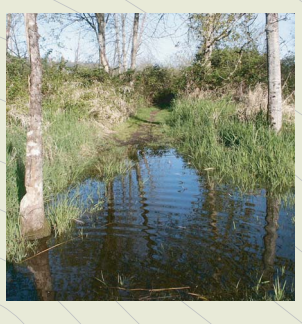
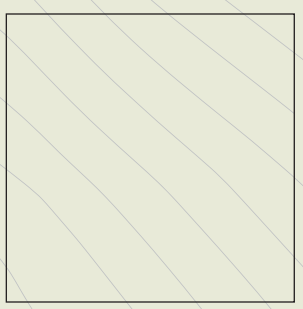
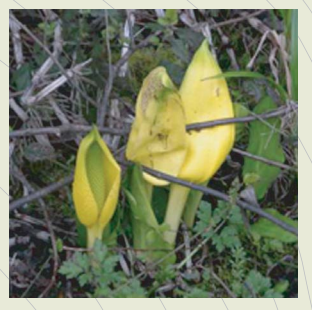
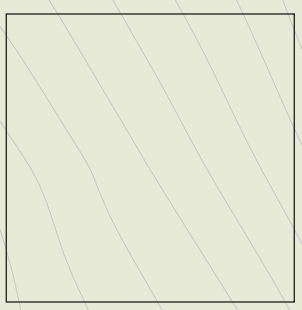
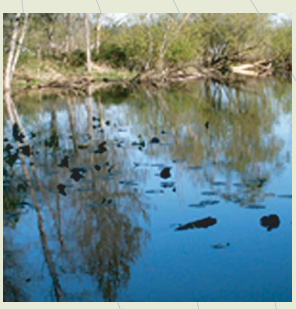
Lake Sammamish State Park

Wetland, Stream and Lakeshore Restoration Plan





Prepared for

Washington State Parks & Recreation Commission

The Watershed Company

FINAL

Lake Sammamish State Park
Wetland, Stream and Lakeshore Restoration Plan
King County and City of Issaquah, Washington

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Wetland, Stream and Lakeshore Restoration Plan

1. INTRODUCTION

The Watershed Company was retained by the Washington State Parks and Recreation Commission (State Parks) to prepare a *Wetland, Stream, and Lakeshore Restoration Plan* for Lake Sammamish State Park (Park) in Issaquah, Washington. This work was partially funded by a generous Wetlands Protection Grant from the United States Environmental Protection Agency. A seven-member Restoration Planning Team guided The Watershed Company in anticipation of overall Park improvement and redevelopment. This group included representatives from State Parks, City of Issaquah Parks and Recreation, City of Issaquah Public Works, Issaquah Rivers and Streams Board, and the Mountains to Sound Greenway Trust.

Lake Sammamish State Park encompasses approximately 512 acres at the south end of Lake Sammamish. The Park is within the Interstate 90/Mountains to Sound Greenway corridor and provides important recreational, open space, and wildlife habitat areas. The Park is primarily developed as a day-use facility including swimming beaches, boat launch, picnic shelters, trails, soccer and baseball fields, and the Hans Jensen Youth Group Camp. Much of the Park is undeveloped and includes meadows, vast wetlands, lakeshore areas, and Issaquah, Tibbetts, and Laughing Jacobs Creeks.

Human activity and development have affected and altered the natural resources in the Park and watershed. Early settlers cleared and farmed the area, draining wetlands and channelizing creeks. Coal mining, forestry, lowering of the winter and flood-event lake level due to Sammamish River dredging and lake outlet reconfiguration by the U.S. Army Corps of Engineers, the construction of Interstate 90, and on-going urbanization have had significant impacts on the natural systems and overall character of the Park.

Lake Sammamish State Park has been identified by government agencies (Washington State Parks, Washington Department of Fish and Wildlife, City of Issaquah), tribal organizations (Northwest Indian Fisheries Council) and non-profit organizations (Mountains to Sound Greenway Trust) as a high priority area for restoration work within the Issaquah Creek Basin and Lake Sammamish Watershed. This study identifies, evaluates, and ranks specific prospective project areas within the Park for restoration of natural lands including wetlands, streams, shorelines, floodplain areas, and associated buffers. This plan is to be used in conjunction with other planning efforts underway for Lake Sammamish State Park, including the *Facilities Development Plan* (FDP), *Master Development Plan* (MDP), and *Classification and Management Planning Project* (CAMP).

2. PURPOSE

As mentioned above, Lake Sammamish State Park is an important feature in the overall Issaquah Creek Basin, shown in Figure 1. The Issaquah Creek Basin is within the Lake Sammamish Watershed, encompassing 61 square miles and including all forks and tributaries of Issaquah and Tibbetts Creeks. Approximately 80 percent of the basin is forested, including 25,500 acres of public land (Grand Ridge Park, Tiger Mountain State Forest, King County Taylor Mountain Forest, Squak Mountain State Park and Cougar Mountain Regional Wildland Park) and adjacent rural lands. The remainder of the basin is pastures, fields, wetlands, or developed. The mixed deciduous/coniferous forests, streams, wetlands, and fields provide significant habitat values for a wide range of aquatic and terrestrial species.

Lake Sammamish State Park is a critical element of the on-going protection and stewardship/restoration efforts in the basin, because of its prominent location at the mouth of Issaquah Creek. The large area is an oasis of open space in the midst of the quickly developing areas of Issaquah and East King County. The Park provides spaces for passive and active recreational activities and significant areas of lowland wildlife habitat, not often present in urban or suburban areas. This valuable resource is an important link in connecting people to open space and natural ecosystems.

This plan proposes to build on this value by restoring and enhancing the natural systems within the Park to make these areas more useful to both human and wildlife users. A complex mosaic of native plant communities and habitats is envisioned that provides the basic requirements of food, cover, and water to a diverse assemblage of native wildlife types. The open character of the Park will be maintained with pockets of native trees and shrubs dispersed throughout in a manner to maximize edge habitat values and wildlife use. These areas are planned in a way to interface with humans that is useful, respectful and low impacting.

The primary ecological need of the Park is to increase overall biodiversity in terms of plant communities and land cover types, which in turn will enhance and encourage use by a variety of native wildlife species. Removal and management of invasive plant species, revegetation with native plant communities, fish habitat improvement, and wetland functions restoration are the means to achieving this result. This study has evaluated the Park holistically in terms of restoration potential. It details park-wide recommendations and presents a menu of interrelated site-specific projects to address overall ecological needs. Site-specific projects can be mixed and matched to create opportunities for volunteer efforts, grant funded professionally managed restoration work, and compensatory mitigation projects.

Issaquah Creek is used by a number of salmonid fish species including chinook, coho, and sockeye salmon (including kokanee), cutthroat and steelhead trout, and, occasionally, bull trout. Large numbers of adult coho and chinook salmon return to the State salmon hatchery a few miles upstream of the park each year. A variety of non-salmonid fish species use the creek as well. Since Lake Sammamish State Park

includes the mouth and lowermost mainstem section of the creek, it serves as the gateway for all of the migratory fish using the entire basin. All such fish successfully completing their life history through hatching, rearing, attainment of maturity, and reproduction to sustain future generations must pass through the park and experience the habitat it provides, in whatever condition, at least twice during their lives. This makes it critically important to ensure that these valuable fish experience suitable and high-quality habitat as they pass through and also if they choose to rear in the park for an extended period. Fish habitat improvement projects in other locations are seldom guaranteed such a high level of use, making such improvements in the park critically important as well as efficient in terms of benefits to fish for money spent and effort expended.

Other restoration efforts are underway in the basin to the benefit of salmonid fish and wildlife in general, including work along Tibbetts Creek, Issaquah Creek, and Laughing Jacobs Creek upstream of the Park boundaries. The Tibbetts Creek Greenway is nearly complete with work done on City of Issaquah properties, private lands owned by Rowley Enterprises, and parklands restored as part of Washington Department of Transportation mitigation efforts. Restoration work along the banks of Issaquah Creek has also been completed recently just outside the Park boundary on private property. King County has implemented stream and wetland restoration work along the upper reaches of Laughing Jacobs Creek within the Hans Jensen Youth Group Camp.

The City of Issaquah and King County have long recognized the value of the Issaquah Creek Basin, not only as habitat for salmonid fish, but also for the other wildlife species dependent upon the creek corridor and upland areas. The City and County are active participants in the Lake Sammamish–Issaquah Creek Waterways Program and Issaquah Basin Action Team. Through these programs, the agencies have implemented a coordinated effort for property acquisitions, placement of conservation easements, and stewardship/restoration projects along Issaquah and Tibbetts Creeks. The major acquisitions have included the purchase of Taylor Mountain Forest at the headwaters of Issaquah Creek (Holder and Carey Creeks), Log Cabin Reach, South Issaquah Creek Greenway, Issaquah Creek/Cybil-Madeline Park as well as many other smaller acquisition sites along the creek corridor.

Additionally, in an effort to protect the surrounding forested areas and public lands, the City of Issaquah, King County, Washington State Department of Natural Resources, and Washington State Parks and Recreation Commission have partnered as the “Issaquah Alps” and Upper Snoqualmie River Valley Interagency Committee in order to acquire critical properties to protect water quality and preserve wildlife habitat and corridors.

The *Lake Sammamish Classification and Management Planning Project* (CAMP) classified the Park as a combination of Natural, Resource Recreation, and Recreation Areas. The *Lake Sammamish State Park Land Classification and Long-Term Boundary Map* from this project is included here as Figure 2. The CAMP map shows the land classifications as defined in the *Lake Sammamish State Park Area Management Plan* (August 2003). The majority of undeveloped lands are classified as Natural (red) and

Resource Recreation (blue) Areas. Recreational use and development in the Natural Areas are limited to low-intensity, such as bank fishing (if and when allowed), pedestrian trails, and interpretive displays. The Resource Recreation Areas are for recreational use and development is limited to low and medium-intensity levels, such as primitive sanitary facilities and shared use trails. The Natural and Resource Recreation classifications provide high and moderate degrees of protection, respectively, for native plant and animal communities. Existing high-intensity Park developments are classified as Recreation Areas (purple). The restoration plan has been developed in the context of these natural resource policies and planning efforts underway for future development of portions of the Park.

Figure 1. Issaquah Creek Basin Map.

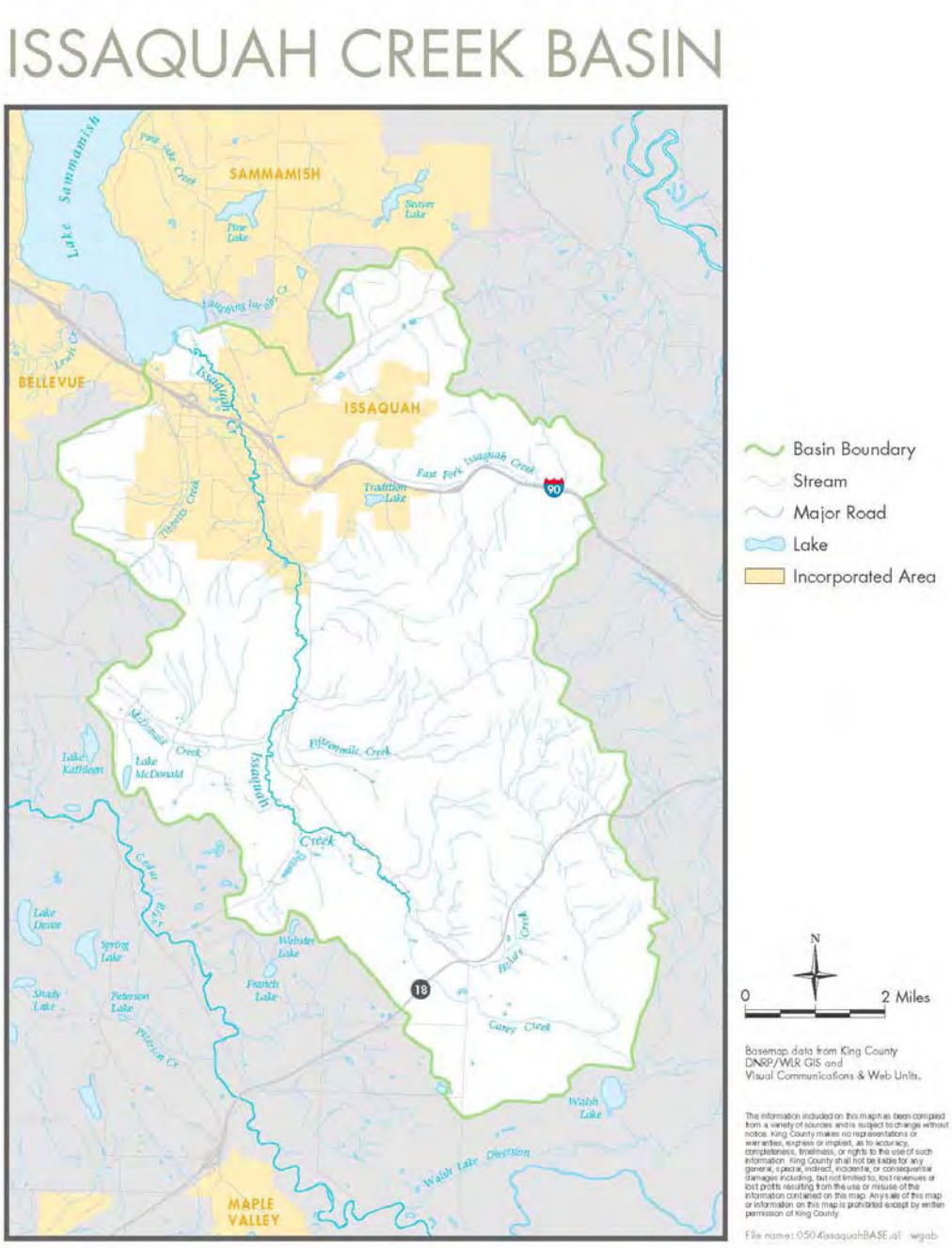
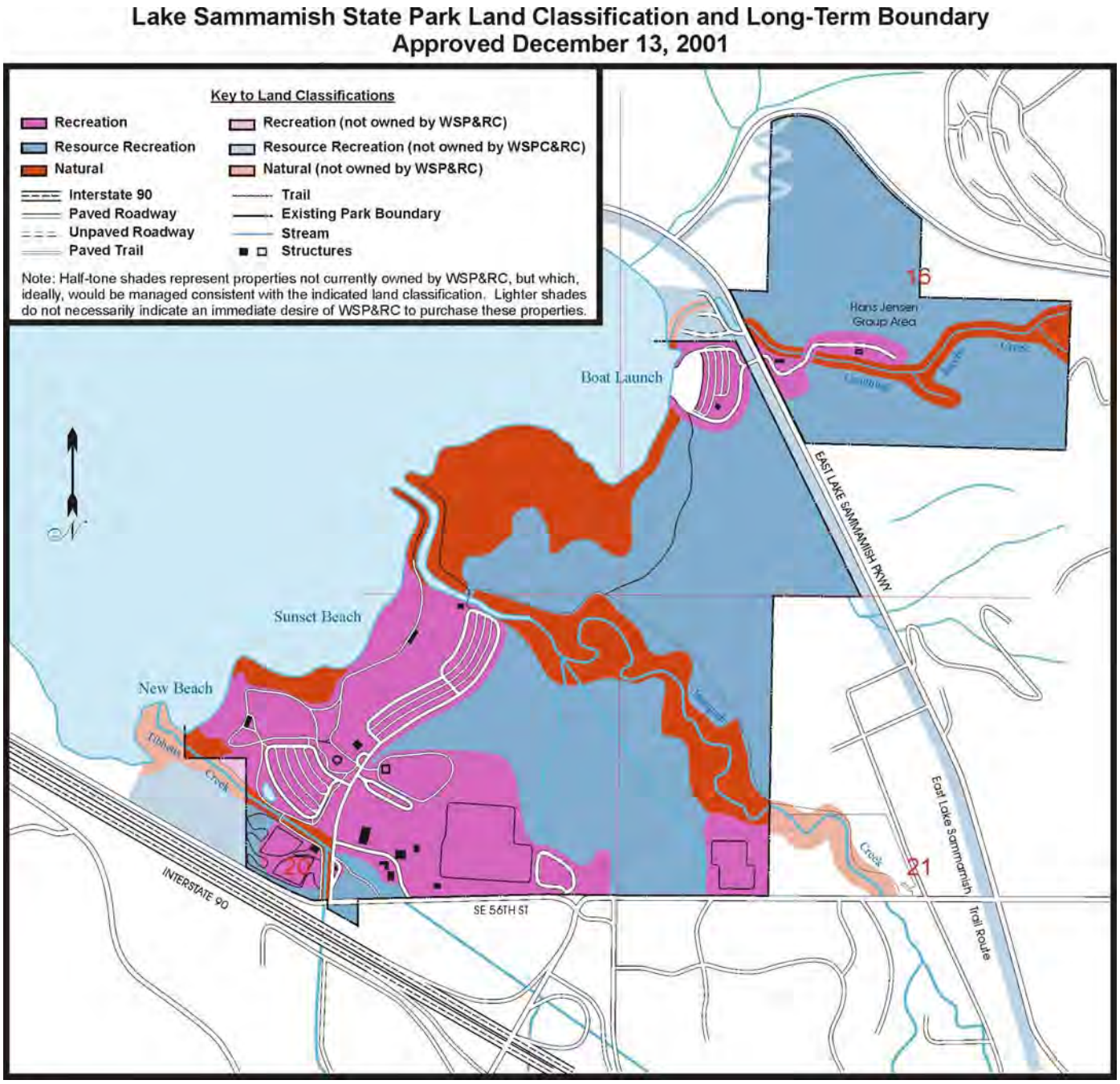


Figure 2. Lake Sammamish State Park Land Classification and Long-Term Boundary.



3. METHODS

This *Wetland, Stream, and Lakeshore Restoration Plan* was initiated with a review of existing information provided by State Parks, including maps, aerial photos, resource inventories of wetlands, soils, flooding, and other natural processes, as well as goals and management issues identified through other planning efforts. The review was followed up with a comprehensive and systematic on-site evaluation of the Park, which resulted in a preliminary list of restoration project ideas. After input and initial review from the Restoration Planning Team, additional field work was conducted to complete the evaluation of the Park and to further define projects, both Park-wide and site-specific.

The entire length of Issaquah Creek within the Park was inventoried, photographed, and evaluated for development of restoration plans. Tibbetts Creek, Laughing Jacobs Creek, and lakeshore areas were similarly evaluated. Earlier in the year, The Coot Company, wetland scientists, identified and delineated wetlands mainly within the developed areas of the Park (January 2005). This report was reviewed and used as a guide with aerial photos for on-site evaluation of wetlands. Other recent wetland studies have been done by Washington State Department of Transportation (April and December 2003), primarily in the Tibbetts Creek area of the Park.

Proposed projects were defined as Wetland (W), Stream (S), Lakeshore (L), Upland (U), and/or Recreation (R) projects, with most being a combination of several types. Wetlands in the Park associated with prospective projects were evaluated using the *Wetland and Buffer Functions Semi-Quantitative Assessment Methodology* (Cooke Scientific Services 2002). Existing wetland functions such as flood/storm water control, shoreline protection, water quality, habitat functions, and cultural/socioeconomic opportunities were analyzed and scored as low, medium, or high in value. This methodology also allows for prediction of eventual scores based on proposed habitat enhancements. This information is summarized in specific project descriptions and the detailed worksheets are included in Appendix B.

After identifying and describing projects throughout the Park, the site-specific items were ranked using evaluation criteria developed and compiled on a questionnaire form. Evaluation criteria included issues such as site accessibility, potential for fish and wildlife habitat improvement, water quality, hydraulic impacts, ease and cost of construction, suitability for educational purposes and community involvement, expected life of project, regulatory requirements, aesthetics, public access, and recreational opportunities. Scoring was based on assumptions and project understanding within the context of conceptual level project elements, needs, and requirements. Provision for a weighting factor was included in the event that it was appropriate to give certain criteria more or less emphasis than others; however, the weighting factor was not used and each of the criteria were ultimately given equal weight. There is also a provision for any overriding, compelling reasons to either do or not do a particular project. This provision and the weighting factor could be used in the future to select and match particular

projects to specific funding sources or to address priority needs and interests as they are identified.

Projects were separated into three "Implementation Groups" based on their anticipated level of required permitting, as follows. Consequently, this also divided the projects into groupings that target similar types of restoration actions and functional benefits; projects with extensive grading and/or in-stream work tend to require the most permitting.

A. Limited permitting. This designation is used for projects which primarily involve removal of invasive vegetation and replanting with native species. Proposed site preparation and planting plans will need to be reviewed by local regulatory agencies (City of Issaquah or King County) to assure that plans have been prepared by a qualified biologist, but are not expected to require state or federal permits. Most of these projects could be implemented by supervised volunteer groups.

B. Moderate permitting. This group of projects will require some additional permits and regulatory review, such as Washington Department of Fish and Wildlife Hydraulic Project Approval for installation of log structures. These projects generally target removal of invasive plants, streambank revegetation, and installation of in-stream log structures and woody debris for fish habitat. Trail improvements are also elements of some of these projects. Grading permits from King County or City of Issaquah may be required for features such as the creation of small depressions or widening of the floodplain along Issaquah or Tibbetts Creeks. As above, supervised volunteer groups could participate in the clearing, trail building, and revegetation portions of these projects.

C. Extensive permitting. These projects will require more complicated permitting on the local, state, and federal levels. They are multi-faceted projects which target larger scale natural resource processes and overall ecological restoration goals. Many of these projects may be suited for implementation as mitigation projects, and possibly as mitigation banks. As above, supervised volunteer groups may be able to participate in some of the clearing, trail building, and revegetation portions of these projects. Also see Section 4, Regulatory Considerations.

