation of existing site conditions and shall identify the restoration measures to return the site to its existing conditions per LUC 20.25H.220.H.

Authority: Land Use Code 20.25H.220.H
Reviewer: Kevin LeClair, Land Use

2. Mitigation for Areas of New Permanent Disturbance: A mitigation plan for all areas of permanent new disturbance is required to be submitted for review and approval by the City of Bellevue prior to issuance of the Clearing and Grading Permit. The plan shall document the total area of permanent disturbance and area of new critical area buffer to satisfy a replacement ratio of one to one.

Authority: Land Use Code 20.25H.210

Reviewer: Kevin LeClair, Land Use

3. Rainy Season restrictions: Due to the proximity to stream and wetland critical areas, no clearing and grading activity may occur during the rainy season, which is defined as October 1 through April 30 without written authorization of the Development Services Department. Should approval be granted for work during the rainy season, increased erosion and sedimentation measures, representing the best available technology must be implemented prior to beginning or resuming site work.

Authority: Bellevue City Code 23.76.093.A,
Reviewer: Savina Uzunow, Clearing and Grading

4. Pesticides, Insecticides, and Fertilizers: The applicant must submit as part of the required Clearing and Grading Permit information regarding the use of pesticides, insecticides, and fertilizers in accordance with the City of Bellevue's "Environmental Best Management Practices".

Authority: Land Use Code 20.25H.220.H
Reviewer: Kevin Leclair, Land Use

5. Noise Control: Noise related to construction is exempt from the provisions of BCC 9.18 between the hours of 7 am to 6 pm Monday through Friday and 9 am to 6 pm on Saturdays, except for Federal holidays and as further defined by the Bellevue City Code. Noise emanating from construction is prohibited on Sundays or legal holidays unless expanded hours of operation are specifically authorized in advance. Requests for construction hour extension must be done in advance with submittal of a construction noise expanded exempt hours permit.

Authority: Bellevue City Code 9.18
Reviewer: Kevin LeClair, Land Use



DEVELOPMENT SERVICES DEPARTMENT
ENVIRONMENTAL COORDINATOR
450 110th Ave NE., P.O. BOX 90012
BELLEVUE, WA 98009-9012

OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS

The attached materials are being sent to you pursuant to the requirements for the Optional DNS Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request.

File No. 10-126356-LO
Project Name/Address: Lewis Creek Vegetation Management and Nature Trail
5808 Lakemont Boulevard
Planner: Kevin LeClair
Phone Number: 425-452-2928

Minimum Comment Period: December 30, 2010

Materials included in this Notice:

- Blue Bulletin
- Checklist
- Vicinity Map
- Plans
- Other: Vegetation Management Plan

City of Bellevue Submittal Requirements	27
ENVIRONMENTAL CHECKLIST	
12/21/00	
<p><i>Thank you in advance for your cooperation and adherence to these procedures. If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call the Permit Center (425-452-6864) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Our TTY number is 425-452-4636.</i></p>	
<p>INTRODUCTION</p> <p>Purpose of the Checklist:</p> <p>The State Environmental Policy Act (SEPA), chapter 43.21c RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the City of Bellevue identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the City decide whether an EIS is required.</p> <p>Instructions for Applicants:</p> <p>This environmental checklist asks you to describe some basic information about your proposal. Answer the questions briefly, with the most precise information known, or give the best description you can. You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.</p> <p>Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the Planner in the Permit Center can assist you. The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. Include references to any reports or studies that you are aware of which are relevant to the answers you provide. The City may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impacts.</p> <p>Use of a Checklist for Nonproject Proposals: <i>A nonproject proposal includes plans, policies, and programs where actions are different or broader than a single site-specific proposal.</i></p> <p>For nonproject proposals, complete the Environmental Checklist even though you may answer "does not apply" to most questions. In addition, complete the Supplemental Sheet for Nonproject Actions available from Permit Processing.</p> <p>For nonproject actions, the references in the checklist to the words <i>project</i>, <i>applicant</i>, and <i>property</i> or <i>site</i> should be read as <i>proposal</i>, <i>proposer</i>, and <i>affected geographic area</i>, respectively.</p> <p>Attach an 8½" x 11" vicinity map which accurately locates the proposed site.</p>	

City of Bellevue Submittal Requirements	27a
---	------------

ENVIRONMENTAL CHECKLIST

12/21/00

If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call the Permit Center (425-452-6864) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Our TTY number is 425-452-4636.

BACKGROUND INFORMATION

Property Owner: **City of Bellevue**

Proponent: **City of Bellevue – Parks and Community Services Department, Attn: Jim Bennett**
450 110th Ave NE
Bellevue, WA 98004
(425) 452-2740

Contact Person: **The Watershed Company, Attn: Kenny Booth**
 (If different from the owner. All questions and correspondence will be directed to the individual listed.)

Address: **750 Sixth Street South, Kirkland, WA 98033**

Phone: **(425) 822-5242**

Proposal Title: **Lewis Creek Park Vegetation Management/Trail Installation**

Proposal Location (Street address and nearest cross street or intersection) Provide a legal description if available:

The project is located within Lewis Creek Park on the east side of Lakemont Blvd SE near the intersection with 164th Way SE, in Bellevue, WA, 98006, King County. The project is located within ten parcels:

1. Tax parcel 2324059024, Legal: S 416 FT OF SE 1/4 OF NE 1/4 LY ELY OF LAKEMONT BLVD SE LESS PTN CONVEYED TO KING COUNTY BY DEED REC #7104290326 LESS C/M RGTS
2. Tax parcel 2324059023, Legal: N 208 FT OF S 624 FT OF SE 1/4 OF NE 1/4 LY E OF CO RD LESS C/M RGTS
3. Tax Parcel 2324059048, Legal: N 1/2 OF E 1/2 OF S 1/2 OF NE 1/4 OF SE 1/4 & POR OF S 1/2 OF NE 1/4 OF SE 1/4 - BEG 30 FT S OF NW COR SD N 1/2 OF E 1/2 SD SUBD TH S ALG W LN THOF TO SW COR THOF TH W PLW N LN SD SUBD 100 FT TH NELY TO POB
4. Tax Parcel 2324059013N, Legal: 1/2 OF NE 1/4 OF SE 1/4 LESS POR LYING WLY OF RD LESS C/M RGTS LESS CO RD
5. Tax Parcel 4139410170, Legal: LAKEMONT DIV NO 02 NGPE TGW TRACTS J & M PER REC NO. 20010215001613
6. Tax Parcel 4139410260, Legal: LAKEMONT DIV NO 02 FUTURE DEVELOPMENT
7. Tax Parcel 4139410190, Legal: LAKEMONT DIV NO 02 NGPE
8. Tax Parcel 4139410270, Legal: LAKEMONT DIV NO 02 FUTURE DEVELOPMENT
9. Tax Parcel 4139440910, Legal: LAKEMONT DIV NO 04 NGPE TGW TRACTS H-N-O-R & V PER REC NO. 20010215001616
10. Tax Parcel 4139440900, Legal: LAKEMONT DIV NO 04 PARK TGW TRACTS J-P-Q-S-T-W & X PER REC NO. 20010215001616

Please attach an 8½" X 11" vicinity map that accurately locates the proposal site.

Give an accurate, brief description of the proposal's scope and nature:

1. General description:

Lewis Creek Park is a 56-acre community park located in southeastern Bellevue that serves as the trailhead for the South Bellevue Greenway system. The City Council adopted the *Lewis Creek Park Management Plan* in 2002. In accordance with that document, development of the park has been undertaken in phases. Phase 1, which included two sports fields, a playground, sport court, visitor center, parking lot and trails, was completed in 2005. Phase 2 includes additional parking, picnic facilities, public restrooms and trails and is currently under permit review.

Within the park, a network of trails provides public access to the undeveloped forested portion of the park, located northeast of the visitor center. Perimeter trails are paved; interior trails are soft surface (gravel, dirt or wood chip mulch). Several existing footbridges accommodate stream and wetland crossings throughout the trail system.

Under the current proposal and in accordance with the management objectives identified in the *Lewis Creek Park Management Plan*, the 25.8-acre northeastern forest area of the park will be managed to maximize ecological functions and values, while maintaining soft-surface trail connections to the Lakemont Trail. Design considerations for the park reflect an open space philosophy that balances recreational and community needs with environmental preservation. The proposal includes a Vegetation Management Plan (VMP) that is intended to aid the Parks and Community Services Department in accomplishing those management objectives identified for the northeastern forest area in the *Lewis Creek Park Management Plan*.

The objective of the VMP is to maximize the ecological functions and values of the 25-8 acre forested area. In some areas, invasive species are growing up and over native vegetation and native vegetation is completely lacking within a few monocultures of invasive weeds. Invasive plant species eradication or suppression is key to improving ecological functions in this natural area. Once invasive plant cover is reduced, native plant density and diversity can be increased. In-fill planting with conifers would further diversify the vegetative strata, providing more habitat niches.

In concert with the VMP, a new soft-surface trail, approximately 800 feet in length, will be installed within the forest area. The trail will connect existing trails within the park and will provide passive recreation opportunities for the public within the forest area. The trail will be located almost entirely within buffers of on-site wetlands (4,738 square feet of trail and 5,482 square feet of total clearing within the buffer) and in one area will cross over a portion a wetland and a section of Lewis Creek. A bridge will be used to span the wetland and stream, thereby preventing direct impacts to either the stream or wetland. An area of enhancement, approximately 5,600 square feet in size, is proposed as mitigation for the buffer impacts associated with trail construction. Enhancement will involve the planting of native trees and shrubs within a degraded wetland and wetland buffer area.

2. Acreage of site: **The northeastern portion of Lewis Creek Park, in which vegetation management activities and trail construction are proposed, is approximately 25.8 acres in size.**

3. Number of dwelling units/buildings to be demolished: **None**
4. Number of dwelling units/buildings to be constructed: **None**
5. Square footage of buildings to be demolished: **N/A**
6. Square footage of buildings to be constructed: **N/A**
7. Quantity of earth movement (in cubic yards): **Cut: 1 cubic yard / Fill: 158 cubic yards**
8. Proposed land use: **The project area is located within Lewis Creek Park. The project area is currently undeveloped. There are no existing structures on the property and no changes are proposed to the existing land use.**
9. Design features, including building height, number of stories, and proposed exterior materials: **The applicant proposes vegetation management activities within the project area, as well as the construction of a soft surface trail and bridge crossing over Lewis Creek. The proposed trail would be 5 feet wide and made of pervious wood chips. The bridge crossing will be constructed of wood and wire panels.**
10. Other

Estimated date of completion of the proposal or timing of phasing:

Once started, trail and bridge construction, and native planting should take approximately two to four weeks. Vegetation management activities will continue for a minimum of five years. It is anticipated that construction would occur sometime in 2011.

Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

None at this time.

List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Lewis Creek Park Wetland & Stream Inventory for the Vegetation Management Area. June 10, 2010. The Watershed Company.

Lewis Creek Park Vegetation Management Plan. June 2010.

Addendum to the Lewis Creek Park – Vegetation Management Plan. November 8, 2010. The Watershed Company.

Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known.

None.

List any government approvals or permits that will be needed for your proposal, if known. If permits have been applied for, list application date and file numbers, if known.

Critical Areas Land Use Permit – submitted concurrently with this SEPA Checklist (City of Bellevue)

Clearing and Grading Permit – not yet applied (City of Bellevue)
Building Permit – not yet applied (City of Bellevue)

Please provide one or more of the following exhibits, if applicable to your proposal.
(Please check appropriate box(es) for exhibits submitted with your proposal):

- Land Use Reclassification (rezone)
Map of existing and proposed zoning
- Preliminary Plat or Planned Unit Development
Preliminary plat map
- Clearing & Grading Permit
Plan of existing and proposed grading
Development plans
- Building Permit (or Design Review)
Site plan
Clearing & grading plan
- Shoreline Management Permit
Site plan

A. ENVIRONMENTAL ELEMENTS

1. EARTH

- a. General description of the site (circle one): Flat Rolling Hilly Steep slopes Mountains Other:

Topography within the project area varies drastically. The main channel of Lewis Creek is approximately 80 feet lower in elevation than upland areas to the west and east.

- b. What is the steepest slope on the site (approximate percent slope)?

The steepest slope on-site is approximately 35%, located along the edge of the Lewis Creek stream channel.

- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

According to the King County Soil Survey, the entire project area is mapped as Beausite gravelly sandy loam, 6 to 15 percent slopes.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No indications of unstable soils were observed.

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

	FILL	CUT
Purpose	All cut and fill activities are planned as part of trail and bridge installation.	
Type and Quantity	Trail: 58 c.y. of woodchips Native Restoration: 100 c.y. mulch	Trail: 0 c.y. soil Bridge Installation: 1 c.y. soil
Total	158 c.y.	1 c.y.
Fill Source	Local source for woodchips	

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Erosion could occur if exposed soils are mobilized by rainfall. Short-term erosion may occur during trail and bridge construction and in areas cleared of vegetation. However, any impacts would be short-term and the measures described below would help minimize erosion.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

The proposed trail would be constructed of wood chips and is therefore considered to be pervious. No new impervious surfaces are proposed.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

All clearing and grading construction would be in accordance with City of Bellevue Clearing & Grading Code (Chapter 23.76), permit conditions, and all other applicable codes,

ordinances, and standards. To ensure that no impacts to wetlands or streams occur, the applicant proposes to use temporary erosion and sedimentation control measures such as silt fencing. The fencing would be installed around soil stockpile areas and exposed soils as necessary to prevent any silt-laden water from reaching adjacent wetlands or waters during rainfall.

It is not anticipated that soils would be left exposed for more than two days. However, to ensure that erosion potential is minimized, disturbed soils shall be covered with straw, hydroseeded, or otherwise revegetated with native plants as soon after construction as possible. In all cases, exposed soil must be covered at the end of the construction week and also at the threat of rain.

2. AIR

- a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Any air quality impacts from construction-related vehicle trips would be temporary. Heavy equipment may be used for a short period of time during the construction process. After project completion, no further impacts to air would occur.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

There are no off-site sources of emissions that will affect the project.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Standard methods of reducing impacts to air would be utilized, and include keeping all heavy equipment and hand-held power equipment in good operating condition and managing disturbed soils as described above under 1h.

3. WATER

- a. Surface:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The project area includes fourteen wetlands and seven streams. Detailed descriptions of each critical area can be found in the *Lewis Creek Park Wetland & Stream Inventory for the Vegetation Management Area*, dated June 10, 2010 by The Watershed Company. The table below summarizes the classification of each critical area.

Feature	Classification	Habitat Score	Buffer Width (ft)
Wetland A	Category II	18	75
Wetland BGI	Category II	25	110
Wetland C	Category II	16	75
Wetland D1	Category II	20	110

Wetland D2	Category III	17	60
Wetland E	Category III	16	60
Wetland F	Category II	15	75
Wetland H	Category II	16	75
Wetland J	Category III	19	60
Wetland K	Category II	18	75
Wetland L	Category II	23	110
Wetland M	Category I	23	110
Wetland N	Category II	18	75
Wetland O	Category II	15	75
Stream A	Type N	NA	50
Stream B/G (Lewis Creek)	Type F	NA	100
Stream C	Type N	NA	50
Stream D	Type N	NA	50
Stream E	Type N	NA	50
Stream F	Type O	NA	25
Stream H	Type O	NA	25

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No impacts are proposed to any of the on-site wetlands or streams. However, enhancement may occur within some areas of wetland. Further, all portions of the proposed bridge crossing are to be positioned above the ordinary high water mark of Lewis Creek.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

No impacts to wetlands are proposed. The bridge will span the entirety of Lewis Creek and its associated wetland. All other portions of the trail are located outside of the on-site wetlands and all on-site waters.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No. The project site does not lie within a 100-year floodplain.

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No intentional discharges of waste materials would occur during project construction.

b. Ground

1. Will ground water be withdrawn, or will water be discharged to ground water? Give a general description, purpose, and approximate quantities if known.

There will be no withdrawal of or discharge to ground water associated with this project.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

There will be no waste material from septic tanks or other sources discharged into the ground as part of this project.

c. Water runoff (including stormwater):

1. Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Runoff from the immediate project site is not expected except at natural, pre-project rates. Trail construction and vegetation management activities are not expected to alter or increase stormwater runoff within the project area.

- 2) Could waste materials enter ground or surface waters? If so, generally describe.

It is not expected that waste materials will enter the on-site wetlands or stream channels. Construction of the trail and bridge will primarily be done by hand. Any heavy equipment that may be used would be positioned as far from the on-site critical areas as feasible.

- d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

The erosion control measures described under question 1h would help control impacts to surface and runoff water. In addition, all heavy equipment and hand-held power equipment would be in good working order.

4. PLANTS

- a. Check or circle types of vegetation found on the site:

- deciduous tree: **alder, maple**, aspen, other:
- evergreen tree: **fir, cedar**, pine, other:
- shrubs: **Himalayan blackberry, giant horsetail, salmonberry, serviceberry, sword fern, oceanspray**
- pasture
- crop or grain
- wet soil plants: cattail, **buttercup, bulrush, skunk cabbage**, other:
- water plants: water lily, eelgrass, milfoil, other:
- other types of vegetation:

- b. What kind and amount of vegetation will be removed or altered?

Invasive vegetation will be removed as part of vegetation management activities. Invasive species to be removed include Himalayan blackberry, English ivy, reed canarygrass, and English holly. Small amounts of native vegetation will be removed as part of trail construction activities.

- c. List threatened or endangered species known to be on or near the site.

No threatened or endangered plant species are known to be on or near the site.

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Permanent wetland buffer impacts associated with trail construction total 4,738 square feet. An area of enhancement, approximately 5,600 square feet in size, is proposed as mitigation for the buffer impacts. Proposed native plantings include Oregon ash, black cottonwood, Sitka spruce, Douglas-fir, western red cedar, vine maple, salmonberry, oceanspray, osoberry, red twig dogwood, and red flowering currant.

Vegetation management activities include invasive species removal, native restoration of degraded areas, and in-fill planting. These actions will increase diversity and interspersions of habitat niches, increase tree health and density, and improve wetland and stream buffer functions.

5. ANIMALS

- a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: **hawk, heron**, eagle, **songbirds**, other: **blackbirds, chickadees, wrens, finches, robins**

mammals: **deer**, bear, elk, beaver, other:

fish: bass, salmon, **trout**, herring, shellfish, other:

- b. List any threatened or endangered species known to be on or near the site.

No threatened or endangered animal species are known to be on or near the site.

- c. Is the site part of a migration route? If so, explain.

No.

- d. Proposed measures to preserve or enhance wildlife, if any:

The proposed project will enhance wildlife habitat through the removal of invasive species and the planting of native species within the project area.

6. ENERGY AND NATURAL RESOURCES

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Hand-held power equipment or a mower will be used for vegetation removal. Hand-held power equipment will be used for the trail construction and vegetation management activities. However, no energy will be necessary after the project is completed.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

No forms of energy are necessary for the completed project.

7. ENVIRONMENTAL HEALTH

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Typical hazards related to heavy equipment and electrical and gasoline powered hand tools are associated with construction of the proposed project.

- 1) Describe special emergency services that might be required.

Emergency services are not anticipated at the site. In the unlikely event that an accident (spill, fire, other exposure) occurs involving toxic chemicals or hazardous wastes, the local Fire Department's Hazardous Materials Team would respond. If necessary, local medical services might also be required. The full range of safety and accident response supplies would be on-site to treat any emergency during construction.

- 2) Proposed measures to reduce or control environmental health hazards, if any:

Standard precautions would be taken to ensure the safety of the work crew. The construction manager would be contacted by a crew member immediately upon discovery of a spill. The construction manager would then ensure that the spill is cleaned up in the manner dictated by the chemical use instructions and would contact the appropriate authorities.

- b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

The project site is located adjacent to Lakemont Blvd SE, a heavily traveled road. However, proposed improvements are planned within the interior of the park, away from the roadway.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Noise associated with the proposed project would be restricted to the use of hand-operated power tools, hand excavation and possibly a mower during the construction phase. Construction noise would be limited to normal daytime working hours as dictated by the City of Bellevue's noise policy. The only noise generated by the proposed project would be that

of trail users. There would be no significant long-term noise associated with the proposed project.

- 3) Proposed measures to reduce or control noise impacts, if any:

As mentioned above, noise would be limited to daylight weekday hours. No other noise-control measures are necessary.

8. LAND AND SHORELINE USE

- a. What is the current use of the site and adjacent properties?

The City of Bellevue, Parks and Community Services Department currently owns the parcels upon which improvements are proposed. The parcels are designated open spaces within the City and lie within the limits of the Lewis Creek Park. Additional areas of the park are located to the north and south of the project area; single-family residences are located easterly of the site; and multi-family residences are located westerly of the site.

- b. Has the site been used for agriculture? If so, describe.

No.

- c. Describe any structures on the site.

There are currently no structures on the site.

- d. Will any structures be demolished? If so, what?

No structures are proposed for demolition.

- e. What is the current zoning classification of the site?

Zoning classifications on the project site include Office (O) and Single-Family Residential (R-5).

- f. What is the current comprehensive plan designation of the site?

The project area has a Comprehensive Plan designation of Single-Family Residential - Low Density (SF-L), Parks/Professional Office (P/PO), and Parks/Single-Family Residential – High Density (P/SF-H).

- g. If applicable, what is the current shoreline master program designation of the site?

N/A

- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

The project site contains areas of wetland and Lewis Creek (the proposed bridge will cross a section of Lewis Creek). These areas are considered to be “environmentally sensitive” areas. The applicant will apply for a Critical Areas Land Use Permit to allow for disturbances within proximity of the sensitive areas.

- i. Approximately how many people would reside or work in the completed project?

No person will reside or work in the completed project.

- j. Approximately how many people would the completed project displace?

No person will be displaced as a result of this project.

- k. Proposed measures to avoid or reduce displacement impacts, if any:

Does not apply.

- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The size, topography, and sensitive area status of the site will prevent any future development opportunities. Therefore, it is appropriate and compatible that the site be used as open space and managed by the Parks and Community Services Department. The improved trail and vegetation management activities are in accordance with the City's long-term goal of making open and natural spaces accessible to citizens for passive recreation.

9. HOUSING

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

- c. Proposed measures to reduce or control housing impacts, if any:

Does not apply.

10. AESTHETICS

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The only structures proposed as part of the vegetation management and trail installation project are a small bridge and timber stairs that will allow for the crossing over a portion of Lewis Creek. The proposed bridge will be approximately 3.5 feet above the existing adjacent grade. The bridge structure will be constructed of wood and wire panels.

- b. What views in the immediate vicinity would be altered or obstructed?

The bridge will be visible from areas of the trail within the park. However, the bridge is to be constructed of natural looking wood materials. Vegetation management activities within the park will include invasive species removal and the planting of native vegetation. These activities are expected to improve views within the park.

- c. Proposed measures to reduce or control aesthetic impacts, if any:

No measures are necessary.

11. LIGHT AND GLARE

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

No light or glare will be produced by the proposed project.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

- c. What existing off-site sources of light or glare may affect your proposal?

None.

- d. Proposed measures to reduce or control light and glare impacts, if any:

No measures are necessary.

12. RECREATION

- a. What designated and informal recreational opportunities are in the immediate vicinity?