Final rankings for project priorities are within each of these groups. An example of the ranking form is included as Figure 4 and overall ranking results are summarized in Table 1, both in Section 8 of this report. The ranking forms with tallied scores for each project are included in Appendix A.

Example cost estimates were prepared for six projects, three from Implementation Group A and three from Implementation Group B, as requested by the Restoration Planning Team. These six projects are among the top-ranked projects in each of these two groups, and were chosen to be representative of a wide range of project types including stream, wetland, and lakeshore elements. The estimated costs are included on the applicable project pages and cost worksheets are included in Appendix C.

Each proposed project is also identified with GIS coordinates, its project type designation(s) (Wetland, Stream, Lakeshore, Upland, Recreation), and Implementation Group (A - Limited permitting, B - Moderate permitting, C - Extensive permitting). This information is included on the site-specific project pages and in Appendix E.

4. REGULATORY CONSIDERATIONS

Restoration projects within the Park will fall under the jurisdiction of several different local, state, and federal agencies. Most of the Park is within unincorporated King County, with the exception of the far west extension along the mouth of Tibbetts Creek, and the Hans Jensen Youth Group Camp, which are in the City of Issaquah.

Applicable City of Issaquah regulations include the Critical Areas Ordinance. Wetlands and streams are each classified according to three-tiered rating systems with required buffer widths ranging from 25 feet to 100 feet. Shoreline permits and grading permits may also be required, depending on the elements of the proposed project.

King County recently adopted a new Critical Areas Ordinance in November 2004. These regulations include a new system for categorizing wetlands and streams and assigning their buffers. There are four wetland categories with buffer widths ranging from 50 to 275 feet. Streams are grouped with lakes and ponds and called “aquatic areas.” There are four categories with buffer widths ranging from 25 to 165 feet. King County shoreline permits and grading permits will also be required where applicable.

Review under the State Environmental Policy Act (SEPA) is required to assure that the environment is given appropriate consideration in state and local permit decisions. Environmental checklists are required for use in making threshold determinations, such as Determination of Non-Significance (DNS) or need for an Environmental Impact Statement (EIS). The State Park serves as its own lead agency and SEPA responsible official.

Washington Department of Fish and Wildlife Hydraulic Project Approval (HPA) would be required for any in-stream work such as installation of habitat log structures or grading to create additional floodplain area. Washington Department of Ecology oversees shoreline permit decisions made at the local level and administers the 401 Water Quality Certification in support of the Corps 404 program (see below).

Federal permitting through the U.S. Army Corps of Engineers is necessary for the discharge of dredged or fill materials into waters of the United States under Section 404 of the Clean Water Act. Section 10 of the Rivers and Harbors Act may also be triggered if any work is conducted in or over Lake Sammamish, a navigable water. Under the federal Endangered Species Act, projects requiring a federal permit or receiving federal funds will also be reviewed by the National Marine Fisheries Service (NOAA Fisheries) and U.S. Fish and Wildlife Service (USFWS) if the proposed project may have an effect on listed fish or wildlife. A Biological Evaluation will need to be prepared to support the federal authorizing or funding agency’s consultation with NOAA Fisheries and USFWS.

5. NATURAL RESOURCE PROCESSES

The morphology of the Lake Sammamish area was formed by continental glaciers that, at their maximum extent, likely covered the Issaquah area with over 3,000 feet of ice. As the glaciers retreated, a much larger Lake Sammamish emerged, initially discharging *southwards* through the present day Issaquah Creek and Tibbetts Creek corridors. The retreating edge of the glacier formed an ice dam preventing flow from exiting to the north, as it does now. Over time, as the ice continued to retreat, the discharge location of the lake shifted temporarily to the northwest to the Eastgate Channel, which is the present-day location of Interstate 90. Large deltas began to form at Issaquah Creek, Tibbetts Creek, and other drainages on the east side of the lake. Eventually, the glaciers receded sufficiently such that that meltwater stopped entering the basin, lower elevation discharge pathways to the north along the Sammamish River alignment opened up, and the lake reduced in size to near its present configuration (Booth 1990).

The Park is located on a large delta deposit which had likely been built primarily by Issaquah Creek, but also with contributions from both Tibbetts and Laughing Jacobs Creeks. Typical of delta deposits, the land slopes very gently towards the lake, and the soils are primarily fine-grained sands and silts. There is also a smaller area of the Park northeast of the delta on moderately sloped ground east of East Lake Sammamish Parkway. Soils were identified in the King County Soil Survey and presented in the wetland inventory done by The Coot Company (2005). This information is included in Appendix D of this report. Eleven different soil types are identified within the Park, four of which are considered hydric soil types.

During historic times, the U.S. Army Corps of Engineers altered the outlet of Lake Sammamish. The Corps dredged the channel of the Sammamish River and installed a weir at the outlet of the lake. The result of this activity was a significant reduction in the peak winter water levels of the lake, though non-flood lake levels were largely unaltered.

Issaquah Creek, and to a lesser extent Tibbetts Creek, appear to have downcut significantly in recent years, which has led to over-steepened and less stable banks. Downcutting is a typical response of a stream in an urbanized basin, however in this case downcutting may have been exacerbated by the alteration of the lake's water level regime.

Large side channel or backwater creation projects across the former, broad flood plain of Issaquah Creek were considered in this study, but not carried forward. The reason for this is that it is perceived, as explained above, that the creek has downcut due to the lowering of the Lake Sammamish high-pool elevation. A new, lower but narrower flood plain for the creek appears to be in the process of forming. As such, the stability and predictability of such projects would be uncertain.

When a stream meets a body of water, it loses energy and can no longer erode its bed or banks. Instead, a stream deposits the material it has been carrying, forming a delta. The elevation of the receiving water is called the base level of the stream. A stream

erodes its bed until it forms a stable gradient to match the base level, and the stream cannot erode below that base level.

Streams do most of their erosion and deposition during flood events. Historically, most floods would likely have corresponded with peak lake levels, which alter the base level that the stream can erode to. Therefore the stream would have formed its gradient to the higher lake level that existed prior to the Corps manipulation. When the Corps altered the peak lake level by several feet, the bed of the stream may have begun eroding to compensate for the difference.

A map depicting the general location of the floodway and floodplain areas within the Park is also included in Appendix D of this report.

6. FISH & WILDLIFE CONSIDERATIONS

A data search of the Washington Department of Fish and Wildlife Natural Heritage System and Priority Habitats and Species database was performed as part of the wetland inventory done by The Coot Company (2005). Four items were identified, as follows.

- All of the Lake Sammamish State Park lands within King County jurisdiction are listed as Urban Natural Open Space (UNOS).

- The active great blue heron colonial nesting site (heronry) is identified along the north lakeshore of the Park.

- The database shows a bald eagle polygon across the northern portion of the Park that is apparently associated with a nest site near the lake.

- Priority anadromous fish are listed for both Tibbetts and Issaquah Creeks.

The Washington Department of Fish and Wildlife's Issaquah Salmon Hatchery lies along Issaquah Creek at River Mile 3.1, a relatively short distance upstream of Lake Sammamish State Park. The hatchery produces primarily coho and chinook salmon. Given the hatchery's situation along the creek relative to the Park, thousands of adult salmon pass through the Park in the process of homing to the hatchery each year and correspondingly larger numbers of juveniles, at least an order of magnitude larger, pass downstream in the process of migrating to sea. As such, Issaquah Creek habitat within the Park is used by and is important to huge numbers of salmon. Adult upstream migrants need places to rest and hide from predators, as do juveniles. Some adult fish inevitably stop short of reaching the hatchery to spawn, so suitable spawning habitat below the hatchery, including sections within the Park, are in high demand. Downstream juvenile migrants as well as some juveniles who rear for longer periods within the Park need functional rearing habitat. Proposed habitat improvement projects within the Park address these needs by providing bank stabilization to reduce turbidity and fine sedimentation of spawning gravels and by the placement of large woody

objects in and along the creek to scour and maintain rearing and resting pools and to provide cover from predation within those pools.

The *Lake Sammamish State Park Area Management Plan* (2003) includes policies regarding protection of natural plant and animal communities such as the great blue heronry, and for control of nuisance wildlife such as Canada geese. These policies stipulate coordination with other natural resource agencies in terms of restoration planning, protection strategies, and interpretive opportunities.

Project A8 of this study addresses restoration of the field south of the great blue heron colonial nesting site. It is recommended that upland forest and shrub patches be installed in this area to increase habitat diversity while still maintaining the views of the heronry. Interpretive signage along the trail is also recommended to enhance awareness of this special feature and explain the need for protection.

An action plan for control of Canada geese has been prepared by Park staff in coordination with other natural resource agencies. This plan includes a variety of management prescriptions. Many of the project recommendations presented here are consistent with these goals, in that increased native plant communities and habitat diversity will discourage use by geese, since they tend to congregate on expanses of lawns and open areas.

7. PARK-WIDE RECOMMENDATIONS

Invasive Plant Management

Many areas of the Park have become dominated by non-native, invasive vegetation. In the past, much of the Park property was used for agriculture, involving primarily hayfields and pasturelands. Native woody vegetation was cleared, and extensive ditching was done to manage water levels. These now-abandoned fields have become dominated by invasive species, particularly reed canarygrass and blackberries (both Himalayan and evergreen). These species are common in other areas of the Park as well, including stream banks, riparian areas, wetlands, and some lakeshore sections. There are also some fairly extensive stands of Japanese knotweed along the upper reaches of Issaquah Creek.

Monocultures of non-native invasive plants are detrimental to the overall ecosystem because they crowd out and compete with the native vegetation that provides for the specific needs of many native wildlife species. When these non-native plant communities dominate, there are less food and cover opportunities for native wildlife and consequently, non-native, often nuisance types of wildlife will flourish and further diminish the ability of native species to be successful.

As explained in Section 2, the *Lake Sammamish Classification and Management Planning Project* (CAMP) classified the Park as a combination of Natural, Resource Recreation, and Recreation Areas; see Figure 2. The areas shown in blue are the former agricultural fields and emergent wetlands that are classified as Resource

Recreation Areas. It is these areas that are most in need of invasive plant control. Many of the red areas, which are generally streams, riparian areas, and undeveloped shorelines are also dominated by invasive plants. Specific descriptions of existing conditions and proposed actions are included in the site-specific project recommendations in Section 8.

In general, non-native invasive plant species in sensitive areas should be removed initially and primarily through mechanical means. This could include removal with mowing or excavating machinery where feasible and/or through hand-pulling and grubbing where the use of such equipment is not feasible or as a supplement to machine work. The goal is to remove the rootstocks to the greatest extent possible.

Chemical means for control and eradication may be appropriate in some areas, where allowed by local regulations. Further recommendations for control of invasive plants may be obtained from the King County Noxious Weed Control Program. A comprehensive integrated vegetation management program, including mechanical, biological, and chemical controls, should be developed for the Park.

Blackberry control can be achieved by digging out roots and old canes repeatedly, over several growing seasons, with follow-up plantings to shade and out-compete new shoots. When choosing the size of project to tackle, it is best to choose a smaller area that can be maintained as opposed to choosing a bigger one that will be reclaimed by the blackberries.

Reed canarygrass can also be weakened over time to some extent with shading and competition through installation of dense and fast-growing species, such as willows. Mowing is also effective in holding back reed canarygrass, as is evident in existing mowed sections of the Park. Large-scale reed canarygrass removal is usually more successful with grading and removal of roots and sod. Creation of more varied topography and dense plantings of aggressive and fast-growing native plants help to combat re-establishment.

With Japanese knotweed, injecting individual stalks with herbicides has been successful in some local applications. When using mechanical removal of this species, it is particularly important to try and remove all rootstocks as they readily re-sprout and grow. It is especially important to avoid inadvertently facilitating the spread of this plant through improper transport and disposal of excavated root materials.

Long-term monitoring and maintenance is required to keep invasive plants in check, and to promote the establishment of newly installed native plantings. See Monitoring and Maintenance section below.

Trail System, Educational and Interpretive Elements

There is a general need to better define trails and connections throughout the Park. Maps for trail users would be helpful and could be tied to existing and future interpretive information. Overall maps with “You Are Here” locators would be very helpful in orienting visitors to this very large Park.

Other specific changes in the existing trail system would be beneficial as well. For example, Project B7 details proposed changes to the trail at the mouth of Tibbetts Creek. This trail should be improved to maintain the popular access point, while at the same time protecting, enhancing, and minimizing foot traffic impacts to the sensitive wetland, stream, and lakeshore habitats. A new trail segment coupled with an interpretive area in an old oxbow of Issaquah Creek is proposed in Project B9.

Sensitive areas, such as the great blue heron colonial nesting site (heronry), should be avoided. Views and interpretive information are appropriate and can be provided from the existing trail at a distance, but any closer access to this area should be avoided to prevent disturbance to the nesting birds. The lakeshore wetlands, in particular, tend to provide secluded habitats for more secretive and sensitive types of wildlife, such as the herons, other shorebirds and aquatic mammals.

Other trail recommendations are detailed in the site-specific project descriptions. In general, on-grade trails through upland areas in meadows or open forests are preferable to trails in wetlands, which can be hard to maintain and difficult to use in certain times of the year. Where trails are appropriate in wetlands, boardwalks may be better suited to both protect the wetland and to focus use by park visitors.

Fencing is also recommended in some locations where restoration is to take place adjacent to high use areas; see specific project descriptions in Section 8. This is an effective way to discourage people from entering newly planted areas until vegetation becomes established. Fencing can also be done in aesthetically pleasing and sensitive ways, such as split rail fencing, to create a strong sense of value and provide a focal point for interpretive signage.

Other opportunities for educational and interpretive signage are detailed throughout the site-specific projects. The diverse ecosystem and varied recreational features of Lake Sammamish State Park make this a particularly valuable educational opportunity. Interpretive signage in and adjacent to high use areas such as the beaches, picnic areas, soccer and baseball fields can raise awareness and appreciation for the unusual nature of this large park. Interpretive signage can explain the value and function of small pockets of native vegetation in non-natural areas of the Park, and will also build public support and understanding of large-scale restoration efforts. Item 16 of the project ranking forms addresses educational and interpretive uses; see Table 1 and Appendix A.

The CAMP map (see Figure 2) shows the land classifications of Natural, Resource Recreation, and Recreation Areas, as defined in the *Lake Sammamish State Park Area Management Plan* (August 2003). The majority of undeveloped lands are classified as Resource Recreation and Natural Areas. Recreational use and development in the Natural Areas are limited to low-intensity, such as bank fishing (if and when allowed), pedestrian trails, and interpretive displays. The Resource Recreation Areas are for recreational use and development is limited to low and medium-intensity levels, such as primitive sanitary facilities and shared use trails. The Natural and Resource Recreation

classifications provide high and moderate degrees of protection, respectively, for native plant and animal communities. The proposed site-specific projects are consistent with these defined uses.

Monitoring and Maintenance

Post construction monitoring and maintenance is critical to the long-term success of restoration projects. Specific requirements and targeted performance standards are usually prescribed as conditions of permit approval. Typically, five or more years of performance monitoring are required with benchmark standards of success. For example, 90-100% survival of installed plants is often required after one year with a guarantee of replacement of dead plants. Plant coverage is usually the standard measure for success in subsequent years. This can be measured in a variety of ways, such as circular sample plots, line intercept transects, or belt transects, depending on type and age of the plant community. Percent coverage of native and non-native vegetation is tracked throughout the monitoring period. If standards of success are not met, contingency plans are developed to address alterations in hydrologic regime, soil, plant species, or other applicable features.

Regular maintenance is also necessary to keep invasive plants in check as native plantings become established. This often involves several visits during the growing season to remove weeds and clear areas around installed plantings. The first few years are critical to the long-term success of restoration and revegetation. Maintenance needs for the site-specific projects are addressed in Item 21 of the project ranking forms and summarized in Table 1. See also Appendix A.

Some monitoring and maintenance activities could be performed by trained volunteers, depending on the size of the project and regulatory requirements. For example, tracking success of revegetation in many of the Group A and B projects could be accomplished in this way. Installation and maintenance of plant guards to protect young vegetation from deer, beavers, and other small rodents could also be performed by volunteer groups.

Larger, more complex projects, such as those described in Group C will likely have more comprehensive and sophisticated monitoring requirements. However, large projects that include changing the landscape with grading and/or changing the hydrologic patterns may be more self-sustaining after the initial establishment period. For example, plugging of old farmer's ditches and restoration of wetland hydrologic patterns will result in re-establishment of more natural processes and functions, and consequently stable native plant communities.

8. SITE-SPECIFIC RECOMMENDATIONS

Thirty-eight specific restoration projects have been identified through this study. These are shown on the Overview map (Figure 3) and are detailed in the following project pages. These recommended projects have been planned within the context of the existing and programmed uses determined through the Natural Resource policies of the Park.

These projects cover areas throughout most of the park property. As mentioned above, King County has completed some restoration and enhancement work on the upper reaches of Laughing Jacobs Creek within the Hans Jensen Camp area of the Park. Monitoring and maintenance of this work are ongoing. There is a recognized need to extend this type of work on the lower reaches and mouth of Laughing Jacobs Creek. However, much of this area is off of Park property and was therefore not considered within the scope of this study.

As explained in Section 3 of this report, the site-specific projects were ranked within each of three Implementation Groups. The projects are presented within these groups and in order from highest to lowest priorities. Table 1 summarizes this information. Figure 4 is an example of the ranking form used. Ranking forms for each project are included in Appendix A of this report.

Projects can be grouped together to capitalize on invasive weed control and long-term maintenance benefits. Some projects would benefit from the implementation of others in close proximity in terms of increasing similar functions and values within a larger area. This is reflected in Items 17 and 18 on the ranking sheets; see Table 1 and Appendix A. Projects may also be combined to capitalize on funding opportunities. The projects do not overlap and do not preclude the implementation of adjacent projects as opportunities arise. However, it is important to consider the proposed elements of each specific project in terms of planning and phasing of construction. For example, proposed revegetation should occur after proposed grading and/or installation of in-stream log structures is accomplished, so as not to disturb newly planted areas.


LEGEND:
GROUP A Limited Permitting
GROUP B Moderate Permitting
GROUP C Extensive Permitting
Boat Launch
East Lake Sammamish Pkwy
Sunset Beach
New Beach
Tibbetts Creek
Interstate 90
NW Sammamish Road
Issaquah Creek
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
A16
A17
A18
B1
B2
B3
B4
B5
B6
B7
B8
B9
B10
C1
C2
C3
C4
C5
C6
C7
C8
C9
C10

Figure 4. Example Ranking Form

EVALUATION FOR _____

AT LAKE SAMMAMISH STATE PARK
(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☐ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)			
2. Is there potential for habitat improvement? (yes = 5, no = 0)			
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)			
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)			
5. Potential for bed & bank stability improvement (high = 5, low = 0)			
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)			
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)			
8. Benefit to water temperature (high = 5, low = 0)			
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)			
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)			
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)			
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)			
13. Constructability (easy = 5, difficult = 0)			
14. Long-term stability/life of project (stable = 5, unstable = 0)			
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)			
16. Amenable to education or interpretive uses (yes =5, no = 0)			
17. Is the success of other projects dependent on this project? (yes =5, no = 0)			
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)			
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)			
20. Relative cost effectiveness (high = 5, low = 0)			
21. Relative maintenance/repair costs (low = 5, high = 0)			
22. Is project amenable to community involvement? (yes = 5, no = 0)			
23. Potential for flow control/detention (high = 5, low = 0)			
24. Benefits to aesthetic values (high = 5, low = 0)			
25. Benefits for public access and recreational opportunities (high = 5, low = 0)			
GRAND TOTAL:			

- **Is there any overriding and compelling reason to do this project?** ☐ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☐ **No** ☐ **Yes**

Describe: _____

Table 1. Lake Sammamish State Park Priority Ranking.

		Priority Ranking																	
		A																	
Project #		A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18
Score		66	65	64	62	61	61	58	57	55	54	53	52	52	49	48	47	47	39
		Rating for Each Site																	
		Site Number																	
		A1	*A2*	*A3*	*A4*	*A5*	*A6*	*A7*	*A8*	*A9*	*A10*	*A11*	*A12*	*A13*	*A14*	*A15*	*A16*	*A17*	*A18*
Question Number	***1***	4	4	5	5	5	5	5	4	5	5	3	3	4	4	5	5	3	5
	2	3	3	4	3	3	4	4	3	4	2	3	4	3	3	3	3	3	2
	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	2	3	4	3	3	4	4	4	4	3	4	3	3	3	0	2	4	4
	5	1	3	1	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0
	6	1	2	1	1	2	1	1	0	0	1	0	1	1	1	1	1	0	1
	7	4	3	4	2	3	3	3	3	1	2	3	3	3	3	3	2	3	2
	8	3	1	1	1	1	2	0	0	0	0	0	1	0	0	0	0	0	0
	9	1	1	1	1	1	1	0	0	0	0	0	1	0	0	0	1	0	0
	10	1	1	1	2	1	2	2	0	0	0	0	1	0	0	0	1	0	0
	11	3	2	2	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0
	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13	4	5	5	5	4	3	5	4	5	5	3	3	4	3	5	4	3	5
	14	4	3	3	4	3	3	4	4	4	4	4	3	3	3	4	3	4	3
	15	4	3	2	2	4	4	2	3	3	2	3	2	2	2	1	2	2	0
	16	3	5	4	3	3	4	2	4	1	4	3	1	4	3	2	2	2	1
	17	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	18	5	5	5	0	5	5	5	5	5	1	5	5	5	5	5	5	5	5
	19	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5	5
	20	4	3	5	5	4	3	4	4	3	5	4	4	4	3	5	3	3	2
	21	3	2	3	4	3	3	3	4	4	4	4	3	3	3	3	2	3	2
	22	4	5	5	5	3	3	4	5	4	3	4	3	4	3	2	2	3	0
	23	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	24	3	4	3	4	3	3	3	3	3	3	3	2	2	2	3	3	2	2
	25	2	1	0	3	1	2	2	2	4	5	2	2	2	3	1	1	2	0
Total		**66**	**65**	**64**	**62**	**61**	**61**	**58**	**57**	**55**	**54**	**53**	**52**	**52**	**49**	**48**	**47**	**47**	**39**

Table 1. Lake Sammamish State Park Priority Ranking (continued).

		Priority Ranking									
		B									
Project #		**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**B8**	**B9**	**B10**
Score		71	70	70	64	64	63	62	54	54	49
		Rating for Each Site									
		Site Number									
		B1	***B2***	***B3***	***B4***	***B5***	***B6***	***B7***	***B8***	***B9***	***B10***
Question Number	***1***	3	5	3	5	5	3	4	5	4	3
	2	4	4	4	3	3	4	3	3	2	2
	3	1	1	1	1	0	1	0	0	0	1
	4	3	3	3	4	3	3	3	4	2	3
	5	4	3	4	3	3	2	3	0	0	2
	6	2	2	2	1	2	1	3	0	0	0
	7	4	4	4	3	3	4	3	3	2	1
	8	2	1	2	3	2	2	1	0	0	1
	9	3	2	3	2	2	2	2	0	0	0
	10	2	1	2	2	3	2	1	1	0	0
	11	3	2	3	4	2	4	2	0	0	0
	12	2	1	2	1	2	3	0	0	0	0
	13	4	4	4	4	3	3	4	4	5	3
	14	3	4	3	3	5	4	3	4	4	5
	15	4	4	4	2	4	4	2	2	3	3
	16	3	4	3	3	3	3	4	4	5	4
	17	1	1	1	0	1	1	0	0	0	0
	18	2	5	2	5	4	1	5	0	5	2
	19	4	3	4	3	3	3	3	4	4	3
	20	4	4	4	3	1	4	4	4	4	3
	21	3	3	3	3	3	3	3	3	4	4
	22	5	3	4	2	3	2	2	4	4	1
	23	0	0	0	0	0	0	0	0	0	0
	24	3	3	3	3	3	3	3	4	1	3
	25	2	3	2	1	1	1	4	5	5	5
Total		**71**	**70**	**70**	**64**	**64**	**63**	**62**	**54**	**54**	**49**

Table 1. Lake Sammamish State Park Priority Ranking (continued).

		Priority Ranking									
		C									
Project #		**C1**	**C2**	**C3**	**C4**	**C5**	**C6**	**C7**	**C8**	**C9**	**C10**
Score		79	77	74	72	72	72	71	70	62	42
		Rating for Each Site									
		Site Number									
		C1	***C2***	***C3***	***C4***	***C5***	***C6***	***C7***	***C8***	***C9***	***C10***
Question Number	***1***	3	3	3	4	3	3	3	4	2	2
	2	4	4	4	5	4	4	4	5	4	3
	3	1	1	1	2	1	1	1	0	1	0
	4	4	4	4	4	4	4	4	4	3	3
	5	5	5	5	3	5	5	5	0	4	0
	6	4	4	4	2	4	4	4	2	2	1
	7	4	4	4	5	4	4	4	5	4	4
	8	2	2	2	2	2	2	2	2	2	0
	9	4	4	5	2	4	4	4	1	3	0
	10	2	2	2	2	2	2	2	2	2	1
	11	5	5	5	3	5	5	5	1	4	0
	12	3	3	4	0	3	3	3	1	0	0
	13	2	2	2	4	2	2	2	3	2	2
	14	4	4	4	3	4	4	4	3	4	3
	15	4	4	4	4	4	4	4	4	4	3
	16	4	4	3	4	3	3	3	4	2	2
	17	2	2	2	0	2	2	1	0	1	0
	18	4	2	2	5	2	2	2	5	5	0
	19	2	2	2	1	2	2	2	2	2	2
	20	3	3	3	3	3	3	3	4	2	4
	21	3	3	3	2	3	3	3	3	2	3
	22	3	3	2	3	2	2	2	4	2	2
	23	0	0	0	2	0	0	0	3	0	3
	24	3	3	3	4	3	3	3	3	3	2
	25	4	4	1	3	1	1	1	5	2	2
Total		**79**	**77**	**74**	**72**	**72**	**72**	**71**	**70**	**62**	**42**

Areas shown are approximate only

Stream, Wetland ■
(X,Y) 407087.012651, 62229.6187451 ■

Tibbetts Creek Streambank Revegetation

Existing & Proposed Conditions:

A previous stream restoration project along Tibbetts Creek was implemented by the Washington State Department of Transportation (WSDOT) along the park entrance road and extending westward from where the creek turns away from the road. The project provided floodplain widening along the left bank (facing downstream), in-stream log structure placement, streambed gravel placement, non-native vegetation removal, and revegetation with native plant species. However, little or no work was done along the right streambank, which is still lined with dense thickets of Himalayan blackberries and some other non-native vegetation types.

This proposed project would expand and complete the riparian restoration along Tibbetts Creek (without further grading) to include the right stream bank for those stream sections included in the previous WSDOT project. Elements of this proposed project include Himalayan blackberry removal, with ongoing monitoring and the removal of regrowth, and the removal of unnatural debris, especially remnants of an old silt fabric fence. Once the streambank has been so-prepared, native vegetation will also be planted along the streambank on the opposing side from the completed WSDOT project. Fencing should be installed as needed to protect plantings at least until they are established. Ongoing monitoring and maintenance will ensure the survival and growth of the planted vegetation without undue invasion by non-native species. This project could be combined with Project B5 and C9, which address other segments of the Tibbetts Creek corridor.

● Project location

Himalayan Blackberry along existing streambank

These enhancements have an estimated construction cost of $80,950. The estimate worksheet can be found in Appendix C.

Wetland, Lakeshore, Upland ■
(X,Y) 407353.650896, 63140.6228152 ■

Lakeshore Enhancement

Existing & Proposed Conditions:

The lakeshore extending from the north side of Sunset Beach to the mouth of Issaquah Creek is a mosaic of wetland and upland conditions. This predominantly sandy area has scattered willows, red-osier dogwood, red alder and black cottonwood trees, some covered with English ivy. It is a high use area of the park, popular with hikers, swimmers, dog walkers, and jet skiers.

Habitat values could be improved in this area by increasing plant species diversity and structural complexity for wildlife food and cover. Increased cover by trees, shrubs, and wetland vegetation could be planned in patches to improve edges and habitat values, while maintaining views and access to the lake. Willow cuttings in particular could be installed in dense clusters to increase and mimic some of the existing condition at the mouth of Issaquah Creek. Ivy should be removed from the cottonwoods. Habitat features such as fallen logs and buffer plantings should also be installed where possible. Enhanced native plant communities and habitat diversity also will serve to discourage congregations of Canada geese as they prefer expanses of lawns and other open areas. This project could be combined with Projects A5 and A6, which address improvements to the Issaquah Creek riparian habitat in the same general area.

● Project location

Wetland function	Existing score	Proposed score
Flood/Storm Water Control	8	9
Base Flow/Ground Water Support	8	9
Erosion/Shoreline Protection	4	5
Water Quality Improvement	5	6
Natural Biological Support	17	24
Overall Habitat Functions	4	5
Specific Habitat Functions	6	8
Cultural/Socioeconomic	12	15

Wetland and buffer functions can be characterized using the Wetland and Buffer Functions Semi-Quantitative Assessment Methodology (Cooke Scientific Services, 2002). The table above shows scores for each function in the existing condition and predicted improvement based on proposed habitat enhancements. The worksheet for this assessment is included in Appendix B.

These enhancements have an estimated construction cost of $125,600. The estimate worksheet can be found in Appendix C.

Lakeshore near the mouth of Issaquah Creek

Wetland, Lakeshore ■
(X,Y) 407166.515427, 62723.4418332 ■

Sunset Beach Wetland Restoration

Existing & Proposed Conditions:

The northeast side of the lakeshore wetland is a very low quality, disturbed area dominated by lawn grasses, spike rush, and weeds. Although identified as jurisdictional wetland (part of Wetland 5A in Wetlands Inventory for the Lake Sammamish State Park Property (The Coot Company, 2005)), this wetland area is more like the beach than the more natural wetland to the west.

This portion of the wetland could be restored to increase the functional area and quality of the overall lakeshore wetland. The project would also serve to raise awareness of wetland restoration needs within the park because it is in such a visible, high use area. A diversity of wetland trees, shrubs, and emergent plants could be installed here to improve wetland functions and habitat values. Wetland buffer vegetation should be planted where possible, as described in Project A7.

Increased native plant communities and habitat diversity also will serve to discourage use by Canada geese as they prefer to congregate on expanses of lawns and other open areas. An interpretive sign could explain the project and highlight habitat values to be improved. Fencing should be installed as needed and at least until plantings have become established. This project could be combined with Projects A7 and A12, which also address features of the lakeshore wetland.

Existing beach is actually a functioning wetland

● Project location

Wetland function	Existing score	Proposed score
Flood/Storm Water Control	10	10
Base Flow/Ground Water Support	9	10
Erosion/Shoreline Protection	6	6
Water Quality Improvement	11	11
Natural Biological Support	25	30
Overall Habitat Functions	6	7
Specific Habitat Functions	10	11
Cultural/Socioeconomic	13	14

Wetland and buffer functions can be characterized using the Wetland and Buffer Functions Semi-Quantitative Assessment Methodology (Cooke Scientific Services, 2002). The table above shows scores for each function in the existing condition and predicted improvement based on proposed habitat enhancements. The worksheet for this assessment is included in Appendix B.

These enhancements have an estimated construction cost of $73,150. The estimate worksheet can be found in Appendix C.

Wetland ■
(X,Y) 406929.093057, 62422.2748226 ■

Pond Habitat Improvement

Existing & Proposed Conditions:

There is a relatively small pond (0.27 acres) along the southwest side of the New Beach parking lot. This detention pond is adjacent to an existing trail from the parking lot, which crosses Tibbetts Creek on a footbridge, and directs people to the baseball fields. Presently, there is a fairly diverse plant community associated with the pond including Douglas fir, red alder and willows, with mostly blackberries in the shrub layer. Emergent and aquatic plants include cattail, yellow iris, slough sedge, lady fern, soft rush, and water smartweed. The pond edges and surrounding buffer areas are mostly lawn grasses, reed canarygrass, creeping buttercup, and birds-foot trefoil. The pond is occasionally dredged for maintenance.

Because this pond is in a very visible location, improvements are proposed to increase wildlife habitat values while preserving the outlook to the pond from the adjacent trail and park bench. Edge habitat could be increased and improved, and a more effective buffer could be developed. Blackberries, reed canarygrass, and other weedy species along the edges of the pond should be removed and replaced with a variety of native trees and shrubs that would increase edge habitat and food and cover values for wildlife. Low-growing shrubs, such as rose, snowberry, and salal should be chosen and planted in clusters to preserve views. Existing trees could be limbed to enhance aesthetics and better accommodate shrub clusters. An interpretive sign explaining zoning and layering of plants in the community, edge habitat, and the value of native plants could be installed here.

● Project location

Existing pond edged by reed canarygrass

Wetland function	Existing score	Proposed score
Flood/Storm Water Control	9	10
Base Flow/Ground Water Support	11	11
Erosion/Shoreline Protection	NA	NA
Water Quality Improvement	12	12
Natural Biological Support	23	25
Overall Habitat Functions	4	4
Specific Habitat Functions	8	8
Cultural/Socioeconomic	11	12

Wetland and buffer functions can be characterized using the Wetland and Buffer Functions Semi-Quantitative Assessment Methodology (Cooke Scientific Services, 2002). The table above shows scores for each function in the existing condition and predicted improvement based on proposed habitat enhancements. The worksheet for this assessment is included in Appendix B.

Stream ■
(X,Y) 407358.043491, 63043.986287 ■

Issaquah Creek Streambank Enhancement

Existing & Proposed Conditions:

Near the mouth of Issaquah Creek along the trail on the left (west) bank is an open area bordering the creek. The site includes two live conifers and a snag along the bank, which is otherwise vegetated almost exclusively with reed canarygrass. The area is approximately 105 feet long by 40 feet wide, extending downstream from an existing fence. Proposed project improvements for this area would entail revegetation with native plant species, possibly retaining a viewpoint.

● Project location

Issaquah Creek streambank near Sunset Beach

Proceeding downstream, the buffer areas between the trail and the creek include a fairly diverse and beneficial assemblage of native plant species, however invasive Himalayan blackberries are interspersed throughout.

It is proposed as part of this potential project that these blackberries be systematically and thoroughly hand-removed and that the area be maintained in a virtually blackberry-free condition.

A viewpoint to Issaquah Creek would enhance user experience

Stream ■
(X,Y) 407414.424188, 62938.843907 ■

Issaquah Creek Streambank Enhancement

Existing & Proposed Conditions:

Upstream of the Issaquah Creek footbridge along the left (southwest) streambank, the existing parking lot leaves little space available to provide a well-functioning buffer for the creek. Downstream of the footbridge along the same bank, beginning at the stream, is a rail fence in need of repair, a trail through an open conifer forest, and an enclosed volleyball/picnic area. An open, grassy area occupies the would-be stream buffer areas extending farther downstream to the west.

Removing and reconfiguring parking lot pavement and implementing a native planting plan would create a wider creek buffer. A significantly scaled back version would involve planting the existing 20-to-25-foot-wide grassy strip adjoining the existing pavement to provide a total vegetated buffer width of 40 to 50 feet. For the left bank buffer areas extending downstream from the footbridge, the project would involve relocating the trail along a somewhat meandering alignment through trees closer to the enclosed picnic area, but farther from the creek, and providing native understory revegetation between the relocated trail and the creek. Building a fence closer to the new trail alignment is a possibility, but not a necessity; neither would it be necessary to remove the existing rail fence along the top-of-streambank. Native revegetation and trail relocation extending farther downstream through the adjacent grassy area along the streambank would serve to further increase the length of stream for which a widened functional stream buffer would be provided.

● Project location

Issaquah Creek streambank near footbridge

Wetland ■
(X,Y) 406874.236163, 62706.4640091 ■

Wetland Buffer Enhancement

Existing & Proposed Conditions:

There is essentially no wetland buffer adjacent to the lakeshore wetland between New Beach and Sunset Beach. The west side is presently mowed grass and sand. This wetland was identified as Wetland 5A in Wetlands Inventory for the Lake Sammamish State Park Property (The Coot Company, 2005).

Wetland buffer plantings should be installed to create additional edge habitat and a more diverse plant community. Conifers, in particular, are lacking in this area, and the addition of firs and cedars would enhance the habitat diversity. There is space for an approximately 25-foot wide buffer area on a hummock between the beach and the wetland. This area could be extended around the wetland as far as possible to the east. Interpretive signage along the trail could be installed to explain the improvements and provide information about habitat features. Fencing should be installed as needed and at least until plantings have become established. This project could be combined with Projects A3 and A12, which also address features of the lakeshore wetland.

Wetland and buffer functions can be characterized using the Wetland and Buffer Functions Semi-Quantitative Assessment Methodology (Cooke Scientific Services, 2002). The table above shows scores for each function in the existing condition and predicted improvement based on proposed habitat enhancements. The worksheet for this assessment is included in Appendix B.

● Project location

Wetland function	Existing score	Proposed score
Flood/Storm Water Control	10	10
Base Flow/Ground Water Support	9	10
Erosion/Shoreline Protection	6	6
Water Quality Improvement	11	11
Natural Biological Support	25	30
Overall Habitat Functions	6	7
Specific Habitat Functions	10	11
Cultural/Socioeconomic	13	14

Existing wetland buffer

Wetland, Upland ■
(X,Y) 407650.613592, 62999.7960113 ■

Open Field Habitat Enhancement

Existing & Proposed Conditions:

The field south of the great blue heron colonial nesting site (heronry) is approximately 15 acres in size. This area is mostly upland, bordered by wetland to the west, north, and east, and by Issaquah Creek to the south. An existing trail is located in the southern portion of this field. This area was not specifically delineated in the Wetlands Inventory for the Lake Sammamish State Park Property (The Coot Company, 2005), but was generally described and identified as Issaquah Creek Uplands. The report characterizes this area as a "combination of slightly higher ground built up from flood overflow deposition plus the drainage effects from the creek channel 'zone of influence' which has created mostly linear 'islands' of upland ground along both sides of the creek."

This area provides an opportunity to create a variety of upland plant communities which would provide a unique assemblage of food and cover opportunities for wildlife diversity. Upland forest and shrub patches or islands could be planted in a scattered fashion to maximize edges while maintaining the open meadow character of the area. The view of the heronry should be preserved. An interpretive sign along the trail could enhance the awareness of this special feature, while explaining the need for protection. The nests are quite a distance away from the trail, mostly only visible when trees are without leaves, and access is limited by dense shrubby thickets on the north side of the field.

● Project location

View of heronry from the open field

Wetland, Upland, Recreation ■

(X,Y) 407402.995668, 62383.4178561 ■
(X,Y) 407671.946829, 62271.4183643

Soccer Field Infrastructure Enhancement

Existing & Proposed Conditions:

Much of the main soccer field complex (westernmost fields) is jurisdictional wetland. The edges adjacent to the mowed and maintained fields are mostly reed canarygrass with some blackberry thickets and other weedy species. There are parking lots on both the west and east sides of the fields. This area was identified as Wetland 6A in Wetlands Inventory for the Lake Sammamish State Park Property (The Coot Company, 2005).

● Project location

Existing open field lacks habitat values

There is opportunity here to improve and enhance some wildlife habitat values, while creating an aesthetically pleasing and useful area for families attending soccer events. This could include a small shelter with tables and a restroom, as well as landscaping with native shade trees and shrub clusters that would provide increased food and cover opportunities for wildlife. There is room for such a feature at both the west and east sides near the existing parking lots.

Orienting visitors to their location in a much larger park setting and including interpretive elements would enhance recreational opportunity for families and children before, during and after soccer games. This project also could be combined with Project A17 for enhanced educational and passive recreational elements.

Increasing demand for amenities near soccer field

Wetland, Recreation ■
(X,Y) 406895.5694, 62244.75182 ■

Trail Improvement

Existing & Proposed Conditions:

Just west of the baseball fields is a trail that meanders through the trees and is used primarily by children riding bikes while their siblings play baseball.

This trail could be improved for greater use by park visitors by providing a destination and a reason for meandering. The fairly aimless form of the existing trail invites non-use. Trail destinations could include an area along a restored portion of Tibbetts Creek, and a connection to a larger trail system in and around the restored Greenwood property as presented in Project C4. Additional plantings along the trail could increase aesthetics and provide enhanced food and cover opportunities for wildlife.

● Project location

Typical trail section

Existing trail near baseball field

Trail connections over Tibbetts creek

Upland, Wetland ■
(X,Y) 408116.135289, 62802.4635735 ■

Oxbow Field Habitat Enhancement

Existing & Proposed Conditions:

The field northeast of the old oxbow on the north side of Issaquah Creek is approximately 20 acres in size. This area is a combination of wetland and upland features, bordered by wetland to the north and east and by Issaquah Creek to the southwest. An existing trail is located in the southern portion of this field. Much of the area is dominated by a variety of grass species, horsetail, buttercup, and vetch, bordered by blackberry thickets and trees beyond. Patches of soft rush, slough sedge, and reed canarygrass are present in the wetter portions to the east. This area was not specifically delineated in the Wetlands Inventory for the Lake Sammamish State Park Property (The Coot Company, 2005), but was generally described and identified in the discussion of Issaquah Creek Uplands. The report characterizes this area as a "combination of slightly higher ground built up from flood overflow deposition plus the drainage effects from the creek channel 'zone of influence' which has created mostly linear 'islands' of upland ground along both sides of the creek."

This area provides an opportunity to create a variety of upland and wetland plant communities, which could be designed to provide a unique assemblage of food and cover opportunities for wildlife diversity. Forest and shrub patches or islands could be planted in a scattered manner to maximize edges while maintaining the open meadow character of the area. This project could be combined with Project B9, which proposes an interpretive area and trail highlighting the oxbow and associated stream processes.

● Project location

Wetland function	Existing score	Proposed score
Flood/Storm Water Control	7	9
Base Flow/Ground Water Support	7	7
Erosion/Shoreline Protection	NA	NA
Water Quality Improvement	12	12
Natural Biological Support	20	27
Overall Habitat Functions	5	7
Specific Habitat Functions	7	9
Cultural/Socioeconomic	12	13

Wetland and buffer functions can be characterized using the Wetland and Buffer Functions Semi-Quantitative Assessment Methodology (Cooke Scientific Services, 2002). The table above shows scores for each function in the existing condition and predicted improvement based on proposed habitat enhancements. The worksheet for this assessment is included in Appendix B.

Existing open field lacks habitat values

Wetland, Lakeshore ■
(X,Y) 407005.759376, 62704.8449689 ■

Lakeshore Wetland Enhancement

Existing & Proposed Conditions:

The lakeshore wetland between New Beach and Sunset Beach is a fairly diverse community of aquatic, emergent, scrub-shrub, and forested wetland features. However, there are portions that have become dominated by reed canarygrass and blackberries, both in the interior of the wetland and along the edges. This wetland was identified as Wetland 5A in Wetlands Inventory for the Lake Sammamish State Park Property (The Coot Company, 2005).

The lakeshore vegetation fringe could be expanded into reed canarygrass areas by mowing and installing willow stakes in clusters. Western red cedar and Sitka spruce trees could be inplanted among the existing trees and shrubs to add a coniferous component to this habitat. Additional shrub plantings such as gooseberry, twinberry, salmonberry, and rose could be planted in clusters to increase edge habitat and wildlife food and cover values. Logs and woody debris could be installed to increase the structural diversity of the habitat. Native emergents such as hardstem bulrush could be installed along the lakeshore. Wetland buffer vegetation should be planted where possible, as described in Project A7. This project could be combined with Projects A3 and A7, which also address features of the lakeshore wetland.