The proposed trail will connect two existing trails within Lewis Creek Park. Lewis Creek Park is situated at the headwaters of Lewis Creek and offers natural areas accessible by boardwalks and soft-surface trails. In addition to the extensive trail system, the site includes a visitor center, play area, basketball court, soccer/baseball fields that can be reserved for practices and games, and restrooms. The adjacent Lakemont Community Park offers a play area, two picnic shelters, a basketball court, two tennis courts, a softball field and a trail system.

The proposed project will create an additional portion of trail between two existing trails and offer additional passive recreational use for park users.

- b. Would the proposed project displace any existing recreational uses? If so, describe.

No. The proposed project will enhance passive recreational use within the area.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

No measures are necessary.

13. HISTORIC AND CULTURAL PRESERVATION

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

No places or objects of this type are known to exist in the immediate vicinity.

- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

There is no known evidence of historic or cultural importance on the project site.

- c. Proposed measures to reduce or control impacts, if any:

Should historic, archeological, scientific or cultural significant items be encountered during implementation of this project, work would be temporarily stopped while the appropriate agencies are notified.

14. TRANSPORTATION

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

The proposed trail will provide a link between two areas of existing trails within Lewis Creek Park. Access to the park will not change with implementation of the vegetation management and trail installation project.

- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

The nearest King County Metro transit stop is located at the corner of 164th Avenue SE and Lakemont Blvd SE, directly adjacent from the proposed project area.

- c. How many parking spaces would the completed project have? How many would the project eliminate?

This project will neither create nor eliminate parking spaces.

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

No impacts/improvements to roads or streets will occur as part of the proposed project.

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

Water, rail, or air transportation would not be utilized by the completed project.

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

None.

- g. Proposed measures to reduce or control transportation impacts, if any:

None.

15. PUBLIC SERVICES

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No increase in public service needs will result from this project.

- b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. UTILITIES

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

No utilities are currently available at the site.

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No new utilities are proposed as part of the project.

Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

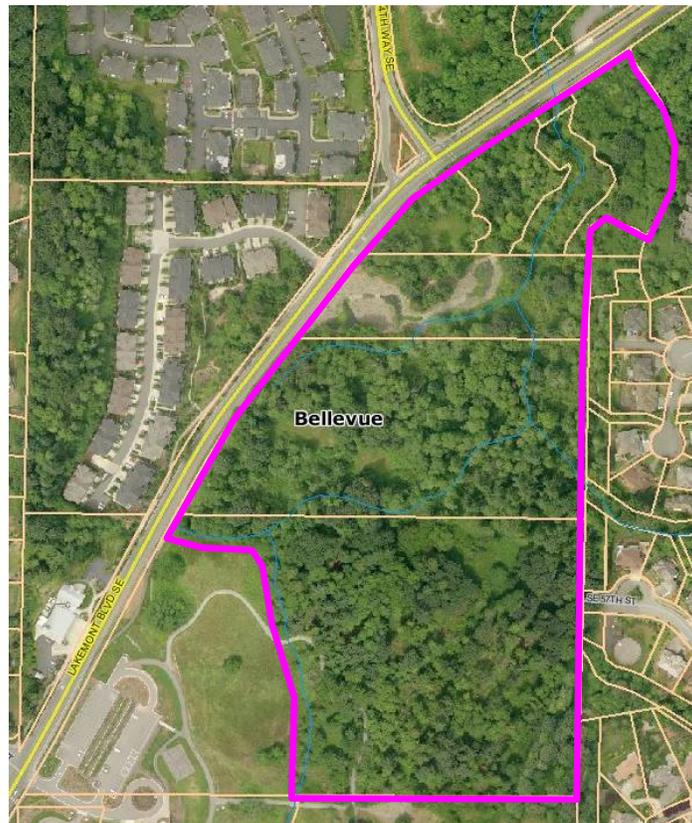
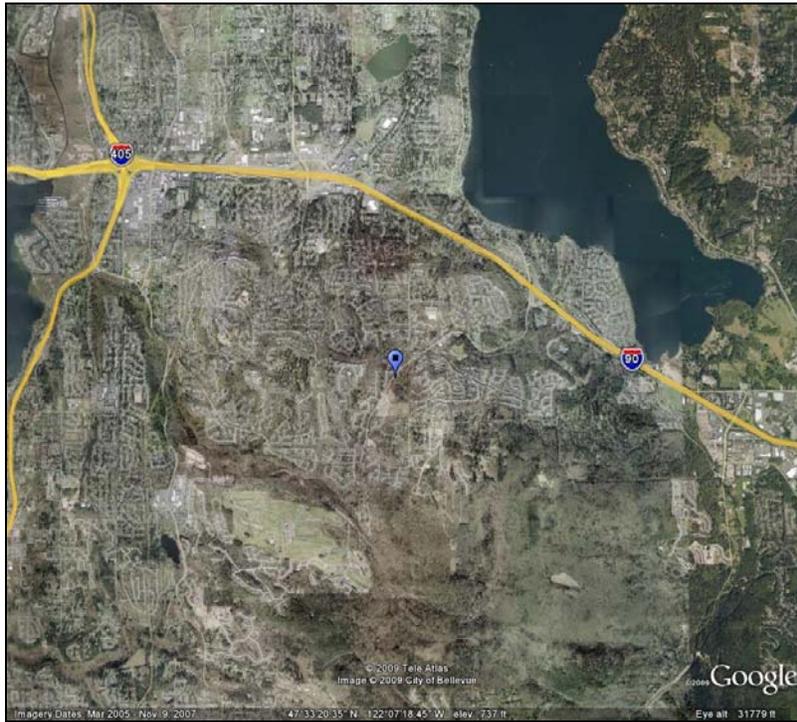
Signature



Kenny Booth, AICP

Date Submitted: _____

Vicinity Map from Google Earth (top) and iMAP (bottom)



VEGETATION MANAGEMENT PLAN

Lewis Creek Park

June 2010
TWC Reference # 100220

Prepared for:

City of Bellevue
Parks & Community Services
Forest Management Program
450 – 110th Avenue SE
Bellevue, WA 98004



750 Sixth Street South
Kirkland, WA 98033

p 425.822.5242

f 425.827.8136

watershedco.com



VEGETATION MANAGEMENT PLAN

Lewis Creek Park

Prepared for:



**PARKS & COMMUNITY
SERVICES DEPARTMENT**

Jim Bennett
Forest Management Program
Parks and Community Services
City of Bellevue
450 - 110th Avenue SE
Bellevue, WA 98004

Prepared by:



750 Sixth Street South
Kirkland, WA 98033

p 425.822.5242
f 425.827.8136
watershedco.com

June 2010

The Watershed Company Reference Number:
100220

The Watershed Company Contact Person:
Mark Garff

Cite this document as:
The Watershed Company. March 2010. Lewis Creek Park
Vegetation Management Plan.

TABLE OF CONTENTS

	Page #
1 Introduction.....	1
2 Site History.....	2
3 Current Site Description	2
3.1 Park Features.....	2
3.2 Critical Areas	2
3.3 Soils.....	3
3.4 Vegetation.....	3
3.5 Habitat	4
3.5.1 Species of Local Importance.....	6
4 Vegetation Management Objectives	7
4.1 Management Zones	7
4.1.1 Red	8
4.1.2 Orange	8
4.1.3 Blue	9
4.2 Management Objectives	9
4.2.1 Short term	9
4.2.2 Long-term.....	9
4.3 Five Year Management Program.....	10
4.3.1 Year One.....	10
4.3.2 Year Two.....	10
4.3.3 Year Three	10
4.3.4 Year Four	10
4.3.5 Year Five.....	10

LIST OF FIGURES

Figure 1. Northeastern portion of Lewis Creek Park, vegetation management area	1
Figure 2. Habitat corridors / landscape overview	5

LIST OF TABLES

Table 1. Native Plants observed within the management area by strata 3
Table 2. Invasive weeds identified and the associated King County management status.
..... 4
Table 3. Species of Local Importance as defined in LUC 20.25H.150.A. 6
Table 4. Invasive plant management zones..... 7
Table 5. Recommended Management Actions – Year One..... 11
Table 6. Recommended Management Actions – Year Two..... 12
Table 7. Recommended Management Actions – Year Three 13

APPENDICES

Appendix A: Site Photos
Appendix B: Vegetation Maps
Appendix C: Lewis Creek Park Wetland and Stream Inventory for the Vegetation
Management Area

VEGETATION MANAGEMENT PLAN

LEWIS CREEK PARK

1 INTRODUCTION

Lewis Creek Park is a 56-acre community park located in southeastern Bellevue that serves as the trailhead for the South Bellevue Greenway system. The City Council adopted the *Lewis Creek Park Management Plan* in 2002. In accord with that document, the park design reflects an open space philosophy that balances recreational and community needs with environmental preservation. The approximately 25.8-acre northeastern forest area will be managed to maximize ecological functions and values, while maintaining soft-surface trail connections to the Lakemont trail system (see Figure 1 below). This vegetation management plan is intended to aid the City Parks and Community Services Department in accomplishing those management objectives identified for the northeastern forest area in the *Lewis Creek Park Management Plan*.

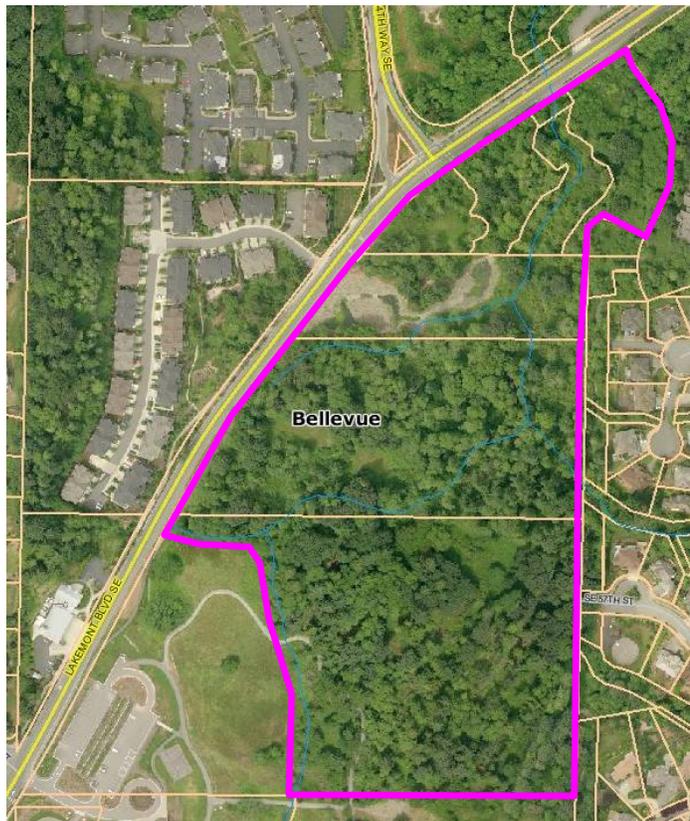


Figure 1. Northeastern portion of Lewis Creek Park, vegetation management area

2 SITE HISTORY

In the 1990's the City of Bellevue purchased three farm properties for eventual use as a community park and in 2005 the Johnson property, located at the north end of the park, was acquired, completing the 56-acre park site. Property acquisitions were funded by a combination of county, state and municipal sources. Park development continues in phases. Phase 1, which included two sports fields, a playground, sport court, visitor center, parking lot and trails, was completed in 2005. Phase 2 is planned to include additional parking, picnic facilities, public restrooms and trails.

3 CURRENT SITE DESCRIPTION

3.1 Park Features

A network of trails provides public access to the undeveloped forested portion of the park, located northeast of the visitor center. Perimeter trails are paved; interior trails are soft surface (gravel, dirt or wood chip mulch). Several existing footbridges accommodate stream and wetland crossings throughout the trail system. The vegetation management area, 25.8 acres at the northeastern end of the park, is a relatively low-impact passive recreation area.

Additionally, a picnic area has been designed and will be sited on the old Johnson homestead. The proposed design includes 19 parking spaces, a driveway loop, a public restroom, a pedestrian path and two picnic shelters. In concert with stewardship of critical areas within the park, green building techniques and public awareness of ecosystem services are key design elements.

3.2 Critical Areas

Lewis Creek, tributaries, wetlands and associated buffers cover most of the vegetation management area. Wetlands and streams in the vicinity of the proposed picnic area were delineated and mapped by SVR Design Company in 2010. The Watershed Company completed a wetland and stream inventory of the entire vegetation management area in June 2010. A total of 14 wetlands and seven streams are present within the management area. All on-site wetlands, streams and their respective buffers are regulated by the City's critical areas regulations. See the delineation report in Appendix C for complete details (The Watershed Company 2010).

3.3 Soils

According to Natural Resources Conservation Service (NRCS) soil maps, the vegetation management area is comprised of Beausite gravelly sandy loam (BeC), six to 15 percent slopes. BeC is a well-drained soil, but soils were saturated in several areas on the day of our site visit. Soils in the vegetation management area contain numerous hydric inclusions not captured by NRCS mapping.

3.4 Vegetation

The vegetation management area is primarily forested. Mixed conifer-deciduous stands are scattered throughout the deciduous forest cover, which is dominated by red alder (see the Overstory Mapping in Appendix B, sheet 1). Native plants identified in the management area include, but are not limited to the species listed in Table 1 below.

Table 1. Native Plants observed within the management area by strata.

	Common Name	Botanical Name
Trees	Big-leaf maple	<i>Acer macrophyllum</i>
	Black cottonwood	<i>Populus balsamifera</i>
	Douglas-fir	<i>Pseudotsuga menziesii</i>
	Red alder	<i>Alnus rubra</i>
	Western hemlock	<i>Tsuga heterophylla</i>
	Western red cedar	<i>Thuja plicata</i>
Shrubs	Beaked hazelnut	<i>Corylus cornuta</i>
	Hardhack spirea	<i>Spiraea douglasii</i>
	Nootka rose	<i>Rosa nutkana</i>
	Osoberry	<i>Oemleria cerasiformis</i>
	Pacific ninebark	<i>Physocarpus capitatus</i>
	Red elderberry	<i>Sambucus racemosa</i>
	Red huckleberry	<i>Vaccinium parvifolium</i>
	Red-osier dogwood	<i>Cornus sericea</i>
	Salmonberry	<i>Rubus spectabilis</i>
Vine maple	<i>Acer circinatum</i>	
Groundcover	Bedstraw	<i>Galium sp.</i>
	Bracken fern	<i>Pteridium aquilinum</i>
	Deer fern	<i>Blechnum spicant</i>
	Lady fern	<i>Athyrium filix-femina</i>
	Miners lettuce	<i>Claytonia sibirica</i>
	Pacific bleeding heart	<i>Dicentra formosa</i>
	Pacific waterleaf	<i>Hydrophyllum tenuipes</i>
	Salal	<i>Gaultheria shallon</i>
	Stinging nettle	<i>Urtica dioica</i>
	Sword fern	<i>Polystichum munitum</i>
Tall Oregon grape	<i>Mahonia aquifolium</i>	

Vine	Trailing blackberry	<i>Rubus ursinus</i>
------	---------------------	----------------------

Invasive weedy plant species within the management area are primarily non-native blackberry, English holly, English ivy and reed canarygrass. Most of the invasive weedy brambles are mixed with native trees and shrubs. For a more detailed list of invasive plants observed, see Table 2 below. Significant occurrences of invasive plant infestations were mapped (see the Invasives Mapping in Appendix B, sheet 2).

Table 2. Invasive weeds identified and the associated King County management status.

Common Name	Botanical Name	King County Status
Canada thistle	<i>Cirsium arvense</i>	non-regulated noxious weed
Creeping buttercup	<i>Ranunculus repens</i>	weed of concern
English holly	<i>Ilex aquifolium</i>	weed of concern
English ivy	<i>Hedera helix</i>	non-regulated noxious weed
English laurel	<i>Prunus laurocerasus</i>	weed of concern
Evergreen blackberry	<i>Rubus laciniatus</i>	non-regulated noxious weed
Himalayan blackberry	<i>Rubus armeniacus</i>	non-regulated noxious weed
Reed canarygrass	<i>Phalaris arundinacea</i>	non-regulated noxious weed
Robert's geranium	<i>Geranium robertianum</i>	non-regulated noxious weed
Scot's broom	<i>Cytisus scoparius</i>	non-regulated noxious weed

3.5 Habitat

The 25.8-acre vegetation management area is primarily forested with a mix of first- and second-growth trees. Deciduous trees present throughout the site are mixed with conifers in several areas (see Vegetation Management Zones in Appendix B, sheet 3). A few open emergent patches are present, one of which is a restored wetland. In most areas a native understory is present. Salmonberry and vine maple are the dominant shrubs. Some less-dense patches of trees break the forest canopy, and native ground cover is generally dense. Invasive weeds have taken hold in several areas, and most weed patches are mixed with native trees and shrubs.

The diversity of plant species and structure throughout the site provides for many different food and cover opportunities for wildlife. Snags and large woody debris present throughout the forest provide additional habitat niches. Many snags show signs of use by woodpeckers. Numerous berry-producing plants within the vegetation management area, such as salmonberry, provide a good food source for songbirds along with other varied plant parts such as seeds and cones.

As noted above, wetlands and streams cross through the vegetation management area. Lewis Creek, the on-site tributaries, and seasonally inundated wetlands are valuable sources of fresh water for animals accessing this natural area. The seasonally ponded wetland located in the open field south of the management area is suitable amphibian breeding habitat. The restored wetland within the management area is also likely to provide suitable herptile (reptile and amphibian) habitat.

Putting the management area into a landscape scale context, Lewis Creek Park is about one mile away from Cougar Mountain and Coal Creek natural areas. Dense residential development separates forested areas within Lewis Creek Park from expansive natural areas to the south. Through the fragmented urban landscape, narrow connections remain between Lewis Creek Park, Lakemont Park, open spaces to the northeast, and ultimately Lake Sammamish (see Figure 2 below). More than three-quarters of the 56-acre Lewis Creek Park remains in natural condition.

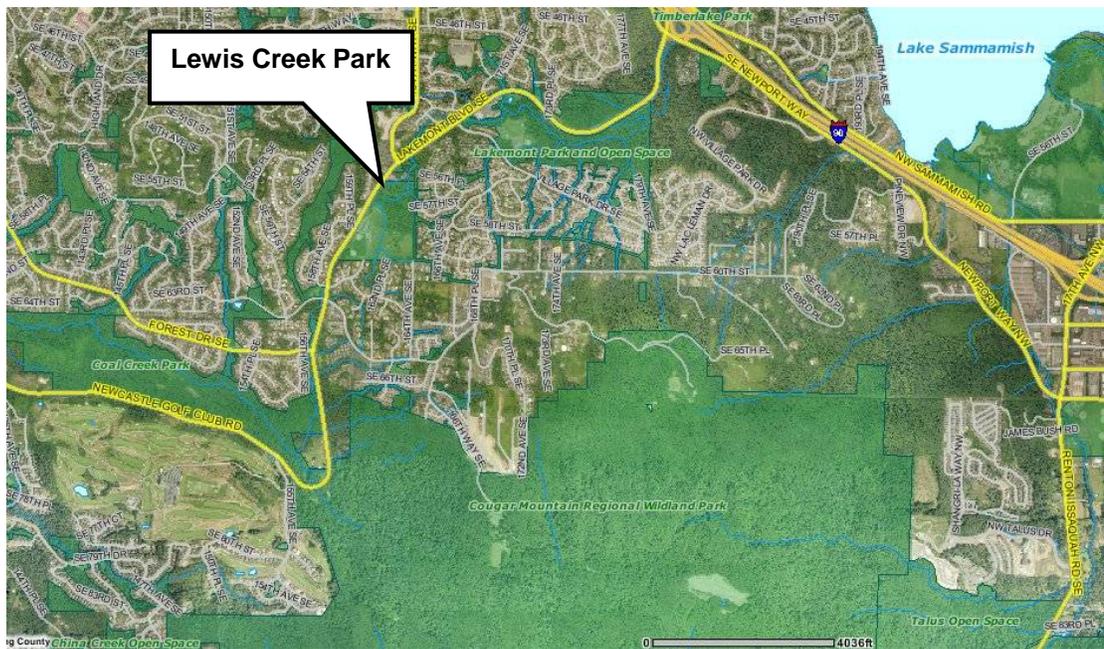


Figure 2. Habitat corridors / landscape overview

The management area provides valuable habitat for birds, herptiles, small mammals, and larger game animals moving through the region, although large mammals are less likely to penetrate breaks in vegetated corridors. Forest fragments surrounded by urban development are vital to urban bird conservation, although they don't support the species that larger forests on the outskirts of urbanizing areas can (Donnelly and Marzluff 2004). Songbirds and woodpeckers in particular are likely to use the forested stand at Lewis Creek Park. Birds are better able to travel in broken corridors, such as that which exists

between the park and surrounding natural areas. Some herptiles may have their entire life cycle requirements met in the park.

3.5.1 Species of Local Importance

The City of Bellevue designates habitat associated with species of local importance as a critical area (LUC 20.25H.150.B). Species of local importance (LUC 20.25H.150.A) are listed in Table 3 below.

Table 3. Species of Local Importance as defined in LUC 20.25H.150.A.

Common name	Scientific name
Bald eagle	<i>Haliaeetus leucocephalus</i>
Peregrine falcon	<i>Falco peregrinus</i>
Common loon	<i>Gavia immer</i>
Pileated woodpecker	<i>Dryocopus pileatus</i>
Vaux's swift	<i>Chaetura vauxi</i>
Merlin	<i>Falco columbarius</i>
Purple martin	<i>Progne subis</i>
Western grebe	<i>Aechmophorus occidentalis</i>
Great blue heron	<i>Ardea herodias</i>
Osprey	<i>Pandion haliaetus</i>
Green heron	<i>Butorides striatus</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Western big-eared bat	<i>Plecotus townsendii</i>
Keen's myotis	<i>Myotis keenii</i>
Long-legged myotis	<i>Myotis volans</i>
Long-eared myotis	<i>Myotis evotis</i>
Oregon spotted frog	<i>Rana pretiosa</i>
Western toad	<i>Bufo boreas</i>
Western pond turtle	<i>Clemmys marmorata</i>
Chinook salmon	<i>Oncorhynchus tshawytscha</i>
Bull trout	<i>Salvelinus confluentus</i>
Coho salmon	<i>Oncorhynchus kisutch</i>
River lamprey	<i>Lampetra ayresi</i>

Given on-site conditions and landscape position, the management area is likely to provide habitat, primarily perching and foraging habitat, for the following species of local importance: red-tailed hawk, merlin, great blue heron, Pileated woodpecker, Vaux's swift, and purple martin. The site contains sparse snags suitable for nesting by pileated woodpecker or Vaux's swift. Bald eagles and osprey more commonly forage and nest next to large open waters, but may pass through the park. No raptor nests were noted during our fieldwork. The on-site streams are near the headwaters of Lewis Creek and are not mapped by King County as part of the Chinook salmon, coho salmon or bull trout distribution areas. Habitat in the park may be suitable for Oregon spotted frog and western toad, but none were observed during our site visit.

4 VEGETATION MANAGEMENT OBJECTIVES

The management objective is to maximize the ecological functions and values of this forested area. In some park areas invasive species are growing up and over native vegetation and native vegetation is completely lacking within a few monocultures of invasive weeds. Invasive plant species eradication or suppression is key to improving ecologic functions in this natural area. Once invasive plant cover is reduced, native plant density and diversity can be increased. In-fill planting with conifers would further diversify the vegetative strata, providing more habitat niches.