● Project location

Wetland function	Existing score	Proposed score
Flood/Storm Water Control	10	10
Base Flow/Ground Water Support	9	10
Erosion/Shoreline Protection	6	6
Water Quality Improvement	11	11
Natural Biological Support	25	30
Overall Habitat Functions	6	7
Specific Habitat Functions	10	11
Cultural/Socioeconomic	13	14

Lakeshore between New Beach and Sunset Beach

Wetland and buffer functions can be characterized using the Wetland and Buffer Functions Semi-Quantitative Assessment Methodology (Cooke Scientific Services, 2002). The table above shows scores for each function in the existing condition and predicted improvement based on proposed habitat enhancements. The worksheet for this assessment is included in Appendix B.

Wetland ■
(X,Y) 407580.042484, 62707.7020988 ■

Open Field Revegetation

Existing & Proposed Conditions:

This wetland is approximately 5.7 acres in size, located to the southeast of the Sunset Beach parking lot. Bat boxes on poles were installed here as a Boy Scout project several years ago. The wetland is comprised of mostly reed canarygrass with blackberry edges and some patches of soft rush. There are willows and cottonwoods beyond the field margins. Several ditches direct water from and through this area to a ditch paralleling the Sunset Beach parking lot.

The natural habitat values of this wetland could be increased by mowing the reed canarygrass and installing dense patches of native trees and shrubs. Plant species should be chosen for their wildlife food and cover characteristics. It is also recommended that several of the existing bat boxes be moved from the installed poles to adjacent tree trunks to possibly increase their use by bats. Bat slabs could also be installed on some of the trees to investigate their relative use compared to the boxes. These habitat features should be oriented to the south or west to maximize their warmth and potential use by bats. An interpretive sign explaining the habitat structures is a good educational opportunity, especially since this is near a trail and visible from the Sunset Beach parking lot.

● Project location

Wetland function	Existing score	Proposed score
Flood/Storm Water Control	8	10
Base Flow/Ground Water Support	7	7
Erosion/Shoreline Protection	NA	NA
Water Quality Improvement	12	12
Natural Biological Support	19	26
Overall Habitat Functions	5	7
Specific Habitat Functions	7	9
Cultural/Socioeconomic	9	11

Wetland and buffer functions can be characterized using the Wetland and Buffer Functions Semi-Quantitative Assessment Methodology (Cooke Scientific Services, 2002). The table above shows scores for each function in the existing condition and predicted improvement based on proposed habitat enhancements. The worksheet for this assessment is included in Appendix B.

This site has potential for wildlife habitat enhancement

Wetland, Upland ■
(X,Y) 407987.659682, 62210.5614977 ■

Open Field Revegetation

Existing & Proposed Conditions:

The area between the two sets of soccer fields is a combination of wetland and upland features, approximately 23 acres in size. A ditch near the eastern "Costco fields" directs water northward into Issaquah Creek. Much of the area is open grassy field dominated by a variety of grass species, thistle, vetch, and horsetail. Blackberries are dense along the edges of the field with some willow, rose, cottonwood, ash, and hawthorn thickets. This wetland area was delineated and identified as part of Wetlands 6A and 6B in Wetlands Inventory for the Lake Sammamish State Park Property (The Coot Company, 2005). The report also indicates that the ditch near the eastern soccer fields receives significant input from storm-water runoff from the City of Issaquah.

This area could be restored and enhanced with removal of blackberries and revegetation at least on the edges of the existing field. Scattered islands of native trees and shrubs planned to correspond to wetland and upland conditions would provide additional food and cover values for wildlife habitat. As the area is near an existing trail, an interpretive sign could be installed to explain habitat enhancement and the value of additional plant species and structural diversity.

● Project location

Wetland function	Existing score	Proposed score
Flood/Storm Water Control	6	8
Base Flow/Ground Water Support	5	5
Erosion/Shoreline Protection	NA	NA
Water Quality Improvement	12	12
Natural Biological Support	17	23
Overall Habitat Functions	4	6
Specific Habitat Functions	7	8
Cultural/Socioeconomic	10	12

Wetland and buffer functions can be characterized using the Wetland and Buffer Functions Semi-Quantitative Assessment Methodology (Cooke Scientific Services, 2002). The table above shows scores for each function in the existing condition and predicted improvement based on proposed habitat enhancements. The worksheet for this assessment is included in Appendix B.

Himalayan blackberry dominates edge of the wetland

Upland ■
(X,Y) 407111.473182, 62596.274033 ■

Upland Forest Enhancement

Existing & Proposed Conditions:

This mostly upland forest area is approximately 2.8 acres northeast of the New Beach parking lot. The existing plant community is dominated by black cottonwood, red alder, Oregon ash, snowberry, osoberry, red-osier dogwood, and salmonberry. Blackberries, both Himalayan and evergreen, have taken hold with reed canarygrass along the edges of the forest.

The fairly diverse forest community could benefit from removal of invasive plants, particularly blackberry and reed canarygrass. Follow up with additional plantings of shrub species to combat invasive weeds and improve habitat values would improve project success. Plantings could include more of the existing shrub species, additional upland shrub species chosen for their food and cover values, and conifers to increase the habitat diversity of the overall area.

● Project location

Edge of the upland forest

Wetland ■
(X,Y) 407205.758468, 62139.1332504 ■

Wetland Enhancement

Existing & Proposed Conditions:

East of the park entry road and south of Tibbetts tributary #0170, the existing wetland/forested community is dominated by black cottonwood, red alder, and Oregon ash in the canopy. The understory is comprised of willow, red-osier dogwood, rose, twinberry, snowberry, osoberry, and blackberries. Blackberry thickets, both Himalayan and evergreen, are dominant along the edges with reed canarygrass. The wetland was identified as Wetland 8 in Wetlands Inventory for the Lake Sammamish State Park Property (The Coot Company, 2005).

This fairly diverse community could benefit from removal of invasive plants, particularly blackberry, English ivy, and reed canarygrass. Follow up with additional plantings of the existing shrub species to combat invasive weeds and improve habitat values would improve project success. Wetland buffer plantings could be established along the west side of the wetland which is presently mowed grass. A diverse community of upland shrubs and trees, including conifers would add to the habitat value of this area.

● Project location

Wetland function	Existing score	Proposed score
Flood/Storm Water Control	9	9
Base Flow/Ground Water Support	6	6
Erosion/Shoreline Protection	NA	NA
Water Quality Improvement	12	12
Natural Biological Support	21	23
Overall Habitat Functions	5	5
Specific Habitat Functions	8	8
Cultural/Socioeconomic	10	10

Wetland and buffer functions can be characterized using the Wetland and Buffer Functions Semi-Quantitative Assessment Methodology (Cooke Scientific Services, 2002). The table above shows scores for each function in the existing condition and predicted improvement based on proposed habitat enhancements. The worksheet for this assessment is included in Appendix B.

Invasive plants and lawn in the wetland buffer

Wetland, Upland ■
(X,Y) 407660.042121, 62456.2746683 ■

Open Field Enhancement

Existing & Proposed Conditions:

A field northeast of the main (western) soccer complex is approximately seven acres in size. There is a ditch along the southwest side between the maintained soccer area and this field. This area is presently dominated by reed canarygrass, fairly large patches of slough sedge, and horsetail with scattered Oregon ash trees. Blackberry thickets are present throughout and particularly along the edges of the field. Edge habitat between the different plant types is well-distributed. This area was not specifically delineated in Wetlands Inventory for the Lake Sammamish State Park Property (The Coot Company, 2005), but was identified as part of Wetland 6.

Removal and/or control of blackberry and reed canarygrass would be beneficial to the habitat value of this area. Follow-up revegetation should include plant species chosen for their food and cover values for wildlife. The habitat values of existing tree and shrub thickets could be expanded and improved with additional species diversity. This project could be combined with Project A9 for enhanced educational and passive recreational opportunities.

● Project location

Wetland function	Existing score	Proposed score
Flood/Storm Water Control	8	9
Base Flow/Ground Water Support	7	7
Erosion/Shoreline Protection	NA	NA
Water Quality Improvement	12	12
Natural Biological Support	20	25
Overall Habitat Functions	6	7
Specific Habitat Functions	9	11
Cultural/Socioeconomic	9	11

Wetland and buffer functions can be characterized using the Wetland and Buffer Functions Semi-Quantitative Assessment Methodology (Cooke Scientific Services, 2002). The table above shows scores for each function in the existing condition and predicted improvement based on proposed habitat enhancements. The worksheet for this assessment is included in Appendix B.

Existing open field is dominated by invasives

Upland ■
(X,Y) 407830.517538, 62255.3231993 ■

Park Compost Area

Existing & Proposed Conditions:

There is an informal park compost area north of NW Sammamish Road between the two sets of soccer fields. This area could be organized into a more efficient composting operation that would provide materials to be used throughout the park and for restoration projects. Revegetation along the edges could help to define and screen the composting area, as well as prevent encroachment into the surrounding natural communities.

This operation could also serve as a "how to" interpretive area to explain composting. Various stages of decomposition could be shown resulting in potting soil quality, vermicompost (worm bins), and information about not attracting pests, such as rats and other rodents.

● Project location

The informal composting area

Areas shown are approximate only

B1 Issaquah Creek Streambank Enhancement
B2 Issaquah Creek Streambank Enhancement
B3 Issaquah Creek Streambank Enhancement
B4 Tibbetts Creek Tributary Enhancement
B5 Entry Road Relocation
B6 Issaquah Creek Streambank Enhancement
B7* Tibbetts Creek Trail Improvement
B8* Wetland Enhancement and Interpretation
B9 Interpretation of Issaquah Creek Dynamics
B10 Issaquah Creek Footbridge

* These wetlands were evaluated using the *Wetland and Buffer Funcations Semi-Quantitative Assessment Methodology* (Cooke Scientific Services, 2002). This information is presented on the individual project pages and the detailed worksheets are included in Appendix B.

Stream ■
(X,Y) 408136.111389, 62556.1551674 ■

Issaquah Creek Streambank Enhancement

Existing & Proposed Conditions:

Along the right streambank at this location is a vertical streambank 10-12 feet high and approximately 150 feet long. The vegetation extending landward from the top-of-slope is primarily grass and weeds. In contrast to a number of other possible project locations with somewhat similar vertical banks, the active stream flow here has moved away from the toe, leaving a sandy, gravelly bar. As such, the proposed project treatment is also somewhat different.

Rather than re-sloping the banks at this location, it is instead proposed that a myriad of willow and cottonwood stakes and/or rooted bare root stock be densely planted across the entire gravel bar area. A few willow seedlings have already begun to grow there. If this vegetation can become well-established before the stream channel attempts to migrate through this area again, it will facilitate continued aggradation and flood plain formation across the bar area, keeping erosive flows away from the toe of the vertical bank. Additional planting along the top of the bank would also be beneficial by increasing the complexity and edge habitat features of the riparian plant community. This is a relatively low-cost project suitable for implementation by volunteers with hand tools, involving only relatively straightforward permitting issues.

● Project location

These enhancements have an estimated construction cost of $10,500. The estimate worksheet can be found in Appendix C.

High bank along Issaquah Creek

Stream ■
(X,Y) 407407.543267, 63100.2003176 ■

Issaquah Creek Streambank Enhancement

Existing & Proposed Conditions:

Along the east bank of Issaquah Creek, between the mouth and just upstream of the footbridge, seven relatively small "patch" areas between the existing trail and the creek have been identified that would benefit from some combination of invasive plant removal, revegetation with native plant species, trail realignment, picnic area creation, and in-stream log structure placement. Because each of these areas would, by itself, constitute a fairly small project, they have been grouped together as a single project for consideration. Much of this work could be implemented by volunteers as a public improvement project.

i. At the lowermost section, about thirty feet long, the trail is about 12 feet from the creek with no vegetation growing between the creek and trail except reed canarygrass. It is proposed that this area be revegetated without blocking visual access to the creek by using somewhat tall, spindly native vegetation that can be seen through or past.

ii. At the second section, the trail is only 3-5 feet from the creek for a length of approximately 75 feet. The trail should be consolidated with an already-existing alternate alignment that is approximately 30 feet from the creek by blocking and revegetating the abandoned section, retaining a dead-end trail section sufficient to provide a viewpoint.

iii. An approximately 35-foot-diameter reed canarygrass meadow lies near the trail between the creek and the trail with an additional approximately 30 feet of well-functioning, vegetated buffer remaining between the meadow and the creek. It is proposed to mow the reed canarygrass in the meadow, which should kill or greatly reduce it over time, and provide a picnic table. As a result, a small, secluded, inviting clearing would be created in the forest for picnicking, reading, or contemplation.

Streambank of Issaquah Creek along an unpaved path

● Project location

iv. A 100-foot-long by 65-foot-wide strip along the creek includes a 12-inch grand fir, a grand fir snag, and a few willows but is mostly reed canarygrass with a few blackberries. Proposed project activities would include mowing and otherwise controlling the reed canarygrass and blackberries and replanting the area with native vegetation. Access for placing some log structures in the creek channel is also available at this location, and a picnicking spot could also be provided with the addition of a picnic table.

v. Proceeding upstream, another 40-foot-long by 40-foot-wide strip along the creek is also mostly reed canarygrass with a few blackberries. As at other locales, primary project activities would entail mowing and otherwise controlling the reed canarygrass and blackberries and replanting the area with native vegetation.

vi. A 40-foot-long by 25-foot-wide strip along the creek immediately downstream of the footbridge is also mostly reed canarygrass with a few blackberries. As for v., above, mowing and otherwise controlling the reed canarygrass and blackberries and replanting native vegetation is proposed.

vii. Along the north side of Issaquah Creek upstream of the footbridge, very little functioning stream buffer exists between the trail and the creek. Without detracting from the functionality and appearance of the trail, it could be readily moved at low cost to provide a larger stream buffer. The existing trail is essentially unsurfaced, and plenty of open field area exists to the north to accommodate this move. After the trail is moved, the intervening new buffer area between the trail and creek would be replanted with native riparian vegetation.

These enhancements have an estimated construction cost of $47,700. The estimate worksheet can be found in Appendix C.

Stream ■
(X,Y) 408117.063856, 62434.7271471 ■

Issaquah Creek Streambank Enhancement

Existing & Proposed Conditions:

Along the left streambank at this location is a vertical streambank 10-12 feet high and approximately 150 feet long, similar to those described at other locations along the creek in that respect. The vegetation extending landward from the top-of-slope is primarily grass and weeds. In contrast to previous possible project locations with somewhat similar vertical banks, however, groundcover vegetation growing along the lower banks indicates that the bank may be more stable with less active ongoing erosion. Though water still flows past the toe of this bank, small gravel bars have formed and woody debris has accumulated on them.

As such, the proposed treatment for this vertical bank section is somewhat different than for some of the other vertical-bank sections. As proposed, this project entails densely planting the lower banks, primarily, with seedling alders rather than re-sloping them. Invasive vegetation removal and native revegetation above the top-of-bank would also occur. This project would land itself to implementation by volunteers as a public improvement project

● Project location

Revegetation would stabilize the existing streambank

Stream ■
(X,Y) 407143.258752, 62212.1091097 ■

Tibbetts Creek Tributary Enhancement

Existing & Proposed Conditions:

Tibbetts Creek tributary #0170 flows in a straight, ditch-like channel south of the park's offices and maintenance buildings between SE 56th Street and the park entrance road. The tributary joins Tibbetts Creek on the west (downstream) side of the entrance road at the point where Tibbetts turns to the west, away from the road. On parks property, the tributary flows in a straight, excavated channel that dates from the period when the area was cleared and drained for farming early in the last century. Several similar and parallel excavated drainages occur in the park to the northeast. The tributary is low-gradient with a silty channel. It presently lacks woody materials in and along it which would provide habitat cover. Vegetation along its lower section on-site is wanting, consisting almost exclusively of invasive and non-native reed canarygrass and Himalayan blackberries. Farther upstream, on-site vegetation improves, including maturing conifer trees, salmonberry, snowberry, sword fern, and lady fern, however invasive English ivy is also present.

● Project location

Project recommendations for this area focus on the removal of invasives including Himalayan blackberries, reed canarygrass, and English ivy from along the banks and their replacement with a diverse assemblage of native plant species. Some areas appear to have been mowed in the past, and this could be done again but would have to be followed up with physical uprooting and (possibly) judicious herbicide use on re-growth. Banks would be replanted similarly to the existing, well-vegetated central section, but with increased diversity of native plants. Widening of the flood plain could also be done, and would be beneficial, but would involve shifting the trail. Large woody materials could also be placed within the channel as habitat features, but at a lower priority than for similar actions recommended for Tibbetts and Issaquah Creeks.

Existing Tibbetts Creek tributary #0170

Stream, Wetland ■
(X,Y) 407127.782632, 62145.4427455 ■

Entry Road Relocation

Existing & Proposed Conditions:

The existing park entry road is adjacent to the east side of Tibbetts Creek and limits the width of the stream buffer in this area. This project would relocate the park entry road further to the east in an area of mostly existing lawn to create a larger and more effective stream buffer along Tibbetts Creek.

The width of the stream buffer and exact location of the new road would need to allow for an enhanced wetland buffer along the wetland area south of Tibbetts tributary #0170, as described in Project A16. Interpretive signage could be installed along the trail in this area explaining the reason for relocating the road as an additional feature of the Tibbetts Creek Greenway restoration work. Additional floodplain along Tibbetts Creek could also be created as part of this stream buffer restoration and could be combined with Projects A1 and C9.

● Project location map

Existing entry road precludes buffering to Tibbetts Creek nearby

Stream ■
(X,Y) 407982.540657, 62716.8687238 ■

Issaquah Creek Streambank Enhancement

Existing & Proposed Conditions:

Centrally-located along the portion of Issaquah Creek on-site is a relatively straight and narrow channel section confined by dense blackberry thickets on both sides. This section has comparatively low levels of woody debris and, unlike the channel sections immediately upstream and downstream of it, has relatively little bank erosion.

Existing streambank

The project envisioned for this section would, primarily, provide for the placement of a number of habitat structures in the stream channel, composed for the most part of logs with attached root wads. The equipment access needed to place these structures would be through the adjoining dense blackberry thickets. Blackberry removal and native revegetation would occur along equipment access routes at a bare minimum but would more likely also occur over a somewhat or considerably larger area as well.

● Project location

The blackberry thickets in this area are too dense to consider removing by hand, and it is envisioned that initial removal of the thickets, at least, would be done by heavy equipment. Ongoing, persistent hand removal of regrowth would likely be necessary to keep project areas relatively free from blackberries over the long term.

Woody debris would enhance wildlife habitat.
Pictured is a mink near the location of this project.

Wetland, Stream, Lakeshore, Recreation ■
(X,Y) 406662.308553, 62212.1091097 ■

Tibbetts Creek Trail Enhancement

Existing & Proposed Conditions:

The trail from the New Beach parking lot to the mouth of Tibbetts Creek is an informal muddy trail that is under water for some parts of the year when the lake level is high. This trail, which has an entry sign and appears to be fairly well used, leaves the park property and extends onto the adjacent Greenwood property. On the east side of Tibbetts Creek it goes along the lakeshore and through associated wetlands, which are dense and complex habitats in this area with large, old fallen willows and evidence of frequent beaver activity.

The use of this trail should be managed to limit impacts to the adjacent habitats. Boardwalk sections could be added to elevate the trail above the lake level, or trail sections could be moved to higher ground with an improved trail surface to prevent the on-going widening and creeping of the trail as users try to avoid mud and water. Willow stakes could be installed along the lakeshore, with more trees and shrubs at the mouth of the creek for improved habitat and increased shading to combat reed canarygrass. Hardstem bulrush could be planted along the lake edge to increase habitat diversity and the presence of native emergent plants. Buffer functions could also be improved near the trail entry with planting of native conifers and shrubs. Interpretive signs along the trail could help to educate users about the value of the habitat and need to limit impacts to both the riparian and lakeshore environments. This project could be implemented by supervised volunteers under the guidance of a qualified trail builder.

View of shoreline from existing trail

● Project location

Wetland function	Existing score	Proposed score
Flood/Storm Water Control	9	9
Base Flow/Ground Water Support	8	8
Erosion/Shoreline Protection	7	7
Water Quality Improvement	11	11
Natural Biological Support	23	25
Overall Habitat Functions	6	6
Specific Habitat Functions	12	12
Cultural/Socioeconomic	10	12

Wetland and buffer functions can be characterized using the Wetland and Buffer Functions Semi-Quantitative Assessment Methodology (Cooke Scientific Services, 2002). The table above shows scores for each function in the existing condition and predicted improvement based on proposed habitat enhancements. The worksheet for this assessment is included in Appendix B.

These enhancements have an estimated construction cost of $92,250. The estimate worksheet can be found in Appendix C.

Wetland, Recreation ■
(X,Y) 407051.592501, 62212.1091097 ■

Wetland Enhancement and Interpretation

Existing & Proposed Conditions:

Along the northeast side of the baseball fields is a grassy, muddy wetland area which is left unmaintained with the exception of a few mowed trails from the ballfields to the existing restroom. This area is approximately 0.9 acres in size. It is dominated by reed canarygrass with a few scattered shrubs and other weedy species.

This area could be improved and enhanced to increase wildlife habitat values, and to create an aesthetically pleasing and useful area for families attending baseball games. Additions could include a small shelter with tables, native shade trees and shrub clusters that would provide food and cover for wildlife. Shallow depressions could be created to support emergent wetland plants, combat invasive plants, and increase species diversity and edge habitat. Interpretive signage could be installed as an additional feature of the Tibbetts Creek Greenway restoration work.