4.1 Management Zones

Invasive plant removal and suppression is the first step in this vegetation management plan. Locally dominant patches of invasive vegetation were located using GPS and mapped as Polygons A through J (see Invasives Mapping in Appendix B, Sheet 2 for the location of polygons). Where appropriate, polygons were subdivided into areas based on canopy cover type (deciduous forest, mixed forest, or open field). Those areas were then divided into zones based on the presence or absence of native plant species and the extent of the infestation. Smaller patches of invasive plants were mapped as single points, labeled DP-1 through DP-11. Based on these criteria, invasive plant management areas are divided into three zones, red, Orange and blue. Red zones are monocultures of invasive plants. Orange zones are areas of dense invasive cover mixed with native trees and shrubs. Blue zones are smaller-scattered patches of invasive plants within the native forest. Table 4 below assigns a zone to each mapped invasive area (see Vegetation Management Zones in Appendix B, sheets 3).

The vegetation mapping did not capture some general maintenance items. Robert's geranium is scattered along trail edges throughout the vegetation management area and should be removed. Also, locally dominant patches of creeping buttercup are present in several wet areas. Although not particularly aggressive, this is a weed of concern.

Table 4. Invasive plant management zones

Zone	Mapped feature	Invasive plants listed in order of dominance (high to low cover dominance)
Red	part of Polygon D	Himalayan blackberry
	part of Polygon J	Himalayan blackberry
	Polygon I	Himalayan blackberry (mixed with sparse willow saplings)
Orange	Polygon A	Himalayan and evergreen blackberry, reed canarygrass, English holly, Robert's geranium
	Polygon B	Himalayan and evergreen blackberry

	Polygon C	Himalayan and evergreen blackberry, trace Scot's broom
	Polygon D	Himalayan and evergreen blackberry, trace Robert's geranium
	Polygon E	English ivy, Himalayan blackberry, Canada thistle
	Polygon F	Himalayan blackberry
	Polygon G	Himalayan and evergreen blackberry
	Polygon H	English holly and Himalayan and evergreen blackberry, trace English ivy
	Polygon J	Himalayan and evergreen blackberry, English holly, English ivy
Blue	DP-1	English ivy
	DP-2	English holly
	DP-3	English holly
	DP-4	English holly
	DP-5	Ornamental shrubs (spreading)
	DP-6	English holly and laurel
	DP-7	English holly
	DP-8	Himalayan blackberry
	DP-9	Himalayan blackberry
	DP-10	English holly
	DP-11	English ivy

4.1.1 Red

Red zones are dense blackberry thickets that lack significant presence of native vegetation. Non-native blackberry, Himalayan and evergreen, dominate red zones. These zones will require intensive weed removal followed by dense planting with native woody vegetation.

The following areas contain red zones: D2, D3, I, J1 and J2 (see Sheet 3 of the vegetation mapping).

4.1.2 Orange

Orange zones contain expansive thickets of invasive weeds, primarily non-native blackberry, mixed with native trees and shrubs. These zones will require prolonged maintenance to remove/suppress invasive weeds. The dominant weed is non-native blackberry. Existing native plant density is relatively high in the orange zones. Therefore, additional planting is a lower priority and may be limited. Overall, density of native stands should be assessed after weeding is complete. Variations in canopy cover do occur in some areas. To achieve the management objectives, native plant density/diversity may need to be increased in localized areas within the orange zones.

Most of the management areas are zoned orange. The orange zones are A1, A2, B, C, D1, E1, E2, F1, F2, G1, G2, G3, H1, H2, and J3 (see Sheet 3 of the vegetation mapping).

4.1.3 Blue

Blue zones are small clusters or single occurrences of invasive weeds. Most of the blue zones contain English holly trees/shrubs. Although these weed patches are currently small, they should be uprooted to prevent them from spreading. Then these zones will need to be checked periodically to be sure initial weed removal efforts were successful.

Due to their small size, blue zones are not subdivided by canopy type. Eleven blue zones are mapped in the vegetation management area (see Sheet 3 of the vegetation mapping).

4.2 Management Objectives

4.2.1 Short term

Identifying and removing any public safety hazards along the existing trail network are a short-term priority. English ivy can kill and take down large trees. Some trees along the path are infested with ivy and will become a hazard if not controlled. Therefore, eradicating invasive English ivy that is endangering established native trees is a top priority.

Given the extent of invasive weedy vegetation along paths, primarily Himalayan blackberry, trail maintenance is essential to allow safe passage. Invasive non-native blackberry vines will continue to encroach into the trail and require periodic maintenance until they are eradicated.

4.2.2 Long-term

The long-term objectives for the vegetation management area are to maintain and improve the ecologic services provided by the management area, while preserving public access. The following elements will guide management actions:

- Forest Health – maintain and improve forest health through invasive removal and targeted replanting efforts.
- Wildlife Habitat – increase diversity and interspersed of habitat niches.
- Air Quality – increase tree health and density.
- Water Quality – maintain wetland and stream buffers with dense and diverse native vegetation.
- Public Safety – maintain trails and prune trees as needed for health and safety.
- Neighborhood buffering – maintain forested area to buffer the adjacent residential neighborhoods from other high intensity recreational uses within the park.

4.3 Five Year Management Program

4.3.1 Year One

As detailed in the short-term objectives above (section 4.2.1) removing any potential hazards along the existing trail network is a priority. Weed control/removal efforts are a key element of successful management and should be among the first steps taken. Weed removal actions in year one should be followed by some targeted replanting. Detailed descriptions of recommended action items in each mapped area (see the Individual Vegetation Management Zones Map, Sheet 3) are listed in Table 5 below.

4.3.2 Year Two

Intensive follow up on initial weed removal areas will be required in year two. With large invasive blackberry brambles removed, the shrub layer can now be assessed and replanted as needed to achieve high native shrub density and species diversity. Planted installed in Year one should be monitored for health and maintenance needs. Blue zones should be screened to verify eradication of localized weed infestations. For maintenance actions by area see Table 6 below.

4.3.3 Year Three

In addition to on-going weed maintenance, the forest canopy can be diversified by planting clusters of native conifers in areas dominated by deciduous cover. Previously installed restoration plantings should be monitored for health and maintenance needs. For maintenance actions by area see Table 7 below.

4.3.4 Year Four

Screening for weed re-emergence and on-going weed maintenance should continue. Previously installed restoration plantings should be monitored for health and maintenance needs. Native tree/shrub density, diversity and interspersions should be evaluated to determine if the restoration plantings are meeting the intended objectives. Replanting and/or additional plant installation should be implemented as needed. Habitat features, such as large woody debris, may be recommended to increase habitat niches within the management area. Existing tree health should be evaluated and pruning may occur as needed to optimize health and safety.

4.3.5 Year Five

On-going weed maintenance should continue. Previously installed restoration plantings should be monitored for growth, health, and maintenance needs. Any additional trail construction or maintenance may be implemented.

Table 5. Recommended Management Actions – Year One

Area	Zone	Recommended Actions -Year One
A1	Orange	Cut back and grub out non-native blackberry vines, cut back reed canarygrass patches and weed away from the base of existing native trees and shrubs, remove sparse occurrences of English holly shrubs
A2		
B	Orange	Cut back and grub out non-native blackberry vines
C	Orange	Cut back and grub out non-native blackberry vines, remove Scot's broom
D1	Orange	Cut back and grub out non-native blackberry vines, remove trace occurrences of Robert's geranium
D2	Orange/Red	1) Cut back and grub out non-native blackberry vines, remove trace occurrences of Robert's geranium; 2) replant cleared invasive monoculture areas with a mix of native trees and shrubs
D3	Orange/Red	
E1	Orange	Remove English ivy, cut back and grub out non-native blackberry vines, uproot Canada thistle
E2	Orange	
F1	Orange	Cut back and grub out non-native blackberry vines
F2	Orange	
G1	Orange	Cut back and grub out non-native blackberry vines
G2	Orange	
G3	Orange	
H1	Orange	Cut back and grub out non-native blackberry vines, remove English holly, pull out trace occurrences of English ivy
H2	Orange	
I	Red	1) Cut back and grub out non-native blackberry vines; 2) replant cleared invasive monoculture area with a mix of native trees and shrubs (riparian plantings)
J1	Orange/Red	1) Cut back and grub out non-native blackberry vines; 2) replant cleared invasive monoculture areas with a mix of native trees and shrubs (riparian plantings)
J2	Orange/Red	
J3	Orange	Cut back and grub out non-native blackberry vines
DP-1	Blue	Remove English ivy
DP-2	Blue	Remove English holly
DP-3	Blue	Remove English holly
DP-4	Blue	Remove English holly
DP-5	Blue	Remove ornamental shrubs (spreading)
DP-6	Blue	Remove English holly
DP-7	Blue	Remove English holly and laurel
DP-8	Blue	Cut back and grub out non-native blackberry vines
DP-9	Blue	Cut back and grub out non-native blackberry vines
DP-10	Blue	Remove English holly
DP-11	Blue	Remove English holly

Table 6. Recommended Management Actions – Year Two

Area	Zone	Recommended Actions -Year Two
A1	Orange	Remove re-emerging weeds; install in-fill plantings as needed to establish a dense and diverse native shrub understory, clusters of willow stakes are recommended in reed canarygrass patches
A2	Orange	Remove re-emerging weeds; install in-fill plantings as needed to establish a dense and diverse native shrub understory
B	Orange	
C	Orange	
D1	Orange	
D2	Orange/Red	Cut back and grub out non-native blackberry vines; remove any weeds from the base of installed restoration plants, monitor plants for health/growth
D3	Orange/Red	
E1	Orange	Remove re-emerging weeds; install in-fill plantings as needed to establish a dense and diverse native shrub understory
E2	Orange	
F1	Orange	
F2	Orange	
G1	Orange	
G2	Orange	
G3	Orange	
H1	Orange	
H2	Orange	
I	Red	Cut back and grub out non-native blackberry vines; remove any weeds from the base of installed restoration plants, monitor plants for health/growth
J1	Orange/Red	
J2	Orange/Red	
J3	Orange	Remove re-emerging weeds; install in-fill plantings as needed to establish a dense and diverse native shrub understory
ALL	Blue	Verify eradication of localized weed patches, remove any re-emerging weeds

Table 7. Recommended Management Actions – Year Three

Area	Zone	Recommended Actions -Year Three
A1	Orange	Remove re-emerging weeds, plant clusters of native conifers as needed, monitor any previously installed in-fill plants
A2	Orange	Remove re-emerging weeds, monitor any previously installed in-fill plants
B	Orange	
C	Orange	Remove re-emerging weeds, plant clusters of native conifers as needed, monitor any previously installed in-fill plants
D1	Orange	Remove re-emerging weeds, monitor any previously installed in-fill plants
D2	Orange/Red	Remove re-emerging weeds, plant clusters of native conifers as needed, monitor previously installed restoration plantings
D3	Orange/Red	
E1	Orange	Remove re-emerging weeds, plant clusters of native conifers as needed, monitor any previously installed in-fill plants
E2	Orange	
F1	Orange	Remove re-emerging weeds, monitor any previously installed in-fill plants
F2	Orange	Remove re-emerging weeds, plant clusters of native conifers as needed, monitor any previously installed in-fill plants
G1	Orange	
G2	Orange	Remove re-emerging weeds, monitor any previously installed in-fill plants
G3	Orange	Remove re-emerging weeds, plant clusters of native conifers as needed, monitor any previously installed in-fill plants
H1	Orange	
H2	Orange	
I	Red	Remove re-emerging weeds, plant clusters of native conifers as needed, monitor previously installed restoration plantings
J1	Orange/Red	
J2	Orange/Red	
J3	Orange	Remove re-emerging weeds, monitor any previously installed in-fill plants
ALL	Blue	Verify eradication of localized weed patches, remove any re-emerging weeds

A P P E N D I X A

Site Photos – Existing Conditions

(Photos taken February and March 2010)

Photo 1. Polygon A, invasive weeds mixed with native trees and shrubs



Photo 2. Polygon C, disturbed edge adjacent to Lakemont Blvd.