Wetland and buffer functions can be characterized using the Wetland and Buffer Functions Semi-Quantitative Assessment Methodology (Cooke Scientific Services, 2002). The attached table shows scores for each function in the existing condition and predicted improvement based on proposed habitat enhancements. The worksheet for this assessment is included in Appendix B.

Project location

Wetland function	Existing score	Proposed score
Flood/Storm Water Control	7	9
Base Flow/Ground Water Support	5	7
Erosion/Shoreline Protection	NA	NA
Water Quality Improvement	13	13
Natural Biological Support	13	22
Overall Habitat Functions	3	4
Specific Habitat Functions	5	9
Cultural/Socioeconomic	8	12

Reed canarygrass dominates the existing wetland

Stream, Recreation ■
(X,Y) 407857.541225, 62834.7253319 ■

Interpretation of Issaquah Creek Dynamics

Existing & Proposed Conditions:

A fairly large bend in the stream at this project location was cut off from active flow when the stream eroded a "short cut," bypassing the bend, some time about a decade ago. This "short cutting" of stream and river channels whereby the flow finds and takes a shorter route instead of its previous meandering, circuitous route is known as avulsion. The cut-off channel section which no longer carries active stream flow is called an oxbow. The area of the oxbow is presently very brushy, including dense Himalayan blackberry thickets, making it fairly inaccessible.

As envisioned, this project would include creating a side trail to the area off of the right bank (east side) trail system with well-developed interpretive signage (and possibly an interpretive center) explaining the processes of channel migration, meandering, and avulsion over time. Included would be the concept of a channel migration zone across the floodplain for streams and rivers and an explanation of the various and valuable habitat types that oxbows and side channels provide for a wide variety of wildlife species.

Project location

This effort would include clearing of blackberry thickets and revegetation with native plantings to enhance the riparian corridor in this area. Benefits would include increased edge habitat, and food and cover opportunities for wildlife, as well as improved aesthetics.

Streambank along the oxbow

Stream, Recreation ■
(X,Y) 408052.778434, 62614.4882361 ■

Issaquah Creek Footbridge

Existing & Proposed Conditions:

Centrally-located along the portion of Issaquah Creek on-site is a relatively straight and narrow channel section confined by dense blackberry thickets on both sides. This section, unlike the channel sections immediately upstream and downstream of it, shows little recent tendency to migrate and has relatively little bank erosion.

As such, it is likely that the best location for an additional footbridge crossing of Issaquah Creek would occur somewhere along this section. One area of interest is just downstream of a row of existing poplar trees. This location is fairly close to either alternative for a "creek play" area (projects C1 and C2), and is an opportunity for a relatively short-span bridge due to a fairly deep, stable stream channel with steep sides.

● Project location

Possible site for an additional footbridge

Areas shown are approximate only

C1 Issaquah Creek Streambank Enhancement : Creek Play Area
C2 Issaquah Creek Streambank Enhancement : Creek Play Area
C3 Issaquah Creek Streambank Enhancement
C4* Greenwood Wetland and Stream Restoration
C5 Issaquah Creek Streambank Enhancement
C6 Issaquah Creek Streambank Enhancement
C7 Issaquah Creek Streambank Enhnacement
C8* East Lake Sammamish Parkway Wetland
C9 Tibbetts Creek Floodplain Extension
C10* Wetland Habitat Enhancement

* These wetlands were evaluated using the *Wetland and Buffer Funcations Semi-Quantitative Assessment Methodology* (Cooke Scientific Services, 2002). This information is presented on the individual project pages and the detailed worksheets are included in Appendix B.

Stream, Recreation ■
(X,Y) 408264.6822, 62365.67984 ■

Issaquah Creek Streambank Enhancement : Creek Play Area

Existing & Proposed Conditions:

Along the right streambank at the eastern park boundary is a vertical, eroding streambank 10-12 feet high and approximately 150 feet long. The area is grassy with little vegetation extending landward from the top-of-slope. The eroding, migrating streambank is encroaching upon a section of trail.

Implementation of this project would entail:

1) re-sloping the vertical bank to a slope of 2:1, H:V or flatter
2) placing numerous logs, possibly in the form of a root wad revetment, to stabilize the toe of the slope and provide fish and wildlife habitat functions
3) removing non-native vegetation around the periphery (blackberries) not eliminated by grading
4) revegetating with native plant species

An example or "demonstration" project already implemented for the purpose of addressing this sort of vertical eroding streambank is located just upstream of the park boundary on adjoining property. Variations can be made in terms of bank slope, log placement, and anchoring methods.

Project location

This is one of two alternative locations for a possible "creek play" area (also see discussion of Project C2). This area is sandier than Project C2 and adjacent office buildings are better screened. An existing large log jam could include interpretive signage explaining stream dynamics. A new trail for access would be threaded through adjacent natural and invasive-vegetation areas.

Creek play areas are envisioned as places where people are allowed to get their toes wet, to actually get into the water and play. These have been proposed at gravel bar locations where impacts to existing native vegetation would be minimal and in somewhat out of the way areas where use is likely to be less intense. It is not necessary that the vertical stream banks at these sites be "fixed" for them to function as creek play areas. In fact, if the banks were left vertical, it would add to the secluded "natural amphitheatre" character of these areas and reduce cross-creek foot traffic.

Existing streambank and gravel bar offer potential for recreational usage

Stream, Recreation ■
(X,Y) 408227.7776, 62512.10775 ■

Issaquah Creek Streambank Enhancement : Creek Play Area

Existing & Proposed Conditions:

Along the right streambank in view of business park buildings near the eastern park boundary is a vertical, eroding streambank 10-12 feet high and approximately 150 feet long. The area is grassy with little vegetation extending landward from the top-of-slope. The eroding, migrating streambank is encroaching upon a section of trail.

Implementation of this project would entail:

1) re-sloping the vertical bank to a slope of 2:1, H:V or flatter
2) placing numerous logs, possibly in the form of a root wad revetment, to stabilize the toe of the slope and provide fish and wildlife habitat functions
3) removing non-native vegetation around the periphery (blackberries) not eliminated by grading
4) revegetating with native plant species

An example or "demonstration" project already implemented for the purpose of addressing this sort of vertical eroding streambank is

Existing gravel bar provides recreational opportunities

● Project location

located just upstream of the park boundary on adjoining property. Variations can be made in terms of bank slope, log placement, and anchoring methods.

This is also one of two possible locations for a "creek play" area. Creek play areas are envisioned as places where people are allowed to get their toes wet, to actually get into the water and play. These have been proposed at gravel bar locations where impacts to existing native vegetation would be minimal and in somewhat out of the way areas where use is likely to be less intense. It is not necessary that the vertical stream banks at these sites be "fixed" for them to function as creek play areas. In fact, if the banks were left vertical, it would add to the secluded "natural amphitheatre" character of these areas and reduce cross-creek foot traffic. This location has a nice, fairly large gravel bar, southeast facing. The area needs to be cleared of invasive Japanese knotweed and reed canarygrass. A new trail would be threaded through adjacent natural and invasive-vegetation areas to provide access to creek. Also see discussion of Project C1.

Stream ■
(X,Y) 407899.2077, 62675.20225 ■

Issaquah Creek Streambank Enhancement

Existing & Proposed Conditions:

Along the left streambank just upstream of a prominent oxbow is a vertical, eroding streambank 10-12 feet high and approximately 300 feet long. The area is grassy with little vegetation extending landward from the top-of-slope. The eroding, migrating streambank has made it necessary to relocate a section of trail farther from the creek for safety reasons.

Implementation of this project would entail:

1) re-sloping the vertical bank to a slope of 2:1, H:V or flatter
2) placing numerous logs, possibly in the form of a root wad revetment, to stabilize the toe of the slope and provide fish and wildlife habitat functions
3) removing non-native vegetation around the periphery (blackberries) not eliminated by grading
4) revegetating with native plant species.

Project location

An example or "demonstration" project already implemented for the purpose of addressing this sort of vertical eroding streambank is located just upstream of the park boundary on adjoining property. Variations can be made in terms of bank slope, log placement, and anchoring methods.

The migrating streambank

Stream, Wetland, Lakeshore, Recreation ■
(X,Y) 406728.9749, 62383.5369 ■

Greenwood Wetland and Stream Restoration

Existing & Proposed Conditions:

The Greenwood property is approximately 14.8 acres, extending from Interstate 90 across the lower reaches of Tibbetts Creek, including the mouth of the creek at Lake Sammamish. This property, which is proposed for future acquisition by Washington State Parks, includes approximately 12 acres of abandoned pasture and hayfield. This large open field is primarily dominated by reed canarygrass surrounded by blackberry thickets with some trees along the edges. Schneider Creek flows from a culvert under the freeway along the western margin of the property to Lake Sammamish. The lakeshore is well vegetated with dense and diverse trees, shrubs, and emergent vegetation. There is abundant downed wood and complex habitat structure.

This property provides a tremendous opportunity to greatly improve fish and wildlife habitat, as well as aesthetics. Schneider Creek could be relocated to the east with a meandering stream channel, associated backwater depressions, log structures, and revegetation with a diverse assemblage of native riparian and wetland plants. Other wetland depressions created throughout the field could further increase the complexity and edge character of the habitat while altering microclimates to discourage invasive plants. Variable sizes, shapes, slopes, and orientation could be incorporated into these depressions to provide excellent amphibian habitat. Installation of snags and brush piles, comprehensive and diverse revegetation, and screening with trees planted along the freeway all would contribute to the overall restoration and value of this area. A trail from the baseball fields and parking lot could lead to an overlook and/or boardwalk through the restored wetland with interpretive signage.

● Project location

Wetland function	Existing score	Proposed score
Flood/Storm Water Control	6	11
Base Flow/Ground Water Support	6	11
Erosion/Shoreline Protection	7	7
Water Quality Improvement	12	12
Natural Biological Support	19	30
Overall Habitat Functions	5	8
Specific Habitat Functions	7	13
Cultural/Socioeconomic	8	14

The abandoned hayfield along Interstate 90

Wetland and buffer functions can be characterized using the Wetland and Buffer Functions Semi-Quantitative Assessment Methodology (Cooke Scientific Services, 2002). The table above shows scores for each function in the existing condition and predicted improvement based on proposed habitat enhancements. The worksheet for this assessment is included in Appendix B.

Stream ■
(X,Y) 407777.7797, 62739.48767 ■

Issaquah Creek Streambank Enhancement

Existing & Proposed Conditions:

Along the left streambank just upstream of the "orchard" is a vertical, eroding streambank 8-10 feet high and approximately 120 feet long. The vegetation extending landward from the top-of-slope is primarily reed canarygrass and Himalayan blackberry.

Implementation of this project would entail:

1) re-sloping the vertical bank to a slope of 2:1, H:V or flatter
2) placing numerous logs, possibly in the form of a root wad revetment, to stabilize the toe of the slope and provide fish and wildlife habitat functions
3) removing non-native vegetation around the periphery (blackberries) not eliminated by grading
4) revegetating with native plant species

● Project location

An example or "demonstration" project already implemented for the purpose of addressing this sort of vertical eroding streambank is located just upstream of the park boundary on adjoining property. Variations can be made in terms of bank slope, log placement, and anchoring methods.

Invasive species on existing streambank

Stream ■
(X,Y) 408071.826, 62541.86952 ■

Issaquah Creek Streambank Enhancement

Existing & Proposed Conditions:

Along the left streambank just upstream of a more stable section, including a possible bridge crossing location, is a vertical, eroding streambank 10-12 feet high and approximately 150 feet long. The area is grassy with little vegetation extending landward from the top-of-slope. The eroding, migrating streambank has made it necessary to relocate a section of trail farther from the creek for safety reasons.

Implementation of this project would entail:

1) re-sloping the vertical bank to a slope of 2:1, H:V or flatter
2) placing numerous logs, possibly in the form of a root wad revetment, to stabilize the toe of the slope and provide fish and wildlife habitat functions
3) removing non-native vegetation around the periphery (blackberries) not eliminated by grading
4) revegetating with native plant species

● Project location

An example or "demonstration" project already implemented for the purpose of addressing this sort of vertical eroding streambank is located just upstream of the park boundary on adjoining property. Variations can be made in terms of bank slope, log placement, and anchoring methods.

The eroding streambank

Stream ■
(X,Y) 407711.1133, 62769.24944 ■

Issaquah Creek Streambank Enhancement

Existing & Proposed Conditions:

Along the left streambank just downstream of the "orchard" is a vertical, eroding streambank 10-12 feet high and approximately 75 feet long. The vegetation extending landward from the top-of-slope is primarily reed canarygrass and Himalayan blackberry.

Implementation of this project would entail

1) re-sloping the vertical bank to a slope of 2:1, H:V or flatter
2) placing numerous logs, possibly in the form of a root wad revetment, to stabilize the toe of the slope and provide fish and wildlife habitat functions
3) removing non-native vegetation around the periphery (blackberries) not eliminated by grading
4) revegetating with native plant species

● Project location

An example or "demonstration" project already implemented for the purpose of addressing this sort of vertical eroding streambank is located just upstream of the park boundary on adjoining property. Variations can be made in terms of bank slope, log placement, and anchoring methods.

Streambank encroached by invasive species

Wetland, Lakeshore, Recreation ■
(X,Y) 408190.873, 63094.24796 ■

East Lake Sammamish Parkway Wetland

Existing & Proposed Conditions:

This large wetland, approximately 46 acres, is south of the boat launch between Lake Sammamish and East Lake Sammamish Parkway SE. The northern boundary of the wetland near the boat launch was delineated and identified as Wetland 4 in Wetlands Inventory for the Lake Sammamish State Park Property (The Coot Company, 2005). Dense, monotypic reed canarygrass dominates this abandoned hayfield and pasture. Blackberries are conspicuously absent from much of the area, as evidence of the wetter conditions found here compared to other wetlands in the park. Several ditches direct water westward into Lake Sammamish. There are small groves of trees and shrubs along the ditches, field edges, and scattered throughout the field.

There is tremendous opportunity to greatly improve wetland functions and wildlife habitat, as well as aesthetics at this site. The ditches could be plugged and/or meander flow pathways created to increase hydrologic diversity. Topography could be changed to create wetland depressions throughout the field to further increase the complexity and edge character of the habitat while altering microclimates to discourage invasive plants. Variable sizes, shapes, slopes, and orientation could be incorporated into these depressions to create excellent amphibian habitat. Installation of snags, logs and brush piles, along with comprehensive and diverse revegetation would contribute to the overall restoration and value of this area. A trail and boardwalk loop connecting from the East Lake Sammamish Trail could allow for public access, viewing, and interpretive opportunities. This large project could be built in phases.

Wetland and buffer functions can be characterized using the Wetland and Buffer Functions Semi-Quantitative Assessment Methodology (Cooke Scientific Services, 2002). The table above shows scores for each function in the existing condition and predicted improvement based on proposed habitat enhancements. The worksheet for this assessment is included in Appendix B.

● Project location

Wetland function	Existing score	Proposed score
Flood/Storm Water Control	9	11
Base Flow/Ground Water Support	9	11
Erosion/Shoreline Protection	7	7
Water Quality Improvement	11	11
Natural Biological Support	17	25
Overall Habitat Functions	5	8
Specific Habitat Functions	9	13
Cultural/Socioeconomic	11	15

Reed canarygrass dominates the existing open field

Wetland, Stream ■
(X,Y) 406751.5939, 62495.44116 ■

Tibbetts Creek Floodplain Extension

Existing & Proposed Conditions:

A previous stream restoration project along Tibbetts Creek was implemented by the Washington State Department of Transportation (WSDOT) along the park entrance road and extending westward from where the creek turns away from the road. The project provided floodplain widening along the left bank (facing downstream), in-stream log structure placement, streambed gravel placement, non-native vegetation removal, and revegetation with native plant species.

This project would extend this same type of in-stream and riparian restoration farther downstream along Tibbetts Creek according to the same template. This extension of the previous project would similarly entail grading to extend the floodplain along the left bank, in-stream log structure placement, blackberry removal, and native revegetation downstream beginning where the previous WSDOT project left off. Furthermore, right bank work along this stream section would include removal of the obsolete silt fencing remaining from already-completed invasive plant removal and revegetation work. This project could be combined with Project A1 and B5, which address other segments of the Tibbetts Creek corridor.

● Project location

The existing Tibbetts Creek channel

Wetland, Upland ■
(X,Y) 407955.1598, 62582.34552 ■

Wetland Habitat Enhancement

Existing & Proposed Conditions:

There is an approximately 15.5-acre wetland and upland field south of Issaquah Creek near the southeast center of the park. This area has more vegetative diversity than many of the other existing fields with large patches of willows, small-fruited bulrush, cattail, and horsetail. Willow and blackberry thickets edge the field. A ditch through this area directs water northward to Issaquah Creek. This wetland was not specifically delineated in the Wetlands Inventory for the Lake Sammamish State Park Property (The Coot Company, 2005), but it is connected to areas identified as Wetlands 6A and 6B. This report also indicates that this ditch receives significant input from stormwater runoff from the City of Issaquah. Drier, upland conditions are present in the north end of this field closer to Issaquah Creek. This area was generally described and identified in the Wetland Inventory report as Issaquah Creek Uplands, a "combination of slightly higher ground built up from flood overflow deposition plus the drainage effects from the creek channel 'zone of influence' which has created mostly linear 'islands' of upland ground along both sides of the creek."

This fairly remote section of the park could be enhanced to increase habitat, food and cover values. The ditch could be plugged to increase wetland hydrology and accommodate more diverse plant communities. Logs and brush piles could be installed to provide additional habitat features. Upland plant communities could be planted to the north to create an overall complex of wetland and upland types.

Wetland and buffer functions can be characterized using the Wetland and Buffer Functions Semi-Quantitative Assessment Methodology (Cooke Scientific Services, 2002). The table above shows scores for each function in the existing condition and predicted improvement based on proposed habitat enhancements. The worksheet for this assessment is included in Appendix B.

● Project location

Wetland function	Existing score	Proposed score
Flood/Storm Water Control	7	10
Base Flow/Ground Water Support	7	9
Erosion/Shoreline Protection	NA	NA
Water Quality Improvement	12	12
Natural Biological Support	20	27
Overall Habitat Functions	7	8
Specific Habitat Functions	8	11
Cultural/Socioeconomic	11	13

Fairly diverse existing vegetation

9. REFERENCES

Booth, Derek. 1990. Surficial geology of the Skykomish and Snoqualmie Rivers area, Snohomish and King Counties, Washington.

Cooke Scientific Services. 2002. Wetland and Buffer Functions Semi-Quantitative Assessment Methodology.

The Coot Company. January 2005. Wetlands Inventory for the Lake Sammamish State Park Property.

Washington State Department of Transportation, Northwest Region Biology. April 2003. Final Wetland Mitigation Report, I-90 Sunset Way Interchange Violation.

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Washington State Department of Transportation, Northwest Region Biology. December 2003. Final Wetland Mitigation Report, I-90 Sunset Way Interchange Retaining Wall 16.

Washington State Parks and Recreation Commission. August 2003. Lake Sammamish State Park Area Management Plan.

Washington State Parks and Recreation Commission. February 2005. Master Development Plan/Environmental Impact Statement (EIS) Proposal Overview.

APPENDIX A

Project Ranking Forms

Lake Sammamish State Park

Priority Ranking

	A																	
Project #	**A1**	**A2**	**A3**	**A4**	**A5**	**A6**	**A7**	**A8**	**A9**	**A10**	**A11**	**A12**	**A13**	**A14**	**A15**	**A16**	**A17**	**A18**
Score	66	65	64	62	61	61	58	57	55	54	53	52	52	49	48	47	47	39

Rating for Each Site.

		Site Number																	
		A1	***A2***	***A3***	***A4***	***A5***	***A6***	***A7***	***A8***	***A9***	***A10***	***A11***	***A12***	***A13***	***A14***	***A15***	***A16***	***A17***	***A18***
Question Number	***1***	4	4	5	5	5	5	5	4	5	5	3	3	4	4	5	5	3	5
	2	3	3	4	3	3	4	4	3	4	2	3	4	3	3	3	3	3	2
	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	2	3	4	3	3	4	4	4	4	3	4	3	3	3	0	2	4	4
	5	1	3	1	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0
	6	1	2	1	1	2	1	1	0	0	1	0	1	1	1	1	1	0	1
	7	4	3	4	2	3	3	3	3	1	2	3	3	3	3	3	2	3	2
	8	3	1	1	1	1	2	0	0	0	0	0	1	0	0	0	0	0	0
	9	1	1	1	1	1	1	0	0	0	0	0	1	0	0	0	1	0	0
	10	1	1	1	2	1	2	2	0	0	0	0	1	0	0	0	1	0	0
	11	3	2	2	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0
	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	22	4	5	5	5	3	3	4	5	4	3	4	3	4	3	2	2	3	0
	23	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	24	3	4	3	4	3	3	3	3	3	3	3	2	2	2	3	3	2	2
	25	2	1	0	3	1	2	2	2	4	5	2	2	2	3	1	1	2	0
Total		66	65	64	62	61	61	58	57	55	54	53	52	52	49	48	47	47	39

Lake Sammamish State Park

Priority Ranking

	B										C									
Project #	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**B8**	**B9**	**B10**	**C1**	**C2**	**C3**	**C4**	**C5**	**C6**	**C7**	**C8**	**C9**	**C10**
Score	71	70	70	64	64	63	62	54	54	49	79	77	74	72	72	72	71	70	62	42

Rating for Each Site.

		Site Number																			
		B1	***B2***	***B3***	***B4***	***B5***	***B6***	***B7***	***B8***	***B9***	***B10***	***C1***	***C2***	***C3***	***C4***	***C5***	***C6***	***C7***	***C8***	***C9***	***C10***
Question Number	***1***	3	5	3	5	5	3	4	5	4	3	3	3	3	4	3	3	3	4	2	2
	2	4	4	4	3	3	4	3	3	2	2	4	4	4	5	4	4	4	5	4	3
	3	1	1	1	1	0	1	0	0	0	1	1	1	1	2	1	1	1	0	1	0
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	5	4	3	4	3	3	2	3	0	0	2	5	5	5	3	5	5	5	0	4	0
	6	2	2	2	1	2	1	3	0	0	0	4	4	4	2	4	4	4	2	2	1
	7	4	4	4	3	3	4	3	3	2	1	4	4	4	5	4	4	4	5	4	4
	8	2	1	2	3	2	2	1	0	0	1	2	2	2	2	2	2	2	2	2	0
	9	3	2	3	2	2	2	2	0	0	0	4	4	5	2	4	4	4	1	3	0
	10	2	1	2	2	3	2	1	1	0	0	2	2	2	2	2	2	2	2	2	1
	11	3	2	3	4	2	4	2	0	0	0	5	5	5	3	5	5	5	1	4	0
	12	2	1	2	1	2	3	0	0	0	0	3	3	4	0	3	3	3	1	0	0
	13	4	4	4	4	3	3	4	4	5	3	2	2	2	4	2	2	2	3	2	2
	14	3	4	3	3	5	4	3	4	4	5	4	4	4	3	4	4	4	3	4	3
	15	4	4	4	2	4	4	2	2	3	3	4	4	4	4	4	4	4	4	4	3
	16	3	4	3	3	3	3	4	4	5	4	4	4	3	4	3	3	3	4	2	2
	17	1	1	1	0	1	1	0	0	0	0	2	2	2	0	2	2	1	0	1	0
	18	2	5	2	5	4	1	5	0	5	2	4	2	2	5	2	2	2	5	5	0
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	22	5	3	4	2	3	2	2	4	4	1	3	3	2	3	2	2	2	4	2	2
	23	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	3
	24	3	3	3	3	3	3	3	4	1	3	3	3	3	4	3	3	3	3	3	2
	25	2	3	2	1	1	1	4	5	5	5	4	4	1	3	1	1	1	5	2	2
Total		71	70	70	64	64	63	62	54	54	49	79	77	74	72	72	72	71	70	62	42

EVALUATION FOR A1 TIBBETTS STREAMBANK REVEGETATION

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☒ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	4		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	3		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	2		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	1		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	1		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	4		
8. Benefit to water temperature (high = 5, low = 0)	3		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	1		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	1		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	3		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	1		
13. Constructability (easy = 5, difficult = 0)	4		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	4		
16. Amenable to education or interpretive uses (yes =5, no = 0)	3		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	1		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	5		
20. Relative cost effectiveness (high = 5, low = 0)	4		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	4		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	2		
GRAND TOTAL:	**66**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**
-

Describe:

EVALUATION FOR A2 LAKESHORE NORTH OF SUNSET BEACH AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☒ **Wetland (W)** ☐ **Stream (S)** ☒ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	4		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	3		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	3		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	3		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	2		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	3		
8. Benefit to water temperature (high = 5, low = 0)	1		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	1		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	1		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	2		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	5		
14. Long-term stability/life of project (stable = 5, unstable = 0)	3		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	3		
16. Amenable to education or interpretive uses (yes =5, no = 0)	5		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	1		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	5		
20. Relative cost effectiveness (high = 5, low = 0)	3		
21. Relative maintenance/repair costs (low = 5, high = 0)	2		
22. Is project amenable to community involvement? (yes = 5, no = 0)	5		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	4		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	1		
GRAND TOTAL:	**65**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**
-

Describe:

EVALUATION FOR A3 WETLAND RESTORATION SOUTH SIDE OF SUNSET BEACH AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☒ **Wetland (W)** ☐ **Stream (S)** ☒ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	5		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	4		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	4		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	1		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	1		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	4		
8. Benefit to water temperature (high = 5, low = 0)	1		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	1		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	1		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	2		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	5		
14. Long-term stability/life of project (stable = 5, unstable = 0)	3		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	2		
16. Amenable to education or interpretive uses (yes =5, no = 0)	4		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	5		
20. Relative cost effectiveness (high = 5, low = 0)	5		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	5		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	0		
GRAND TOTAL:	**64**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe:

EVALUATION FOR A4 POND HABITAT IMPROVEMENT

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☒ **Wetland (W)** ☐ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	5		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	3		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	3		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	1		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	1		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	2		
8. Benefit to water temperature (high = 5, low = 0)	1		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	1		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	2		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	0		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	5		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	2		
16. Amenable to education or interpretive uses (yes =5, no = 0)	3		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	0		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	5		
20. Relative cost effectiveness (high = 5, low = 0)	5		
21. Relative maintenance/repair costs (low = 5, high = 0)	4		
22. Is project amenable to community involvement? (yes = 5, no = 0)	5		
23. Potential for flow control/detention (high = 5, low = 0)	3		
24. Benefits to aesthetic values (high = 5, low = 0)	4		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	3		
GRAND TOTAL:	**62**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe:

EVALUATION FOR A5 ISSAQUAH CREEK LEFT BANK NEAR LAKESHORE

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☒ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	5		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	3		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	1		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	3		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	1		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	2		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	3		
8. Benefit to water temperature (high = 5, low = 0)	1		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	1		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	1		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	1		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	4		
14. Long-term stability/life of project (stable = 5, unstable = 0)	3		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	4		
16. Amenable to education or interpretive uses (yes =5, no = 0)	3		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	1		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	5		
20. Relative cost effectiveness (high = 5, low = 0)	4		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	3		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	1		
GRAND TOTAL:	**61**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe:

EVALUATION FOR A6 ISSAQUAH CREEK LEFT BANK NEAR FOOTBRIDGE

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☒ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	5		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	4		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	4		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	1		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	1		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	3		
8. Benefit to water temperature (high = 5, low = 0)	2		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	1		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	2		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	1		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	3		
14. Long-term stability/life of project (stable = 5, unstable = 0)	3		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	4		
16. Amenable to education or interpretive uses (yes =5, no = 0)	4		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	4		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	5		
20. Relative cost effectiveness (high = 5, low = 0)	3		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	3		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	2		
GRAND TOTAL:	**61**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe:

EVALUATION FOR A7 WETLAND BUFFER ENHANCEMENT

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☒ **Wetland (W)** ☐ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	5		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	4		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	4		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	0		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	1		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	3		
8. Benefit to water temperature (high = 5, low = 0)	0		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	0		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	2		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	0		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	5		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	2		
16. Amenable to education or interpretive uses (yes =5, no = 0)	2		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	5		
20. Relative cost effectiveness (high = 5, low = 0)	4		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	4		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	2		
GRAND TOTAL:	**58**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

EVALUATION FOR A8 FIELD SOUTH OF HERON ROOKERY

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☒ **Wetland (W)** ☐ **Stream (S)** ☐ **Lakeshore (L)** ☒ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	4		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	3		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	4		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	0		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	0		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	3		
8. Benefit to water temperature (high = 5, low = 0)	0		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	0		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	0		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	0		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	4		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	3		
16. Amenable to education or interpretive uses (yes =5, no = 0)	4		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	5		
20. Relative cost effectiveness (high = 5, low = 0)	4		
21. Relative maintenance/repair costs (low = 5, high = 0)	4		
22. Is project amenable to community involvement? (yes = 5, no = 0)	5		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	2		
GRAND TOTAL:	**57**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

EVALUATION FOR A9 PARENT PLACES AT SOCCER FIELDS

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☐ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☒ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	5		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	4		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	4		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	0		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	0		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	1		
8. Benefit to water temperature (high = 5, low = 0)	0		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	0		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	0		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	0		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	5		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	3		
16. Amenable to education or interpretive uses (yes =5, no = 0)	1		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	5		
20. Relative cost effectiveness (high = 5, low = 0)	3		
21. Relative maintenance/repair costs (low = 5, high = 0)	4		
22. Is project amenable to community involvement? (yes = 5, no = 0)	4		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	4		
GRAND TOTAL:	**55**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe:

EVALUATION FOR A10 TRAIL IMPROVEMENT WEST OF BASEBALL FIELDS

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☒ **Wetland (W)** ☐ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☒ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	5		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	2		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	3		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	0		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	1		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	2		
8. Benefit to water temperature (high = 5, low = 0)	0		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	0		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	0		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	0		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	5		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	2		
16. Amenable to education or interpretive uses (yes =5, no = 0)	4		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	1		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	5		
20. Relative cost effectiveness (high = 5, low = 0)	5		
21. Relative maintenance/repair costs (low = 5, high = 0)	4		
22. Is project amenable to community involvement? (yes = 5, no = 0)	3		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	5		
GRAND TOTAL:	**54**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

EVALUATION FOR A11 FIELD NORTHEAST OF OXBOW

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☒ **Wetland (W)** ☐ **Stream (S)** ☐ **Lakeshore (L)** ☒ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	3		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	3		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	4		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	0		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	0		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	3		
8. Benefit to water temperature (high = 5, low = 0)	0		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	0		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	0		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	0		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	3		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	3		
16. Amenable to education or interpretive uses (yes =5, no = 0)	3		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	5		
20. Relative cost effectiveness (high = 5, low = 0)	4		
21. Relative maintenance/repair costs (low = 5, high = 0)	4		
22. Is project amenable to community involvement? (yes = 5, no = 0)	4		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	2		
GRAND TOTAL:	**53**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**
-

Describe:

EVALUATION FOR A12 LAKESHORE WETLAND ENHANCEMENT BETWEEN BEACHES AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☒ **Wetland (W)** ☐ **Stream (S)** ☒ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	3		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	4		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	3		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	1		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	1		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	3		
8. Benefit to water temperature (high = 5, low = 0)	1		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	1		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	1		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	1		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	3		
14. Long-term stability/life of project (stable = 5, unstable = 0)	3		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	2		
16. Amenable to education or interpretive uses (yes =5, no = 0)	1		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	5		
20. Relative cost effectiveness (high = 5, low = 0)	4		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	3		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	2		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	2		
GRAND TOTAL:	**52**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe:

EVALUATION FOR A13 FIELD SOUTHEAST OF MAIN PARKING LOT

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☒ **Wetland (W)** ☐ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	4		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	3		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	3		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	0		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	1		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	3		
8. Benefit to water temperature (high = 5, low = 0)	0		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	0		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	0		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	0		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	4		
14. Long-term stability/life of project (stable = 5, unstable = 0)	3		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	2		
16. Amenable to education or interpretive uses (yes =5, no = 0)	4		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	5		
20. Relative cost effectiveness (high = 5, low = 0)	4		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	4		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	2		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	2		
GRAND TOTAL:	**52**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

EVALUATION FOR A14 AREA BETWEEN TWO SETS OF SOCCER FIELDS

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☒ **Wetland (W)** ☐ **Stream (S)** ☐ **Lakeshore (L)** ☒ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	4		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	3		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	3		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	0		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	1		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	3		
8. Benefit to water temperature (high = 5, low = 0)	0		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	0		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	0		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	0		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	3		
14. Long-term stability/life of project (stable = 5, unstable = 0)	3		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	2		
16. Amenable to education or interpretive uses (yes =5, no = 0)	3		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	5		
20. Relative cost effectiveness (high = 5, low = 0)	3		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	3		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	2		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	3		
GRAND TOTAL:	**49**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe:

EVALUATION FOR A15 UPLAND FOREST ENHANCEMENT

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☐ **Stream (S)** ☐ **Lakeshore (L)** ☒ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	5		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	3		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	0		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	0		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	1		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	3		
8. Benefit to water temperature (high = 5, low = 0)	0		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	0		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	0		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	0		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	5		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	1		
16. Amenable to education or interpretive uses (yes =5, no = 0)	2		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	5		
20. Relative cost effectiveness (high = 5, low = 0)	5		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	2		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	1		
GRAND TOTAL:	**48**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

EVALUATION FOR A16 WETLAND ADJACENT TO TIBBETTS TRIBUTARY #0170

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☒ **Wetland (W)** ☐ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	5		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	3		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	2		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	0		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	1		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	2		
8. Benefit to water temperature (high = 5, low = 0)	0		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	1		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	1		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	0		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	4		
14. Long-term stability/life of project (stable = 5, unstable = 0)	3		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	2		
16. Amenable to education or interpretive uses (yes =5, no = 0)	2		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	5		
20. Relative cost effectiveness (high = 5, low = 0)	3		
21. Relative maintenance/repair costs (low = 5, high = 0)	2		
22. Is project amenable to community involvement? (yes = 5, no = 0)	2		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	1		
GRAND TOTAL:	**47**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

EVALUATION FOR A17 FIELD NORTHEAST OF SOCCER FIELDS

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☒ **Wetland (W)** ☐ **Stream (S)** ☐ **Lakeshore (L)** ☒ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	3		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	3		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	4		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	0		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	0		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	3		
8. Benefit to water temperature (high = 5, low = 0)	0		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	0		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	0		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	0		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	3		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	2		
16. Amenable to education or interpretive uses (yes =5, no = 0)	2		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	5		
20. Relative cost effectiveness (high = 5, low = 0)	3		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	3		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	2		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	2		
GRAND TOTAL:	**47**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe:

EVALUATION FOR A18 COMPOST AREA AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☐ **Stream (S)** ☐ **Lakeshore (L)** ☒ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	5		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	2		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	4		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	0		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	1		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	2		
8. Benefit to water temperature (high = 5, low = 0)	0		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	0		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	0		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	0		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	5		
14. Long-term stability/life of project (stable = 5, unstable = 0)	3		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	0		
16. Amenable to education or interpretive uses (yes =5, no = 0)	1		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	5		
20. Relative cost effectiveness (high = 5, low = 0)	2		
21. Relative maintenance/repair costs (low = 5, high = 0)	2		
22. Is project amenable to community involvement? (yes = 5, no = 0)	0		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	2		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	0		
GRAND TOTAL:	**39**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

EVALUATION FOR B1 ISSAQUAH CREEK RIGHT BANK UPSTREAM OF PROPERTIES AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☒ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	3		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	4		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	1		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	3		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	4		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	2		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	4		
8. Benefit to water temperature (high = 5, low = 0)	2		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	3		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	2		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	3		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	2		
13. Constructability (easy = 5, difficult = 0)	4		
14. Long-term stability/life of project (stable = 5, unstable = 0)	3		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	4		
16. Amenable to education or interpretive uses (yes =5, no = 0)	3		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	1		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	2		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	4		
20. Relative cost effectiveness (high = 5, low = 0)	4		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	5		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	2		
GRAND TOTAL:	**71**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

EVALUATION FOR B2 ISSAQUAH CREEK LOWER RIGHT BANK

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☒ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	5		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	4		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	1		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	3		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	3		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	2		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	4		
8. Benefit to water temperature (high = 5, low = 0)	1		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	2		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	1		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	2		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	1		
13. Constructability (easy = 5, difficult = 0)	4		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	4		
16. Amenable to education or interpretive uses (yes =5, no = 0)	4		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	1		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	3		
20. Relative cost effectiveness (high = 5, low = 0)	4		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	3		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	3		
GRAND TOTAL:	**70**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

EVALUATION FOR B3 ISSAQUAH CREEK LEFT BANK UPPER PARK REACH

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☒ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	3		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	4		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	1		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	3		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	4		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	2		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	4		
8. Benefit to water temperature (high = 5, low = 0)	2		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	3		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	2		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	3		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	2		
13. Constructability (easy = 5, difficult = 0)	4		
14. Long-term stability/life of project (stable = 5, unstable = 0)	3		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	4		
16. Amenable to education or interpretive uses (yes =5, no = 0)	3		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	1		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	2		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	4		
20. Relative cost effectiveness (high = 5, low = 0)	4		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	4		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	2		
GRAND TOTAL:	**70**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

EVALUATION FOR B4 TIBBETTS TRIBUTARY #0170

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☒ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	5		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	3		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	1		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	4		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	3		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	1		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	3		
8. Benefit to water temperature (high = 5, low = 0)	3		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	2		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	2		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	4		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	1		
13. Constructability (easy = 5, difficult = 0)	4		
14. Long-term stability/life of project (stable = 5, unstable = 0)	3		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	2		
16. Amenable to education or interpretive uses (yes =5, no = 0)	3		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	3		
20. Relative cost effectiveness (high = 5, low = 0)	3		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	2		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	1		
GRAND TOTAL:	**64**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

EVALUATION FOR B5 ENTRY ROAD RELOCATION FOR TIBBETTS BUFFER

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☒ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	5		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	3		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	3		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	3		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	2		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	3		
8. Benefit to water temperature (high = 5, low = 0)	2		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	2		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	3		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	2		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	2		
13. Constructability (easy = 5, difficult = 0)	3		
14. Long-term stability/life of project (stable = 5, unstable = 0)	5		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	4		
16. Amenable to education or interpretive uses (yes =5, no = 0)	3		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	1		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	4		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	3		
20. Relative cost effectiveness (high = 5, low = 0)	1		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	3		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	1		
GRAND TOTAL:	**64**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe:

EVALUATION FOR B6 ISSAQUAH CREEK CENTRAL REACH

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☒ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	3		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	4		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	1		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	3		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	2		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	1		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	4		
8. Benefit to water temperature (high = 5, low = 0)	2		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	2		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	2		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	4		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	3		
13. Constructability (easy = 5, difficult = 0)	3		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	4		
16. Amenable to education or interpretive uses (yes =5, no = 0)	3		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	1		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	1		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	3		
20. Relative cost effectiveness (high = 5, low = 0)	4		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	2		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	1		
GRAND TOTAL:	**63**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

EVALUATION FOR B7 TIBBETTS MOUTH TRAIL

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☒ **Wetland (W)** ☒ **Stream (S)** ☒ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	4		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	3		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	3		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	3		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	3		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	3		
8. Benefit to water temperature (high = 5, low = 0)	1		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	2		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	1		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	2		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	4		
14. Long-term stability/life of project (stable = 5, unstable = 0)	3		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	2		
16. Amenable to education or interpretive uses (yes =5, no = 0)	4		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	3		
20. Relative cost effectiveness (high = 5, low = 0)	4		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	2		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	4		
GRAND TOTAL:	**62**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

EVALUATION FOR B8 WETLAND INTERPRETIVE/PARENT AREA AT BASEBALL FIELDS AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☒ **Wetland (W)** ☐ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	5		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	3		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	4		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	0		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	0		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	3		
8. Benefit to water temperature (high = 5, low = 0)	0		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	0		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	1		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	0		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	4		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	2		
16. Amenable to education or interpretive uses (yes =5, no = 0)	4		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	0		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	4		
20. Relative cost effectiveness (high = 5, low = 0)	4		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	4		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	4		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	5		
GRAND TOTAL:	**54**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe:

EVALUATION FOR B9 ISSAQUAH CREEK OXBOW AREA

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☒ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	4		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	2		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	2		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	0		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	0		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	2		
8. Benefit to water temperature (high = 5, low = 0)	0		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	0		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	0		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	0		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	5		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	3		
16. Amenable to education or interpretive uses (yes =5, no = 0)	5		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	4		
20. Relative cost effectiveness (high = 5, low = 0)	4		
21. Relative maintenance/repair costs (low = 5, high = 0)	4		
22. Is project amenable to community involvement? (yes = 5, no = 0)	4		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	1		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	5		
GRAND TOTAL:	**54**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

EVALUATION FOR B10 ISSAQUAH CREEK FOOTBRIDGE

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☒ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☒ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	3		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	2		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	1		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	3		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	2		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	0		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	1		
8. Benefit to water temperature (high = 5, low = 0)	1		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	0		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	0		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	0		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	3		
14. Long-term stability/life of project (stable = 5, unstable = 0)	5		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	3		
16. Amenable to education or interpretive uses (yes =5, no = 0)	4		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	2		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	3		
20. Relative cost effectiveness (high = 5, low = 0)	3		
21. Relative maintenance/repair costs (low = 5, high = 0)	4		
22. Is project amenable to community involvement? (yes = 5, no = 0)	1		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	5		
GRAND TOTAL:	**49**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

EVALUATION FOR C1 ISSAQUAH CREEK RIGHT BANK ENHANCEMENT

"POSSIBLE CREEK PLAY" AREA AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☒ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	3		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	4		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	1		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	4		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	5		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	4		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	4		
8. Benefit to water temperature (high = 5, low = 0)	2		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	4		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	2		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	5		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	3		
13. Constructability (easy = 5, difficult = 0)	2		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	4		
16. Amenable to education or interpretive uses (yes =5, no = 0)	4		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	2		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	4		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	2		
20. Relative cost effectiveness (high = 5, low = 0)	3		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	3		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	4		
GRAND TOTAL:	**79**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

EVALUATION FOR C2 ISSAQUAH CREEK RIGHT BANK ENHANCEMENT

"POSSIBLE CREEK PLAY" AREA AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☒ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	3		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	4		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	1		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	4		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	5		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	4		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	4		
8. Benefit to water temperature (high = 5, low = 0)	2		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	4		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	2		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	5		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	3		
13. Constructability (easy = 5, difficult = 0)	2		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	4		
16. Amenable to education or interpretive uses (yes =5, no = 0)	4		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	2		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	2		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	2		
20. Relative cost effectiveness (high = 5, low = 0)	3		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	3		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	4		
GRAND TOTAL:	**77**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

EVALUATION FOR C3 ISSAQUAH CREEK LEFT BANK UPSTREAM OF OXBOW AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☒ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	3		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	4		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	1		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	4		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	5		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	4		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	4		
8. Benefit to water temperature (high = 5, low = 0)	2		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	5		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	2		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	5		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	4		
13. Constructability (easy = 5, difficult = 0)	2		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	4		
16. Amenable to education or interpretive uses (yes =5, no = 0)	3		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	2		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	2		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	2		
20. Relative cost effectiveness (high = 5, low = 0)	3		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	2		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	1		
GRAND TOTAL:	**74**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