Photo 3. Polygon D, Himalayan blackberry monoculture.



Photo 4. Polygon E, English ivy infestation



Photo 5. Polygon G, Himalayan blackberry mixed with native riparian vegetation



Photo 6. Polygon H, primarily non-native blackberry and English holly mixed with native trees and shrubs



Photo 7. Polygon I, non-native blackberry cluster along riparian corridor.



Photo 8. Polygon J, dense non-native blackberry along riparian corridor.

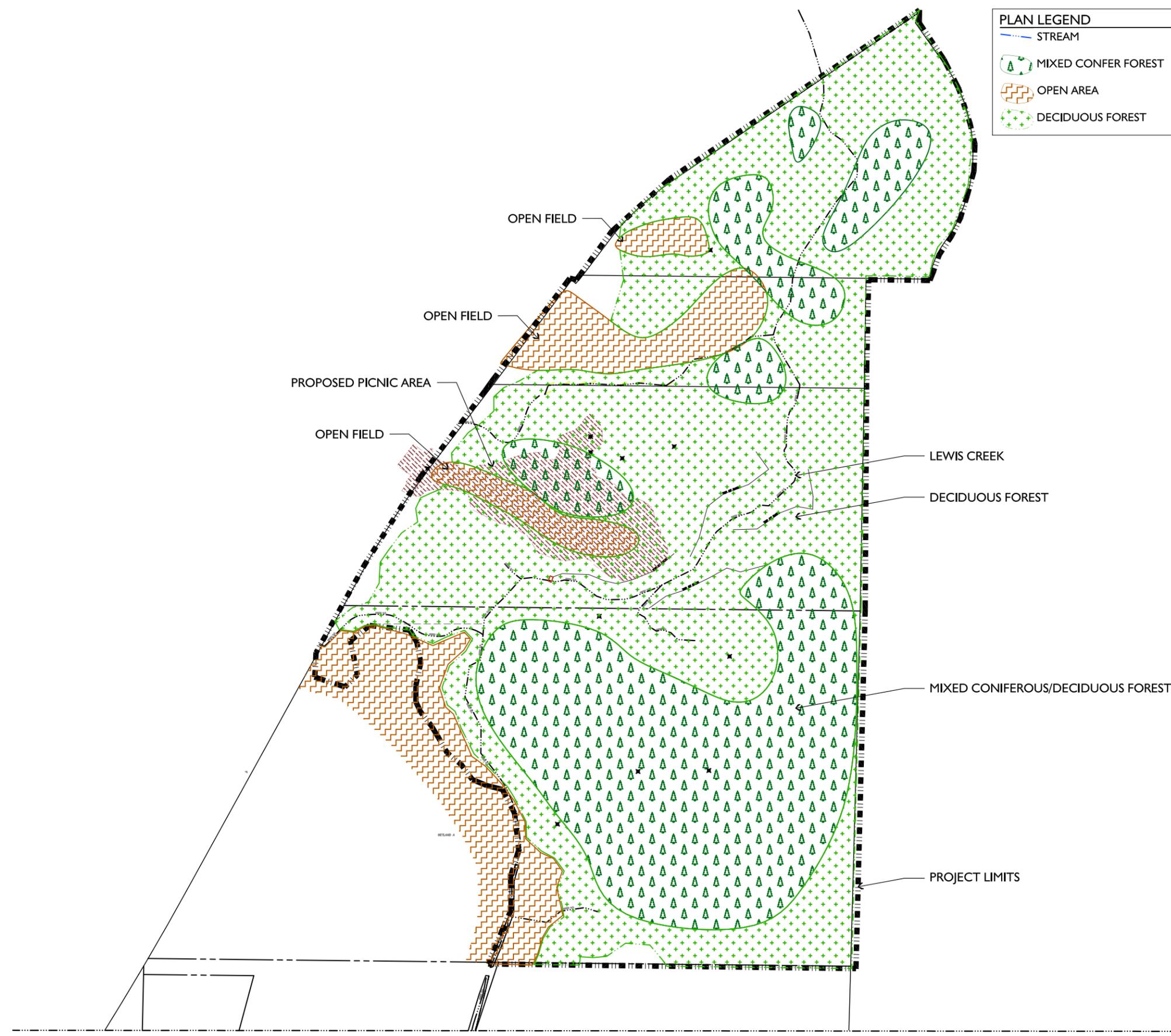


APPENDIX B

Vegetation Maps

PLAN LEGEND

-  STREAM
-  MIXED CONIFER FOREST
-  OPEN AREA
-  DECIDUOUS FOREST



LEWIS CREEK PARK
VEGETATION MAPPING
PREPARED FOR THE CITY OF BELLEVUE

5808 LAKEMONT BLVD., SE
BELLEVUE, WA 98009

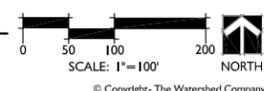
SUBMITTALS & REVISIONS

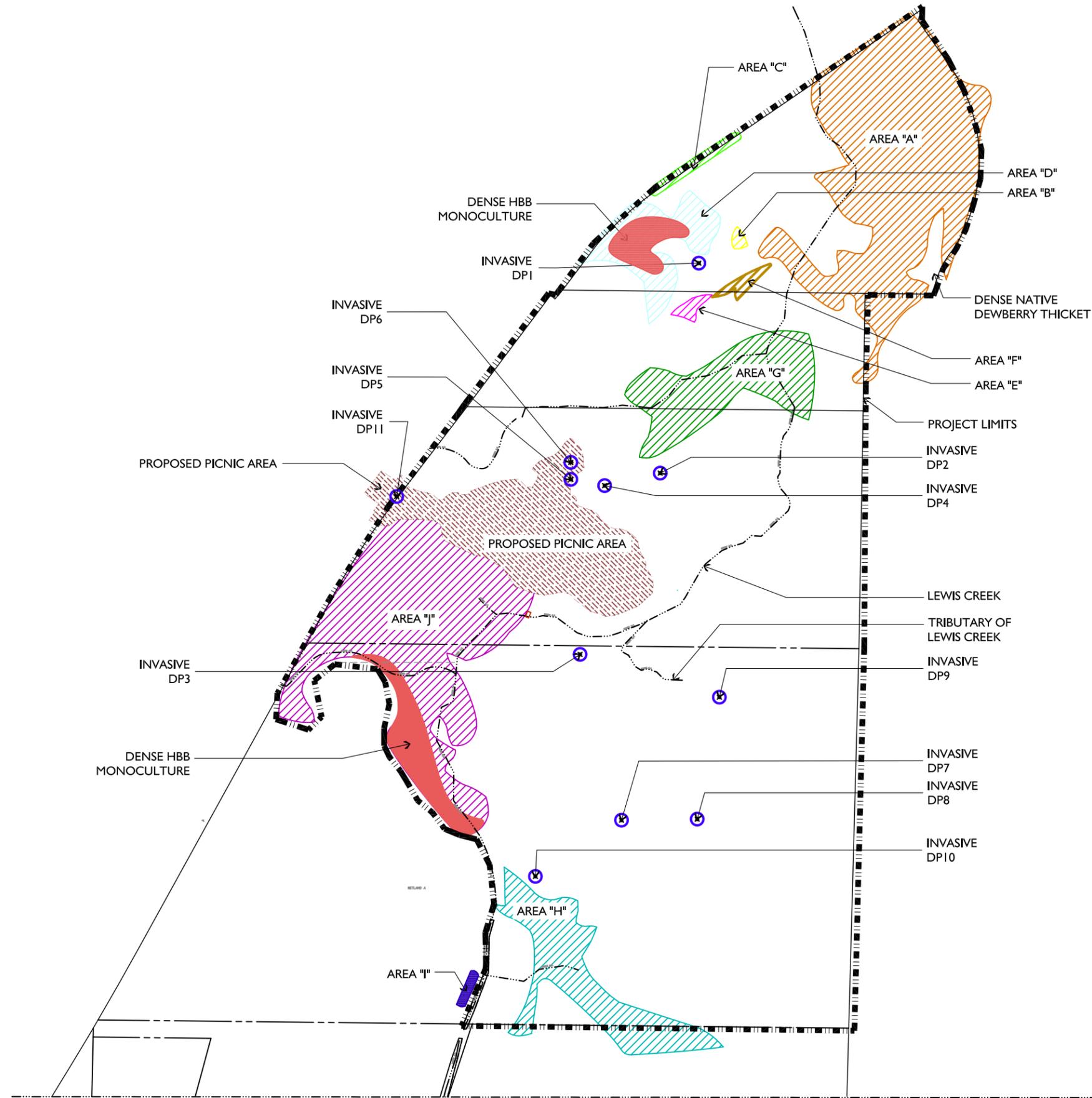
NO.	DATE	DESCRIPTION	BY
1	03-12-10	REVIEW SET	MI
2	3-30-10	REVIEW SET	CL
3	4-16-10	REVIEW SET	MG

SHEET SIZE:
ORIGINAL PLAN IS 22' x 34"
SCALE ACCORDINGLY.

PROJECT MANAGER: MG
DESIGNED: MI
DRAFTED: MI, CL
CHECKED: MG, BW
JOB NUMBER: 100220
SHEET NUMBER: 1 OF 4

OVERSTORY MAPPING





LEWIS CREEK PARK
VEGETATION MAPPING
PREPARED FOR THE CITY OF BELLEVUE
5808 LAKEMONT BLVD. SE
BELLEVUE, WA 98009

SUBMITTALS & REVISIONS		BY	DATE	DESCRIPTION
1	MI	03-12-10	REVIEW SET	
2	CL	3-30-10	REVIEW SET	
3	MG	4-16-10	REVIEW SET	

SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER: MG
DESIGNED: MI
DRAFTED: MI, CL
CHECKED: MG, BW
JOB NUMBER:

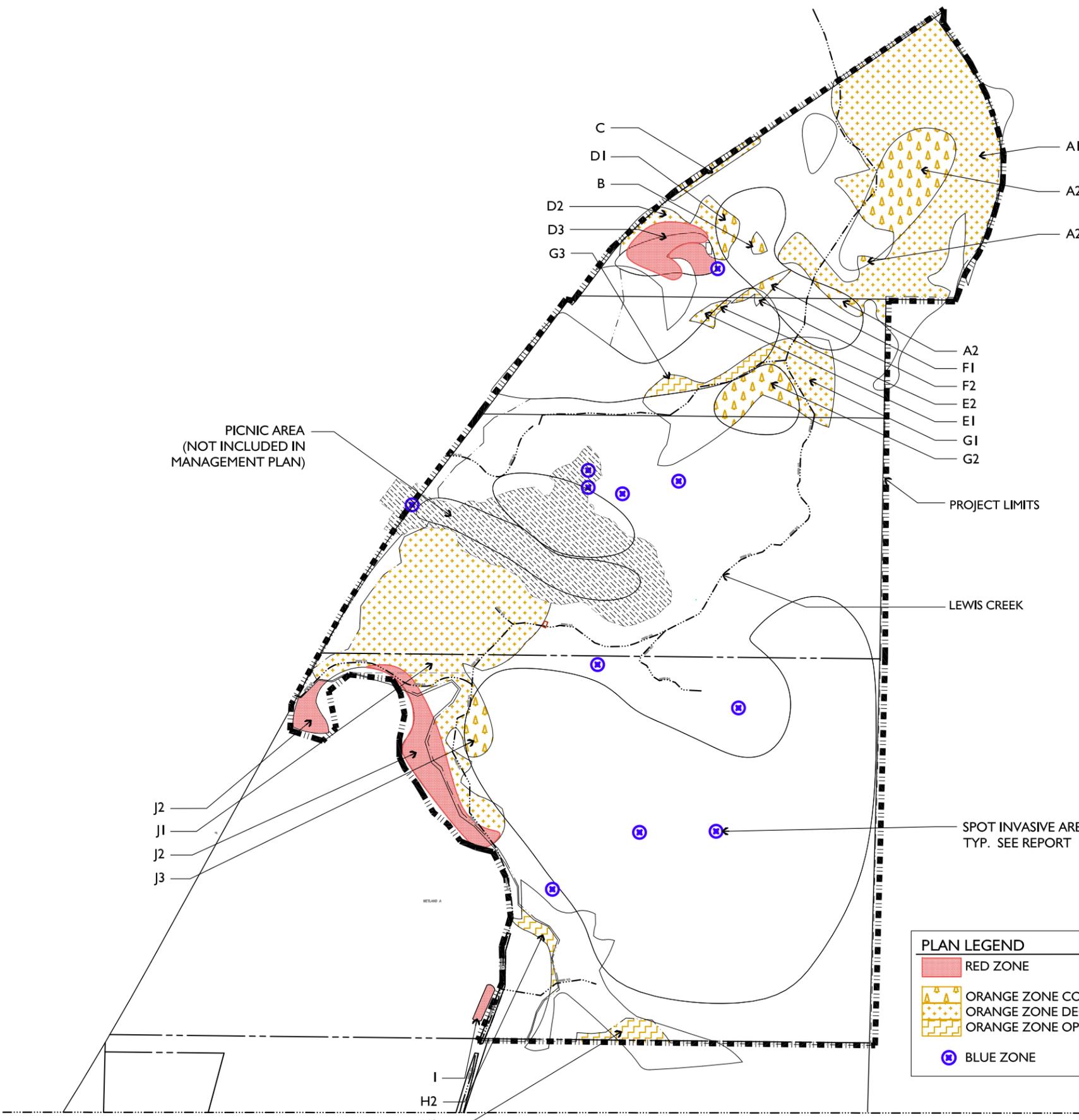
INVASIVES MAPPING



DATE: 6/10/2010
PRINTED BY: COURTNEY LANDOLL
FILENAME: VEG_MAPPING_3.DWG

LEWIS CREEK PARK
VEGETATION MAPPING
PREPARED FOR THE CITY OF BELLEVUE

5808 LAKEMONT BLVD. SE
BELLEVUE, WA 98009



INDIVIDUAL VEGETATION MANAGEMENT ZONES

PLAN LEGEND

- RED ZONE
- ORANGE ZONE CONIFEROUS
- ORANGE ZONE DECIDUOUS
- ORANGE ZONE OPEN
- BLUE ZONE



SUBMITTALS & REVISIONS

NO.	DATE	DESCRIPTION	BY
1	03-12-10	REVIEW SET	MI
2	3-30-10	REVIEW SET	CL
3	4-16-10	REVIEW SET	MG

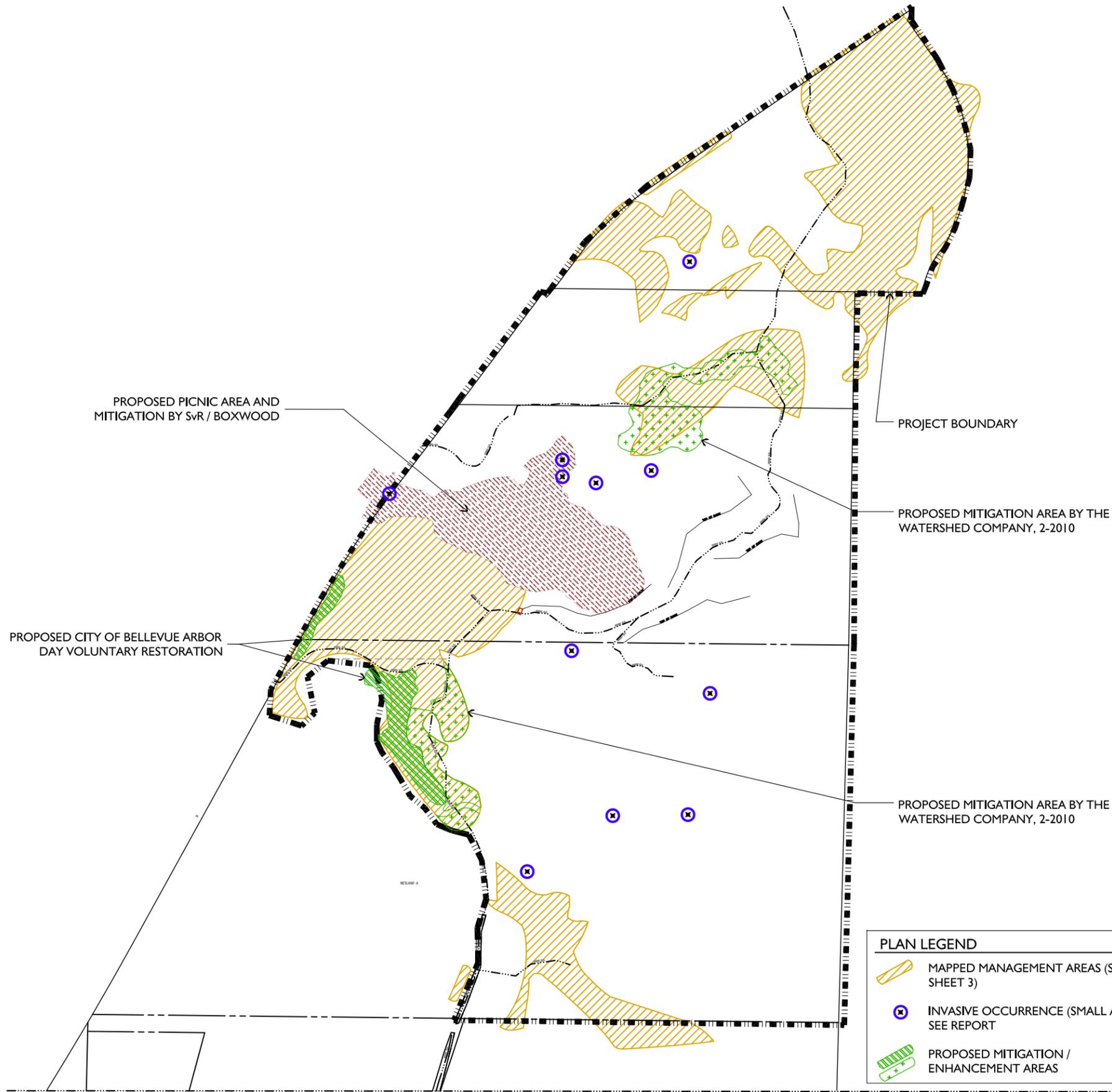
SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER: MG
DESIGNED: MI
DRAFTED: MI, CL
CHECKED: MG, BW
JOB NUMBER:

DATE: 4/10/10 PRINTED BY: COURTNEY LANDOLL FILENAME: VEG_MAPPING_3.DWG

**LEWIS CREEK PARK
VEGETATION MAPPING
PREPARED FOR THE CITY OF BELLEVUE**

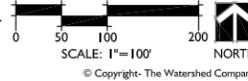
5808 LAKEMONT BLVD. SE
BELLEVUE, WA 98009



PLAN LEGEND

- MAPPED MANAGEMENT AREAS (SEE SHEET 3)
- INVASIVE OCCURRENCE (SMALL AREAS) / SEE REPORT
- PROPOSED MITIGATION / ENHANCEMENT AREAS

PROPOSED MITIGATION AREAS MAP



SUBMITTALS & REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	03-12-10	REVIEW SET	MI
2	3-30-10	REVIEW SET	CL
3	4-16-10	REVIEW SET	MG

SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER: MG
DESIGNED: MI
DRAFTED: MI, CL
CHECKED: MG, BW
JOB NUMBER:

100220
SHEET NUMBER:
4 OF 4

APPENDIX C

Lewis Creek Park Wetland and
Stream Inventory for the Vegetation
Management Area

June 10, 2010

Jim Bennett
Forest Management Program Supervisor
Parks and Community Services
450 110th Ave SE
Bellevue, WA 98004
Via email: JNBennett@bellevuewa.gov

**Re: Lewis Creek Park Wetland and Stream Inventory for
the Vegetation Management Area**

The Watershed Company Reference Number: 100220

Dear Jim:

Ecologist Meagan McManus and I completed a wetland and stream delineation study for the north end of Lewis Creek Park in May 2010. The study area was limited to the Vegetation Management Area, which is the approximately 25.8-acre northeastern forested portion of the park (see Figure 1 below).

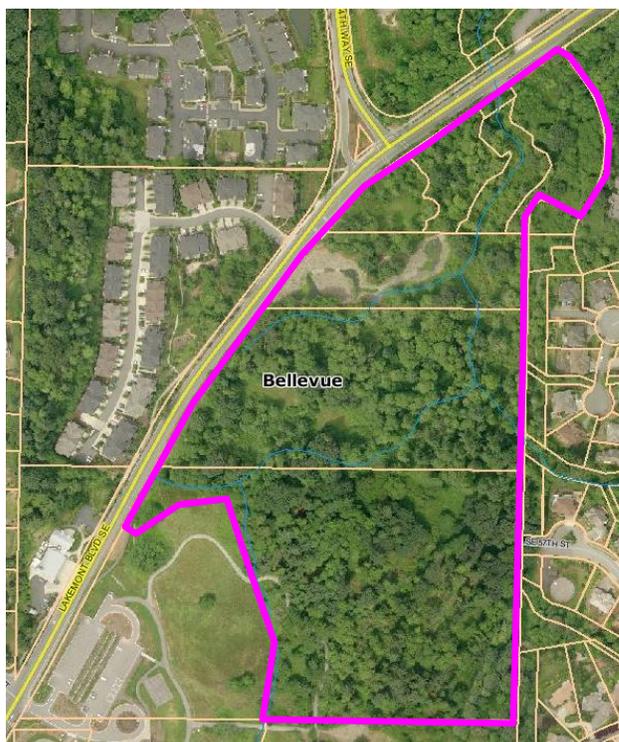


Figure 1. Vegetation Management Area at Lewis Creek Park

This letter summarizes the findings of this study and details applicable federal, state, and local regulations. The following attachments are included:

- Wetland Delineation Map
- Wetland Determination Data Forms
- Wetland Rating Forms

Methods

The study area was evaluated for wetlands using methodology from the *Washington State Wetlands Identification and Delineation Manual* (Manual) (Washington Department of Ecology [Ecology] 1997) and the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Regional Supplement) (US Army Corps of Engineers [Corps] April 2008). Wetland boundaries were determined on the basis of an examination of vegetation, soils, and hydrology. Areas meeting the criteria set forth in the Manual and Regional Supplement were determined to be wetland. Soil, vegetation, and hydrologic parameters were sampled at several locations along the wetland boundaries to make the determination. Data points on-site are marked with yellow- and black-striped flags. We recorded data at 10 of these locations.

Delineated wetlands were marked with pink- and black-striped flagging and classified using the *Western Washington Wetland Rating System* (Ecology, Aug 2004, version 2).

The ordinary high water mark (WM) of streams was determined based on the definition provided by the Washington Department of Fish and Wildlife and WAC 220-110-020(57). The WM is located by examining the bed and bank physical characteristics and vegetation to ascertain the water elevation for mean annual floods. Areas meeting the definition were determined to be the WM and flagged with blue- and white-flagging. Streams were identified and classified using definitions from the City of Bellevue Critical Areas Ordinance.

Findings

Lewis Creek Park is within the West Lake Sammamish drainage basin of the Cedar-Sammamish Water Resource Inventory Area (WRIA 8). The study area in the forested northeast portion of the park contains a network of foot trails and clearings associated with the former homestead, but is otherwise undeveloped. Fourteen wetlands and seven streams were identified, flagged and mapped within the study area.