EVALUATION FOR C4 GREENWOOD WETLAND AND STREAM RESTORATION AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☒ **Wetland (W)** ☒ **Stream (S)** ☒ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	4		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	5		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	2		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	4		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	3		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	2		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	5		
8. Benefit to water temperature (high = 5, low = 0)	2		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	2		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	2		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	3		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	4		
14. Long-term stability/life of project (stable = 5, unstable = 0)	3		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	4		
16. Amenable to education or interpretive uses (yes =5, no = 0)	4		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	1		
20. Relative cost effectiveness (high = 5, low = 0)	3		
21. Relative maintenance/repair costs (low = 5, high = 0)	2		
22. Is project amenable to community involvement? (yes = 5, no = 0)	3		
23. Potential for flow control/detention (high = 5, low = 0)	2		
24. Benefits to aesthetic values (high = 5, low = 0)	4		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	3		
GRAND TOTAL:	**72**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe:

EVALUATION FOR C5 ISSAQUAH CREEK LEFT BANK NEAR ORCHARD

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☒ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	3		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	4		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	1		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	4		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	5		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	4		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	4		
8. Benefit to water temperature (high = 5, low = 0)	2		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	4		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	2		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	5		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	3		
13. Constructability (easy = 5, difficult = 0)	2		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	4		
16. Amenable to education or interpretive uses (yes =5, no = 0)	3		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	2		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	2		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	2		
20. Relative cost effectiveness (high = 5, low = 0)	3		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	2		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	1		
GRAND TOTAL:	**72**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe:

EVALUATION FOR C6 ISSAQUAH CREEK LEFT BANK NEAR POPLAR TREES

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☒ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	3		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	4		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	1		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	4		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	5		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	4		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	4		
8. Benefit to water temperature (high = 5, low = 0)	2		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	4		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	2		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	5		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	3		
13. Constructability (easy = 5, difficult = 0)	2		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	4		
16. Amenable to education or interpretive uses (yes =5, no = 0)	3		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	2		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	2		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	2		
20. Relative cost effectiveness (high = 5, low = 0)	3		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	2		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	1		
GRAND TOTAL:	**72**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe:

EVALUATION FOR C7 ISSAQUAH CREEK LEFT BANK DOWNSTREAM OF ORCHARD AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☐ **Wetland (W)** ☒ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	3		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	4		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	1		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	4		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	5		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	4		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	4		
8. Benefit to water temperature (high = 5, low = 0)	2		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	4		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	2		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	5		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	3		
13. Constructability (easy = 5, difficult = 0)	2		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	4		
16. Amenable to education or interpretive uses (yes =5, no = 0)	3		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	1		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	2		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	2		
20. Relative cost effectiveness (high = 5, low = 0)	3		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	2		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	1		
GRAND TOTAL:	**71**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe:

EVALUATION FOR C8 E. LAKE SAMMAMISH. PARKWAY WETLAND

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☒ **Wetland (W)** ☐ **Stream (S)** ☒ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	4		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	5		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	4		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	0		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	2		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	5		
8. Benefit to water temperature (high = 5, low = 0)	2		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	1		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	2		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	1		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	1		
13. Constructability (easy = 5, difficult = 0)	3		
14. Long-term stability/life of project (stable = 5, unstable = 0)	3		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	4		
16. Amenable to education or interpretive uses (yes =5, no = 0)	4		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	2		
20. Relative cost effectiveness (high = 5, low = 0)	4		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	4		
23. Potential for flow control/detention (high = 5, low = 0)	3		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	5		
GRAND TOTAL:	**70**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe:

EVALUATION FOR C9 TIBBETTS CREEK FLOODPLAIN EXTENSION

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☒ **Wetland (W)** ☒ **Stream (S)** ☐ **Lakeshore (L)** ☐ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	2		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	4		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	1		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	3		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	4		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	2		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	4		
8. Benefit to water temperature (high = 5, low = 0)	2		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	3		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	2		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	4		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	2		
14. Long-term stability/life of project (stable = 5, unstable = 0)	4		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	4		
16. Amenable to education or interpretive uses (yes =5, no = 0)	2		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	1		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	5		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	2		
20. Relative cost effectiveness (high = 5, low = 0)	2		
21. Relative maintenance/repair costs (low = 5, high = 0)	2		
22. Is project amenable to community involvement? (yes = 5, no = 0)	2		
23. Potential for flow control/detention (high = 5, low = 0)	0		
24. Benefits to aesthetic values (high = 5, low = 0)	3		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	2		
GRAND TOTAL:	**62**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe:

EVALUATION FOR C10 FIELD SOUTH OF ISSAQUAH CREEK

AT LAKE SAMMAMISH STATE PARK

(Site name/number and proposed project, e.g. Site 3, NB sta. 197.48, storm grate.)

In Section A, rate the site, AS IT CURRENTLY EXISTS. In Section B, rate the PROPOSED REHABILITATION PROJECT for the site. Multiply each rating by the weighting factor, if any, to determine the total score. When each site/project has been rated, those with the highest scores should be given the highest priority.

Category: ☒ **Wetland (W)** ☐ **Stream (S)** ☐ **Lakeshore (L)** ☒ **Upland (U)** ☐ **Recreation (RE)**

SECTION A: Current site conditions	**Rating**	**Weighting Factor**	**Total**
1. Accessibility for construction (easily accessible = 5, poorly accessible = 0)	2		
2. Is there potential for habitat improvement? (yes = 5, no = 0)	3		
3. Status of site regarding fish migration (highly impacted = 5, unimpacted = 0)	0		
4. Status of site regarding fish &/or wildlife habitat (highly impacted = 5, unimpacted = 0)	3		
5. Potential for bed & bank stability improvement (high = 5, low = 0)	0		
6. Urgency to stop impacts/prevent damage, including flooding (urgent = 5, not urgent = 0)	1		
SECTION B: Proposed rehabilitation project			
7. Benefits to fish & wildlife habitat (high = 5, low = 0)	4		
8. Benefit to water temperature (high = 5, low = 0)	0		
9. Benefit in terms of decreasing sediment supply (high = 5, low = 0)	0		
10. Benefit in terms of water quality (excluding temp. and turbidity) (high = 5, low = 0)	1		
11. On-site hydraulic impact (will dissipate energy or will armor/protect site = 5, will provide no protection = 0)	0		
12. Up- and downstream hydraulic impacts (will reduce energy = 5, will not affect up- or downstream portions = 0)	0		
13. Constructability (easy = 5, difficult = 0)	2		
14. Long-term stability/life of project (stable = 5, unstable = 0)	3		
15. Possibility of cost sharing with other funding sources (high = 5, low = 0)	3		
16. Amenable to education or interpretive uses (yes =5, no = 0)	2		
17. Is the success of other projects dependent on this project? (yes =5, no = 0)	0		
18. Is the success of this project dependent on the implementation of other projects? (no = 5, yes = 0)	0		
19. Regulatory requirements (simple permitting = 5, difficult permitting = 0)	2		
20. Relative cost effectiveness (high = 5, low = 0)	4		
21. Relative maintenance/repair costs (low = 5, high = 0)	3		
22. Is project amenable to community involvement? (yes = 5, no = 0)	2		
23. Potential for flow control/detention (high = 5, low = 0)	3		
24. Benefits to aesthetic values (high = 5, low = 0)	2		
25. Benefits for public access and recreational opportunities (high = 5, low = 0)	2		
GRAND TOTAL:	**42**		

- **Is there any overriding and compelling reason to do this project?** ☒ **No** ☐ **Yes**
- **Is there any overriding and compelling reason to *not* do this project?** ☒ **No** ☐ **Yes**

Describe: _____

APPENDIX B

Wetland and Buffer Functions
Semi-Quantitative Assessment Forms

2000 Wetland and Buffer Functions and Semi-quantitative Performance Assessment updated 8/04

Wetland #: A2 LAKESHORE WETLAND NORTH OF SUNSET BEACH
Staff: JC
Date: 5/3/2005

Table 1: Determining Wetland Size in Landscape Context

Attribute		Low (1pt.)		Medium (2pts.)		High (3pts.)	Total
Absolute Size		<5 acres		5-10 acres		>10 acres	1
Wetland Loss In Basin		< 20%		20-60%		> 60%	1
Size Relative to Other Wetlands in Basin (on NWI maps)		< 100% of average size		100-200 % of average size		> 200% of average size	1
Buffer Size		< 75 feet		75-200 feet		> 200 feet	1
Buffer Condition		> 60% disturbed		20-60% disturbed		< 20% disturbed	1
Relative Size				If score is = 1.4 then give the question a 1 If score is = 1.5 to 2.4 then give the question a 2 If score is 2.5 to 3 then give the question a 3			Score/5 1

Function		Criteria				
		Group 1 1 pt		Group 2 2 pts		Group 3 3 pts
Flood/ Storm Water Control						
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
8		riverine or shallow depression		mid-sloped wetland	3	lake, depressions, headwaters, bogs
(max 15)		<10% forested cover	2	10-30% forested cover		>30% forested cover
	1	unconstrained outlet		semi-constrained outlet		culvert/bermed outlet
	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage
Base Flow/Ground Water Support						
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
8		riverine or lakeshore wetland		mid-sloped wetland	3	Lake,depressions, headwaters, bogs
(max 15)	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage
		temporally flooded or saturated	2	seasonally or semi-permanently flooded or saturated		permanently flooded or saturated, or intermittently exposed
	1	vegetation < 20% OBL species		vegetation 20 to 40 % OBL species		vegetation >40% OBL species
Erosion/ Shoreline Protection						
points		sparse grass/herbs or no veg along OHWM	2	sparse wood or veg along OHWM		dense wood or veg along OHWM
4	1	wetlands extends <30 m from OHWM		wetlands extends 30-60 m from OHWM		wetlands extends >200 m from OHWM
(max 9)	1	< 20% shoreline developed		20 to 60 % shoreline developed		>60% shoreline developed

Water Quality Improvement						
points	1	rapid flow through site		moderate flow through site		slow flow through site
5	1	< 50% veg cover		50-80% veg cover		>80% veg cover
(max 15)	1	20%upstream in basin from wetland is undeveloped		20 to 50% of basin upstream from wetland is undeveloped		>50% of basin upstream from wetland is undeveloped
	1	result from table 2		result from table 2		result from table 2
	1	soil coarse-gravel, sand, sandyloam		soil organic mineral mix		soil heavy organic muck and peat

Table 2: Overland Flow Contained in Wetland

Attribute		Low (1pt.)		Medium (2pts.)		High (3pts.)	Total
Configuration		Plate-shaped		Shallow Bowl-shaped		Deep Bowl-shaped	1
Drainage Basin Size		< 2 acres		2-5 acres		> 5 acres	1
Outlet		Unconstrained		Semi-constrained		Constrained	1
Input		Groundwater only		Surface flow and groundwater		Surface flow	3
Basin Condition		< 20% impervious		20-40% impervious		> 40% impervious	1
Flow Contained							Score/5 1.4

		Group 1 1 pt		Group 2 2 pts		Group 3 3 pts
Natural Biological Support						
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
17	1	low connectivity to veg'd buffers		mod connectivity to veg'd buffers		high connectivity to veg'd buffers
(max 36)		ag land, low veg structure	2	2 layers of vegetation		high vegetation structure
	1	seasonal surface water		permanent surface water		open water pools through summer
		one habitat type (PAB POW PEM PSS PFO EST)		two habitat types (PAB POW PEM PSS PFO EST)	3	≥ 3 habitat types (PAB POW PEM PSS PFO EST)
	1	low plant diversity (<6 species)		moderate plant diversity (7-15 species)		high plant diversity (>15spp)
		> 50% invasive species	2	10 to 50% invasive species		<10% invasive species
	1	low organic accumulation		moderate organic accumulation		high organic accumulation
	1	low organic export		moderate organic export		high organic export
	1	few habitat features		some habitat features		many habitat features
	1	buffers very disturbed		buffers slightly disturbed		buffers not disturbed
		isolated from upland habitats	2	partially connected to upland habitats		well connected to upland habitats

Overall Habitat Functions						
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
4		low habitat diversity	2	moderate habitat diversity		high habitat diversity
(max 9)	1	low sanctuary or refuge		moderate sanctuary or refuge		high sanctuary or refuge

Specific Habitat Functions						
points	1	low invertebrate habitat		moderate invertebrate habitat		high invertebrate habitat
6	1	low amphibian habitat		moderate amphibian habitat		high amphibian habitat
(max 15)	1	low fish habitat		moderate fish habitat		high fish habitat
	1	low mammal habitat		moderate mammal habitat		high mammal habitat
		low bird habitat	2	moderate bird habitat		high bird habitat

Cultural/ Socioeconomic						
points	1	low educational opportunities		moderate education opportunities		high education opportunities
12		low aesthetic value	2	moderate aesthetic value		high aesthetic value
(max 18)	1	lacks commercial fisheries, agriculture, renewable resources		moderate commercial fisheries, agriculture, renewable resources		high commercial fisheries, agriculture, renewable resources
		lacks historical or archaeological resources	2	historical or archaeological site		important historical or archaeological site
		lacks passive and active recreational opportunities		some passive and active recreational opportunities	3	many passive and active recreational opportunities
		privately owned		privately owned, some public access	3	unrestricted public access

N/A = Not Applicable, N/I = No information available

Dominant Vegetation:

Wildlife:

2000 Wetland and Buffer Functions and Semi-quantitative Performance Assessment updated 8/04

Wetland #: A4 POND BY BASEBALL FIELDS
Staff: JC
Date: 5/3/2005

Table 1: Determining Wetland Size in Landscape Context

Attribute	Low (1pt.)	Medium (2pts.)	High (3pts.)	Total
Absolute Size	<5 acres	5-10 acres	>10 acres	1
Wetland Loss In Basin	< 20%	20-60%	> 60%	2
Size Relative to Other Wetlands in Basin (on NWI maps)	< 100% of average size	100-200 % of average size	> 200% of average size	1
Buffer Size	< 75 feet	75-200 feet	> 200 feet	1
Buffer Condition	> 60% disturbed	20-60% disturbed	< 20% disturbed	1
Relative Size	If score is = 1.4 then give the question a 1 If score is = 1.5 to 2.4 then give the question a 2 If score is 2.5 to 3 then give the question a 3			Score/5 1.2

Function		Criteria: Group 1 1 pt		Group 2 2 pts		Group 3 3 pts
Flood/ Storm Water Control						
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
9		riverine or shallow depression		mid-sloped wetland	3	lake, depressions, headwaters, bogs
(max 15)	1	<10% forested cover		10-30% forested cover		>30% forested cover
		unconstrained outlet		semi-constrained outlet	3	culvert/bermed outlet
	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage

Base Flow/Ground Water Support						
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
11		riverine or lakeshore wetland		mid-sloped wetland	3	Lake,depressions, headwaters, bogs
(max 15)	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage
		temporally flooded or saturated		seasonally or semi-permanently flooded or saturated	3	permanently flooded or saturated, or intermittently exposed
		vegetation < 20% OBL species		vegetation 20 to 40 % OBL species	3	vegetation >40% OBL species

Erosion/ Shoreline Protection						
points		sparse grass/herbs or no veg along OHWM		sparse wood or veg along OHWM		dense wood or veg along OHWM
N/A		wetlands extends <30 m from OHWM		wetlands extends 30-60 m from OHWM		wetlands extends >200 m from OHWM
(max 9)		< 20% shoreline developed		20 to 60 % shoreline developed		>60% shoreline developed

Water Quality Improvement						
points		rapid flow through site		moderate flow through site	3	slow flow through site
12		< 50% veg cover		50-80% veg cover	3	>80% veg cover
(max 15)		20%upstream in basin from wetland is undeveloped	2	20 to 50% of basin upstream from wetland is undeveloped		>50% of basin upstream from wetland is undeveloped
		result from table 2	2	result from table 2		result from table 2
		soil coarse-gravel, sand, sandyloam	2	soil organic mineral mix		soil heavy organic muck and peat

Table 2: Overland Flow Contained in Wetland

Attribute		Low (1pt.)		Medium (2pts.)		High (3pts.)	Total
Configuration		Plate-shaped		Shallow Bowl-shaped		Deep Bowl-shaped	3
Drainage Basin Size		< 2 acres		2-5 acres		> 5 acres	1
Outlet		Unconstrained		Semi-constrained		Constrained	3
Input		Groundwater only		Surface flow and groundwater		Surface flow	2
Basin Condition		< 20% impervious		20-40% impervious		> 40% impervious	1
Flow Contained							Score/5 2

		Group 1 1 pt		Group 2 2 pts		Group 3 3 pts
Natural Biological Support						
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
23	1	low connectivity to veg'd buffers		mod connectivity to veg'd buffers		high connectivity to veg'd buffers
(max 36)		ag land, low veg structure		2 layers of vegetation	3	high vegetation structure
		seasonal surface water		permanent surface water	3	open water pools through summer
		one habitat type (PAB POW PEM PSS PFO EST)		two habitat types (PAB POW PEM PSS PFO EST)	3	≥ 3 habitat types (PAB POW PEM PSS PFO EST)
		low plant diversity (<6 species)	2	moderate plant diversity (7-15 species)		high plant diversity (>15spp)
		> 50% invasive species	2	10 to 50% invasive species		<10% invasive species
		low organic accumulation	2	moderate organic accumulation		high organic accumulation
	1	low organic export		moderate organic export		high organic export
		few habitat features	2	some habitat features		many habitat features
	1	buffers very disturbed		buffers slightly disturbed		buffers not disturbed
		isolated from upland habitats	2	partially connected to upland habitats		well connected to upland habitats

Overall Habitat Functions						
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
4		low habitat diversity	2	moderate habitat diversity		high habitat diversity
(max 9)	1	low sanctuary or refuge		moderate sanctuary or refuge		high sanctuary or refuge

Specific Habitat Functions						
points		low invertebrate habitat	2	moderate invertebrate habitat		high invertebrate habitat
8		low amphibian habitat	2	moderate amphibian habitat		high amphibian habitat
(max 15)	1	low fish habitat		moderate fish habitat		high fish habitat
	1	low mammal habitat		moderate mammal habitat		high mammal habitat
		low bird habitat	2	moderate bird habitat		high bird habitat

Cultural/ Socioeconomic						
points		low educational opportunities	2	moderate education opportunities		high education opportunities
11		low aesthetic value	2	moderate aesthetic value		high aesthetic value
(max 18)	1	lacks commercial fisheries, agriculture, renewable resources		moderate commercial fisheries, agriculture, renewable resources		high commercial fisheries, agriculture, renewable resources
	1	lacks historical or archaeological resources		historical or archaeological site		important historical or archaeological site
		lacks passive and active recreational opportunities	2	some passive and active recreational opportunities		many passive and active recreational opportunities
		privately owned		privately owned, some public access	3	unrestricted public access

N/A = Not Applicable, N/I = No information available

Dominant Vegetation:

Wildlife:

2000 Wetland and Buffer Functions and Semi-quantitative Performance Assessment updated 8/04

Wetland #: A7 / A12 / A3 LAKESHORE WETLAND
Staff: JC
Date: 5/3/2005

Table 1: Determining Wetland Size in Landscape Context

Attribute	Low (1pt.)	Medium (2pts.)	High (3pts.)	Total
Absolute Size	<5 acres	5-10 acres	>10 acres	2
Wetland Loss In Basin	< 20%	20-60%	> 60%	2
Size Relative to Other Wetlands in Basin (on NWI maps)	< 100% of average size	100-200 % of average size	> 200% of average size	2
Buffer Size	< 75 feet	75-200 feet	> 200 feet	1
Buffer Condition	> 60% disturbed	20-60% disturbed	< 20% disturbed	1
Relative Size	If score is = 1.4 then give the question a 1 If score is = 1.5 to 2.4 then give the question a 2 If score is 2.5 to 3 then give the question a 3			Score/5 1.6

Function	Criteria					
	Group 1 1 pt		Group 2 2 pts		Group 3 3 pts	
Flood/ Storm Water Control						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
10		riverine or shallow depression		mid-sloped wetland	3	lake, depressions, headwaters, bogs
(max 15)		<10% forested cover		10-30% forested cover	3	>30% forested cover
	1	unconstrained outlet		semi-constrained outlet		culvert/bermed outlet
	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage

Base Flow/Ground Water Support						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
9		riverine or lakeshore wetland		mid-sloped wetland	3	Lake,depressions, headwaters, bogs
(max 15)	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage
		temporally flooded or saturated	2	seasonally or semi-permanently flooded or saturated		permanently flooded or saturated, or intermittently exposed
	1	vegetation < 20% OBL species		vegetation 20 to 40 % OBL species		vegetation >40% OBL species

Erosion/ Shoreline Protection						
points		sparse grass/herbs or no veg along OHWM		sparse wood or veg along OHWM	3	dense wood or veg along OHWM
6		wetlands extends <30 m from OHWM	2	wetlands extends 30-60 m from OHWM		wetlands extends >200 m from OHWM
(max 9)	1	< 20% shoreline developed		20 to 60 % shoreline developed		>60% shoreline developed

Water Quality Improvement						
points		rapid flow through site	2	moderate flow through site		slow flow through site
11		< 50% veg cover		50-80% veg cover	3	>80% veg cover
(max 15)		20%upstream in basin from wetland is undeveloped	2	20 to 50% of basin upstream from wetland is undeveloped		>50% of basin upstream from wetland is undeveloped
		result from table 2	2	result from table 2		result from table 2
		soil coarse-gravel, sand, sandyloam	2	soil organic mineral mix		soil heavy organic muck and peat