Wetlands

Wetlands A, BGI, F, K and M

Slope and riverine hydrogeomorphic classes (HGM) characterize Wetlands A, BGI, F, K and M. All are rated as riverine wetlands per Ecology guidance. Groundwater seeps and overbank flooding are the primary sources of hydrology in these wetlands. All of these wetlands contain a palustrine forested vegetation class, typically dominated by western red cedar and red alder. Wetlands A and BGI also contain palustrine scrub shrub areas that are primarily vegetated with salmonberry and vine maple. In addition to a forested class, Wetlands BGI and M also have palustrine emergent patches characterized by mannagrass, lady fern, skunk cabbage, and meadow grasses. Soils at a 12-inch depth are a black (10YR 2/1) clay loam. Observed soil saturation ranged from the surface to eight inches below the surface at the time of our fieldwork.

Wetlands C, D1 and H

Riverine HGM classes characterize these wetlands along Lewis Creek. Overbank flooding and an elevated watertable are the primary sources of hydrology in these wetlands. Wetlands C and H contain a palustrine forested class dominated by black cottonwood and red alder. Wetland D1 contains both palustrine forested and scrub-shrub areas dominated by red alder, western red cedar and salmonberry. Skunk cabbage, piggyback plant and lady fern dominate groundcover in all these wetlands. Soils at a 10-inch depth are a black (10YR 2/1) silty loam. At the time of our fieldwork, soils were saturated to the surface and the watertable was 6 inches below the surface.

Wetlands D2, E and J

Wetlands D2, E and J contain a slope HGM class. Groundwater seeps are the primary sources of hydrology. All of these wetlands contain a palustrine forested vegetation class, typically dominated by western red cedar and/or red alder. Wetland D2 also contains a palustrine scrub-shrub patch dominated by salmonberry and Wetland J has a palustrine emergent area characterized by soft rush, velvet grass and other meadow grasses. Soils down to a 14-inch depth are a black (10YR 2/1) silty clay loam. Soils were saturated to the surface and the watertable was 6 inches below the surface at the time of our fieldwork.

Wetlands L, N and O

Wetlands L, N and O are each within a depressional HGM feature. Wetland L is a diverse wetland containing an interspersed of palustrine forested, scrub-shrub and emergent vegetation classes. Red alder and black cottonwood dominate forest cover in Wetland L and palustrine scrub-shrub patches are primarily salmonberry. Emergent areas within Wetland L, which were inundated on day of our site visit, contain slough sedge, yellow-flag iris, mannagrass and skunk cabbage. Wetlands N and O were

previously restored by the City and contain palustrine scrub-shrub and emergent vegetation classes. A diversity of native species was planted in these restored wetlands including Sitka spruce, willows, Pacific ninebark, twinberry and bulrush. Soils at a 12-inch depth ranged from a black (10YR 2/1) silty clay loam to a very dark grayish brown (10YR 3/2) sandy clay loam with redoximorphic features. Observed soil saturation was at or ten inches below the surface.

Streams

Lewis Creek (Stream B/G)

The on-site segment of Lewis Creek is mapped by King County as habitat for salmonids, including chinook and coho salmon. The streambed is primarily composed of gravel and cobble; riffle and pool formations are present throughout the channel.

Streams A, C, D and E

Streams A, C, D and E are all tributaries of Lewis Creek that are associated with delineated wetlands. All these tributaries are presumed non-fish bearing based on steep inclines and/or low flow conditions.

Streams F and H

Streams F and H are not connected to any other streams by an above ground channel or wetland. Stream F is ditched parallel to a trail segment in the southeast quadrant of the study area; it crossed under the trail and infiltrates a short distance to the northwest. Stream H is a cobble-lined channel that conveys seasonal flows from Wetland N into Wetland O across an existing trail.

Local Regulations

In Bellevue, wetlands and streams are regulated under the Critical Areas Ordinance, Land Use Code, Title 20, Part 20.25H. According to LUC 20.25H.095.C, wetland buffer widths are determined based on wetland category and habitat score using Ecology's Western Washington Rating System. Wetland classifications and associated buffer widths are listed in Table 1 below. Several Category II wetlands scored 20 or more habitat points, which requires an increased buffer width. Streams in the City of Bellevue are classified according to shoreline designation, presence or absence of fish habitat, and surface connections to other streams. Stream buffer widths are based on stream classification. Wetland and stream buffer requirements are also based on current site condition, developed or undeveloped. The study area does not contain any primary structures; therefore, it is undeveloped.

Table 1. Wetland and Stream Summary: Classifications and Regulatory Buffer Widths

Feature	Classification	Habitat Score	Buffer Width (ft)
Wetland A	Category II	18	75
Wetland BGI	Category II	25	110
Wetland C	Category II	16	75
Wetland D1	Category II	20	110
Wetland D2	Category III	17	60
Wetland E	Category III	16	60
Wetland F	Category II	15	75
Wetland H	Category II	16	75
Wetland J	Category III	19	60
Wetland K	Category II	18	75
Wetland L	Category II	23	110
Wetland M	Category I	23	110
Wetland N	Category II	18	75
Wetland O	Category II	15	75
Stream A	Type N	NA	50
Stream B/G (Lewis Creek)	Type F	NA	100
Stream C	Type N	NA	50
Stream D	Type N	NA	50
Stream E	Type N	NA	50
Stream F	Type O	NA	25
Stream H	Type O	NA	25

Additionally, Bellevue requires that there be a structure setback of 15 feet beyond the edge of all wetland buffers (20.25H.035.A) Setbacks from stream buffers are 20 feet, 15 feet and 10 feet for Type F, Type N and Type O streams, respectively.

State and Federal Regulations

Wetlands are also regulated by the U.S. Army Corps of Engineers (Corps) under section 404 of the Clean Water Act. Any filling of Waters of the State, including wetlands (except isolated wetlands), would require notification and permits from the Corps. The identified wetlands would likely not be considered isolated. Federally permitted actions that could affect endangered species (i.e. salmon or bull trout) may also require a biological assessment study and consultation with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service. Application for Corps permits may also require an individual 401 Water Quality Certification and Coastal Zone Management Consistency determination from Ecology.

In general, neither the Corps nor Ecology regulates wetland buffers, unless direct impacts are proposed. When direct impacts are proposed, mitigated wetlands may be required to employ buffers based on Corps and Ecology joint regulatory guidance.

The information contained in this letter or report is based on the application of technical guidelines currently accepted as the best available science and in conjunction with the manuals and criteria outlined in the methods section. All discussions, conclusions and recommendations reflect the best professional judgment of the author(s) and are based upon information available to us at the time the study was conducted. All work was completed within the constraints of budget, scope, and timing. The findings of this report are subject to verification and agreement by the appropriate local, state and federal regulatory authorities. No other warranty, expressed or implied, is made.

Please call if you have any questions or if we can provide you with any additional information.

Sincerely,



Nell Lund
Ecologist, WPIT

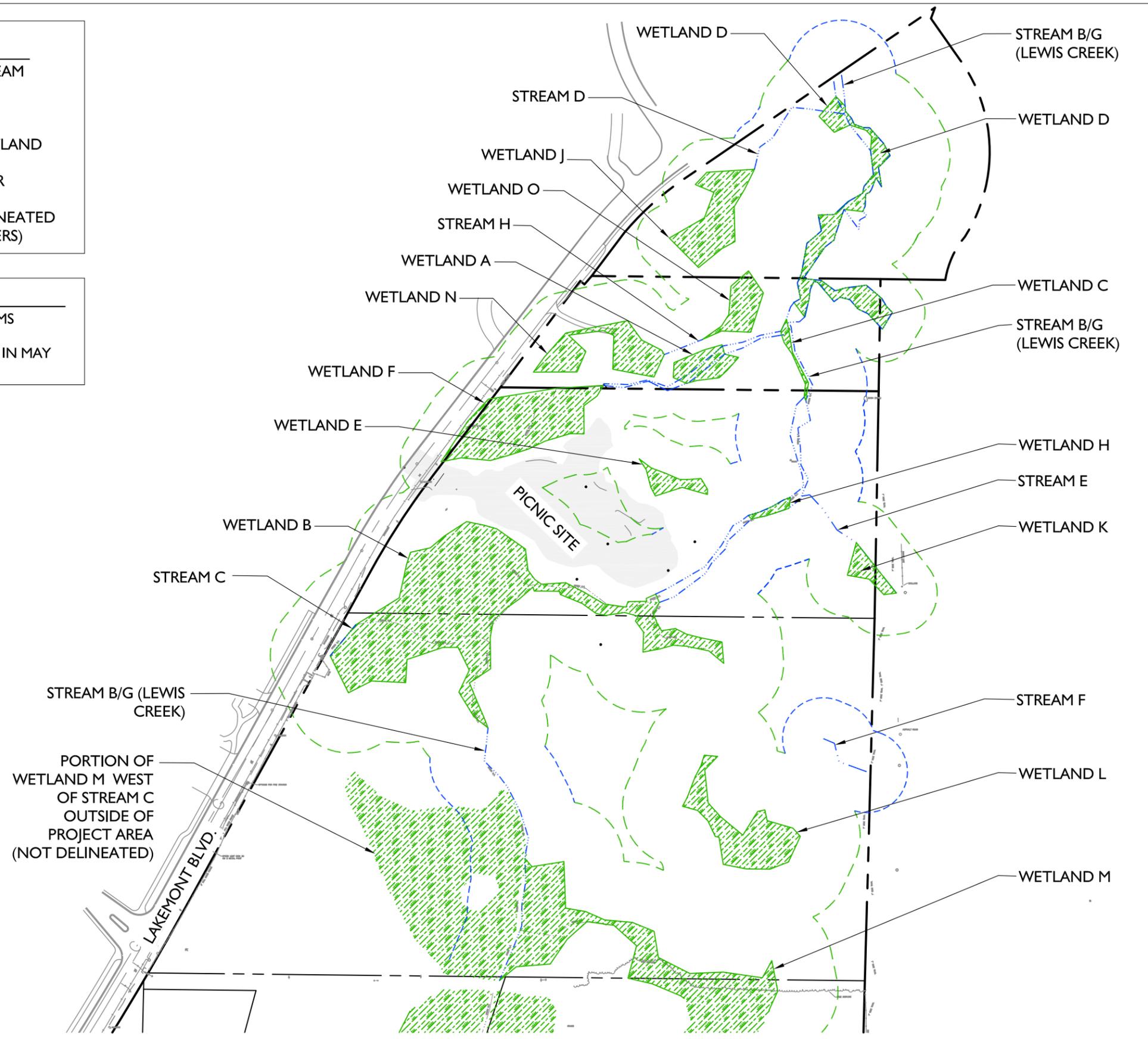
Enclosures

PLAN LEGEND

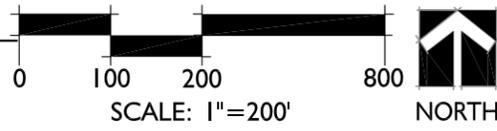
-  DELINEATED STREAM
-  STREAM BUFFER
-  DELINEATED WETLAND
-  WETLAND BUFFER
-  PREVIOUSLY DELINEATED STREAM (BY OTHERS)

NOTES

- I. WETLANDS AND STREAMS DELINEATED BY THE WATERSHED COMPANY IN MAY OF 2010 USING GPS.



DELINEATION MAP



**LEWIS CREEK PARK
DELINEATION MAP
PREPARED FOR THE CITY OF BELLEVUE**

5808 LAKEMONT BLVD. SE
BELLEVUE, WA 98009

NO.	DATE	DESCRIPTION	BY
1	6-2-10	REVIEW SET	CL

SHEET SIZE:
ORIGINAL PLAN IS 11" x 17".
SCALE ACCORDINGLY.

PROJECT MANAGER: MG
DESIGNED: I
DRAFTED: CL
CHECKED: NL
JOB NUMBER:
100220
SHEET NUMBER:
1 OF 1

DATE: 6/3/2010
PRINTED BY: COURTNEY LANDOLL
FILENAME: WS-100220-TRAIL PLANS-SE1.DWG