Table 2: Overland Flow Contained in Wetland

Attribute		Low (1pt.)		Medium (2pts.)		High (3pts.)	Total
Configuration		Plate-shaped		Shallow Bowl-shaped		Deep Bowl-shaped	1
Drainage Basin Size		< 2 acres		2-5 acres		> 5 acres	3
Outlet		Unconstrained		Semi-constrained		Constrained	1
Input		Groundwater only		Surface flow and groundwater		Surface flow	2
Basin Condition		< 20% impervious		20-40% impervious		> 40% impervious	1
Flow Contained							Score/5 1.6

	Group 1 1 pt		Group 2 2 pts		Group 3 3 pts	
Natural Biological Support						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
25		low connectivity to veg'd buffers	2	mod connectivity to veg'd buffers		high connectivity to veg'd buffers
(max 36)		ag land, low veg structure		2 layers of vegetation	3	high vegetation structure
		seasonal surface water	2	permanent surface water		open water pools through summer
		one habitat type (PAB POW PEM PSS PFO EST)		two habitat types (PAB POW PEM PSS PFO EST)	3	≥ 3 habitat types (PAB POW PEM PSS PFO EST)
		low plant diversity (<6 species)	2	moderate plant diversity (7-15 species)		high plant diversity (>15spp)
		> 50% invasive species	2	10 to 50% invasive species		<10% invasive species
		low organic accumulation	2	moderate organic accumulation		high organic accumulation
		low organic export	2	moderate organic export		high organic export
		few habitat features	2	some habitat features		many habitat features
	1	buffers very disturbed		buffers slightly disturbed		buffers not disturbed
		isolated from upland habitats	2	partially connected to upland habitats		well connected to upland habitats

Overall Habitat Functions						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
6		low habitat diversity	2	moderate habitat diversity		high habitat diversity
(max 9)		low sanctuary or refuge	2	moderate sanctuary or refuge		high sanctuary or refuge

Specific Habitat Functions						
points		low invertebrate habitat	2	moderate invertebrate habitat		high invertebrate habitat
10		low amphibian habitat	2	moderate amphibian habitat		high amphibian habitat
(max 15)		low fish habitat	2	moderate fish habitat		high fish habitat
		low mammal habitat	2	moderate mammal habitat		high mammal habitat
		low bird habitat	2	moderate bird habitat		high bird habitat

Cultural/ Socioeconomic						
points		low educational opportunities	2	moderate education opportunities		high education opportunities
13		low aesthetic value		moderate aesthetic value	3	high aesthetic value
(max 18)	1	lacks commercial fisheries, agriculture, renewable resources		moderate commercial fisheries, agriculture, renewable resources		high commercial fisheries, agriculture, renewable resources
		lacks historical or archaeological resources	2	historical or archaeological site		important historical or archaeological site
		lacks passive and active recreational opportunities	2	some passive and active recreational opportunities		many passive and active recreational opportunities
		privately owned		privately owned, some public access	3	unrestricted public access

N/A = Not Applicable, N/I = No information available

Dominant Vegetation:

Wildlife:

2000 Wetland and Buffer Functions and Semi-quantitative Performance Assessment updated 8/04

Wetland #: A11 FIELD NE OF OXBOW
Staff: JC
Date: 5/10/2005

Table 1: Determining Wetland Size in Landscape Context

Attribute	Low (1pt.)	Medium (2pts.)	High (3pts.)	Total
Absolute Size	<5 acres	5-10 acres	>10 acres	3
Wetland Loss In Basin	< 20%	20-60%	> 60%	2
Size Relative to Other Wetlands in Basin (on NWI maps)	< 100% of average size	100-200 % of average size	> 200% of average size	2
Buffer Size	< 75 feet	75-200 feet	> 200 feet	2
Buffer Condition	> 60% disturbed	20-60% disturbed	< 20% disturbed	2
Relative Size	If score is = 1.4 then give the question a 1 If score is = 1.5 to 2.4 then give the question a 2 If score is 2.5 to 3 then give the question a 3			Score/5 2.2

Function	Criteria					
	Group 1 1 pt		Group 2 2 pts		Group 3 3 pts	
Flood/ Storm Water Control						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
7	1	riverine or shallow depression		mid-sloped wetland		lake, depressions, headwaters, bogs
(max 15)	1	<10% forested cover		10-30% forested cover		>30% forested cover
		unconstrained outlet	2	semi-constrained outlet		culvert/bermed outlet
	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage

Base Flow/Ground Water Support						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
7	1	riverine or lakeshore wetland		mid-sloped wetland		Lake,depressions, headwaters, bogs
(max 15)	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage
		temporally flooded or saturated	2	seasonally or semi-permanently flooded or saturated		permanently flooded or saturated, or intermittently exposed
	1	vegetation < 20% OBL species		vegetation 20 to 40 % OBL species		vegetation >40% OBL species

Erosion/ Shoreline Protection						
points		sparse grass/herbs or no veg along OHWM		sparse wood or veg along OHWM		dense wood or veg along OHWM
N/A		wetlands extends <30 m from OHWM		wetlands extends 30-60 m from OHWM		wetlands extends >200 m from OHWM
(max 9)		< 20% shoreline developed		20 to 60 % shoreline developed		>60% shoreline developed

Water Quality Improvement						
points		rapid flow through site		moderate flow through site	3	slow flow through site
12		< 50% veg cover		50-80% veg cover	3	>80% veg cover
(max 15)		< 20%upstream in basin from wetland is undeveloped	2	20 to 50% of basin upstream from wetland is undeveloped		>50% of basin upstream from wetland is undeveloped
		result from table 2	2	result from table 2		result from table 2
		soil coarse-gravel, sand, sandyloam	2	soil organic mineral mix		soil heavy organic muck and peat

Table 2: Overland Flow Contained in Wetland

Attribute		Low (1pt.)		Medium (2pts.)		High (3pts.)	Total
Configuration		Plate-shaped		Shallow Bowl-shaped		Deep Bowl-shaped	1
Drainage Basin Size		< 2 acres		2-5 acres		> 5 acres	3
Outlet		Unconstrained		Semi-constrained		Constrained	2
Input		Groundwater only		Surface flow and groundwater		Surface flow	2
Basin Condition		< 20% impervious		20-40% impervious		> 40% impervious	1
Flow Contained							Score/5 1.8

	Group 1 1 pt		Group 2 2 pts		Group 3 3 pts
Natural Biological Support					
points	size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
20	low connectivity to veg'd buffers	2	mod connectivity to veg'd buffers		high connectivity to veg'd buffers
(max 36)	1 ag land, low veg structure		2 layers of vegetation		high vegetation structure
	1 seasonal surface water		permanent surface water		open water pools through summer
	one habitat type (PAB POW PEM PSS PFO EST)	2	two habitat types (PAB POW PEM PSS PFO EST)		≥ 3 habitat types (PAB POW PEM PSS PFO EST)
	low plant diversity (<6 species)	2	moderate plant diversity (7-15 species)		high plant diversity (>15spp)
	> 50% invasive species	2	10 to 50% invasive species		<10% invasive species
	low organic accumulation	2	moderate organic accumulation		high organic accumulation
	1 low organic export		moderate organic export		high organic export
	1 few habitat features		some habitat features		many habitat features
	buffers very disturbed	2	buffers slightly disturbed		buffers not disturbed
	isolated from upland habitats	2	partially connected to upland habitats		well connected to upland habitats

Overall Habitat Functions						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
5	1	low habitat diversity		moderate habitat diversity		high habitat diversity
(max 9)		low sanctuary or refuge	2	moderate sanctuary or refuge		high sanctuary or refuge

Specific Habitat Functions						
points	1	low invertebrate habitat		moderate invertebrate habitat		high invertebrate habitat
7	1	low amphibian habitat		moderate amphibian habitat		high amphibian habitat
(max 15)	1	low fish habitat		moderate fish habitat		high fish habitat
		low mammal habitat	2	moderate mammal habitat		high mammal habitat
		low bird habitat	2	moderate bird habitat		high bird habitat

Cultural/ Socioeconomic						
points		low educational opportunities	2	moderate education opportunities		high education opportunities
12		low aesthetic value	2	moderate aesthetic value		high aesthetic value
(max 18)	1	lacks commercial fisheries, agriculture, renewable resources		moderate commercial fisheries, agriculture, renewable resources		high commercial fisheries, agriculture, renewable resources
		lacks historical or archaeological resources	2	historical or archaeological site		important historical or archaeological site
		lacks passive and active recreational opportunities	2	some passive and active recreational opportunities		many passive and active recreational opportunities
		privately owned		privately owned, some public access	3	unrestricted public access

N/A = Not Applicable, N/I = No information available

Dominant Vegetation:

Wildlife:

2000 Wetland and Buffer Functions and Semi-quantitative Performance Assessment updated 8/04

Wetland #: A13 FIELD SE OF SUNSET BEACH PARKING LOT
Staff: JC
Date: 5/11/2005

Table 1: Determining Wetland Size in Landscape Context

Attribute		Low (1pt.)		Medium (2pts.)		High (3pts.)	Total
Absolute Size		<5 acres		5-10 acres		>10 acres	2
Wetland Loss In Basin		< 20%		20-60%		> 60%	2
Size Relative to Other Wetlands in Basin (on NWI maps)		< 100% of average size		100-200 % of average size		> 200% of average size	1
Buffer Size		< 75 feet		75-200 feet		> 200 feet	1
Buffer Condition		> 60% disturbed		20-60% disturbed		< 20% disturbed	2
Relative Size				If score is = 1.4 then give the question a 1 If score is = 1.5 to 2.4 then give the question a 2 If score is 2.5 to 3 then give the question a 3			Score/5 1.6

Function	Criteria					
	Group 1 1 pt		Group 2 2 pts		Group 3 3 pts	
Flood/ Storm Water Control						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
8	1	riverine or shallow depression		mid-sloped wetland		lake, depressions, headwaters, bogs
(max 15)	1	<10% forested cover		10-30% forested cover		>30% forested cover
		unconstrained outlet		semi-constrained outlet	3	culvert/bermed outlet
	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage

Base Flow/Ground Water Support						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
7	1	riverine or lakeshore wetland		mid-sloped wetland		Lake,depressions, headwaters, bogs
(max 15)	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage
		temporally flooded or saturated	2	seasonally or semi-permanently flooded or saturated		permanently flooded or saturated, or intermittently exposed
	1	vegetation < 20% OBL species		vegetation 20 to 40 % OBL species		vegetation >40% OBL species

Erosion/ Shoreline Protection						
points		sparse grass/herbs or no veg along OHWM		sparse wood or veg along OHWM		dense wood or veg along OHWM
N/A		wetlands extends <30 m from OHWM		wetlands extends 30-60 m from OHWM		wetlands extends >200 m from OHWM
(max 9)		< 20% shoreline developed		20 to 60 % shoreline developed		>60% shoreline developed

Water Quality Improvement						
points		rapid flow through site		moderate flow through site	3	slow flow through site
12		< 50% veg cover		50-80% veg cover	3	>80% veg cover
(max 15)		< 20%upstream in basin from wetland is undeveloped	2	20 to 50% of basin upstream from wetland is undeveloped		>50% of basin upstream from wetland is undeveloped
		result from table 2	2	result from table 2		result from table 2
		soil coarse-gravel, sand, sandyloam	2	soil organic mineral mix		soil heavy organic muck and peat

Table 2: Overland Flow Contained in Wetland

Attribute		Low (1pt.)		Medium (2pts.)		High (3pts.)	Total
Configuration		Plate-shaped		Shallow Bowl-shaped		Deep Bowl-shaped	1
Drainage Basin Size		< 2 acres		2-5 acres		> 5 acres	2
Outlet		Unconstrained		Semi-constrained		Constrained	3
Input		Groundwater only		Surface flow and groundwater		Surface flow	2
Basin Condition		< 20% impervious		20-40% impervious		> 40% impervious	1
Flow Contained							Score/5 1.8

	Group 1 1 pt		Group 2 2 pts		Group 3 3 pts
Natural Biological Support					
points	size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
19	low connectivity to veg'd buffers	2	mod connectivity to veg'd buffers		high connectivity to veg'd buffers
(max 36)	ag land, low veg structure	2	2 layers of vegetation		high vegetation structure
1	seasonal surface water		permanent surface water		open water pools through summer
	one habitat type (PAB POW PEM PSS PFO EST)	2	two habitat types (PAB POW PEM PSS PFO EST)		≥ 3 habitat types (PAB POW PEM PSS PFO EST)
1	low plant diversity (<6 species)		moderate plant diversity (7-15 species)		high plant diversity (>15spp)
1	> 50% invasive species		10 to 50% invasive species		<10% invasive species
1	low organic accumulation		moderate organic accumulation		high organic accumulation
1	low organic export		moderate organic export		high organic export
	few habitat features	2	some habitat features		many habitat features
	buffers very disturbed	2	buffers slightly disturbed		buffers not disturbed
	isolated from upland habitats	2	partially connected to upland habitats		well connected to upland habitats

Overall Habitat Functions						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
5	1	low habitat diversity		moderate habitat diversity		high habitat diversity
(max 9)		low sanctuary or refuge	2	moderate sanctuary or refuge		high sanctuary or refuge

Specific Habitat Functions						
points	1	low invertebrate habitat		moderate invertebrate habitat		high invertebrate habitat
7	1	low amphibian habitat		moderate amphibian habitat		high amphibian habitat
(max 15)	1	low fish habitat		moderate fish habitat		high fish habitat
		low mammal habitat	2	moderate mammal habitat		high mammal habitat
		low bird habitat	2	moderate bird habitat		high bird habitat

Cultural/ Socioeconomic						
points	1	low educational opportunities		moderate education opportunities		high education opportunities
9	1	low aesthetic value		moderate aesthetic value		high aesthetic value
(max 18)	1	lacks commercial fisheries, agriculture, renewable resources		moderate commercial fisheries, agriculture, renewable resources		high commercial fisheries, agriculture, renewable resources
	1	lacks historical or archaeological resources		historical or archaeological site		important historical or archaeological site
		lacks passive and active recreational opportunities	2	some passive and active recreational opportunities		many passive and active recreational opportunities
		privately owned		privately owned, some public access	3	unrestricted public access

N/A = Not Applicable, N/I = No information available

Dominant Vegetation:

Wildlife:

2000 Wetland and Buffer Functions and Semi-quantitative Performance Assessment updated 8/04

Wetland #: A14 AREA BETWEEN SOCCER FIELDS
Staff: JC
Date: 5/11/2005

Table 1: Determining Wetland Size in Landscape Context

Attribute	Low (1pt.)	Medium (2pts.)	High (3pts.)	Total
Absolute Size	<5 acres	5-10 acres	>10 acres	1
Wetland Loss In Basin	< 20%	20-60%	> 60%	2
Size Relative to Other Wetlands in Basin (on NWI maps)	< 100% of average size	100-200 % of average size	> 200% of average size	1
Buffer Size	< 75 feet	75-200 feet	> 200 feet	1
Buffer Condition	> 60% disturbed	20-60% disturbed	< 20% disturbed	2
Relative Size	If score is = 1.4 then give the question a 1 If score is = 1.5 to 2.4 then give the question a 2 If score is 2.5 to 3 then give the question a 3			Score/5 1.4

Function		Criteria				
		Group 1 1 pt		Group 2 2 pts		Group 3 3 pts
Flood/ Storm Water Control						
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
6	1	riverine or shallow depression		mid-sloped wetland		lake, depressions, headwaters, bogs
(max 15)	1	<10% forested cover		10-30% forested cover		>30% forested cover
		unconstrained outlet	2	semi-constrained outlet		culvert/bermed outlet
	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage
Base Flow/Ground Water Support						
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
5	1	riverine or lakeshore wetland		mid-sloped wetland		Lake,depressions, headwaters, bogs
(max 15)	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage
	1	temporally flooded or saturated		seasonally or semi-permanently flooded or saturated		permanently flooded or saturated, or intermittently exposed
	1	vegetation < 20% OBL species		vegetation 20 to 40 % OBL species		vegetation >40% OBL species
Erosion/ Shoreline Protection						
points		sparse grass/herbs or no veg along OHWM		sparse wood or veg along OHWM		dense wood or veg along OHWM
N/A		wetlands extends <30 m from OHWM		wetlands extends 30-60 m from OHWM		wetlands extends >200 m from OHWM
(max 9)		< 20% shoreline developed		20 to 60 % shoreline developed		>60% shoreline developed

Water Quality Improvement						
points		rapid flow through site		moderate flow through site	3	slow flow through site
12		< 50% veg cover		50-80% veg cover	3	>80% veg cover
(max 15)		< 20%upstream in basin from wetland is undeveloped	2	20 to 50% of basin upstream from wetland is undeveloped		>50% of basin upstream from wetland is undeveloped
		result from table 2	2	result from table 2		result from table 2
		soil coarse-gravel, sand, sandyloam	2	soil organic mineral mix		soil heavy organic muck and peat

Table 2: Overland Flow Contained in Wetland

Attribute		Low (1pt.)		Medium (2pts.)		High (3pts.)	Total
Configuration		Plate-shaped		Shallow Bowl-shaped		Deep Bowl-shaped	1
Drainage Basin Size		< 2 acres		2-5 acres		> 5 acres	2
Outlet		Unconstrained		Semi-constrained		Constrained	2
Input		Groundwater only		Surface flow and groundwater		Surface flow	2
Basin Condition		< 20% impervious		20-40% impervious		> 40% impervious	2
Flow Contained							Score/5 1.8

	Group 1 1 pt		Group 2 2 pts		Group 3 3 pts
Natural Biological Support					
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)	size cumulative score (see table 1)
17		low connectivity to veg'd buffers	2	mod connectivity to veg'd buffers	high connectivity to veg'd buffers
(max 36)		ag land, low veg structure	2	2 layers of vegetation	high vegetation structure
	1	seasonal surface water		permanent surface water	open water pools through summer
		one habitat type (PAB POW PEM PSS PFO EST)	2	two habitat types (PAB POW PEM PSS PFO EST)	≥ 3 habitat types (PAB POW PEM PSS PFO EST)
	1	low plant diversity (<6 species)		moderate plant diversity (7-15 species)	high plant diversity (>15spp)
	1	> 50% invasive species		10 to 50% invasive species	<10% invasive species
	1	low organic accumulation		moderate organic accumulation	high organic accumulation
	1	low organic export		moderate organic export	high organic export
	1	few habitat features		some habitat features	many habitat features
		buffers very disturbed	2	buffers slightly disturbed	buffers not disturbed
		isolated from upland habitats	2	partially connected to upland habitats	well connected to upland habitats

Overall Habitat Functions					
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)	size cumulative score (see table 1)
4	1	low habitat diversity		moderate habitat diversity	high habitat diversity
(max 9)		low sanctuary or refuge	2	moderate sanctuary or refuge	high sanctuary or refuge

Specific Habitat Functions						
points	1	low invertebrate habitat		moderate invertebrate habitat		high invertebrate habitat
7	1	low amphibian habitat		moderate amphibian habitat		high amphibian habitat
(max 15)	1	low fish habitat		moderate fish habitat		high fish habitat
		low mammal habitat	2	moderate mammal habitat		high mammal habitat
		low bird habitat	2	moderate bird habitat		high bird habitat

Cultural/ Socioeconomic						
points	1	low educational opportunities		moderate education opportunities		high education opportunities
10	1	low aesthetic value		moderate aesthetic value		high aesthetic value
(max 18)	1	lacks commercial fisheries, agriculture, renewable resources		moderate commercial fisheries, agriculture, renewable resources		high commercial fisheries, agriculture, renewable resources
		lacks historical or archaeological resources	2	historical or archaeological site		important historical or archaeological site
		lacks passive and active recreational opportunities	2	some passive and active recreational opportunities		many passive and active recreational opportunities
		privately owned		privately owned, some public access	3	unrestricted public access

N/A = Not Applicable, N/I = No information available

Dominant Vegetation:

Wildlife:

2000 Wetland and Buffer Functions and Semi-quantitative Performance Assessment updated 8/04

Wetland #: A16 WETLAND BY TIBBETTS TRIBUTARY
Staff: JC
Date: 5/3/2005

Table 1: Determining Wetland Size in Landscape Context

Attribute	Low (1pt.)	Medium (2pts.)	High (3pts.)	Total
Absolute Size	<5 acres	5-10 acres	>10 acres	1
Wetland Loss In Basin	< 20%	20-60%	> 60%	2
Size Relative to Other Wetlands in Basin (on NWI maps)	< 100% of average size	100-200 % of average size	> 200% of average size	1
Buffer Size	< 75 feet	75-200 feet	> 200 feet	1
Buffer Condition	> 60% disturbed	20-60% disturbed	< 20% disturbed	1
Relative Size	If score is = 1.4 then give the question a 1 If score is = 1.5 to 2.4 then give the question a 2 If score is 2.5 to 3 then give the question a 3			Score/5 1.2

Function		Criteria				
		Group 1 1 pt		Group 2 2 pts		Group 3 3 pts
Flood/ Storm Water Control						
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
9	1	riverine or shallow depression		mid-sloped wetland		lake, depressions, headwaters, bogs
(max 15)		<10% forested cover		10-30% forested cover	3	>30% forested cover
		unconstrained outlet		semi-constrained outlet	3	culvert/bermed outlet
	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage
Base Flow/Ground Water Support						
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
6	1	riverine or lakeshore wetland		mid-sloped wetland		Lake,depressions, headwaters, bogs
(max 15)	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage
		temporally flooded or saturated	2	seasonally or semi-permanently flooded or saturated		permanently flooded or saturated, or intermittently exposed
	1	vegetation < 20% OBL species		vegetation 20 to 40 % OBL species		vegetation >40% OBL species
Erosion/ Shoreline Protection						
points		sparse grass/herbs or no veg along OHWM		sparse wood or veg along OHWM		dense wood or veg along OHWM
N/A		wetlands extends <30 m from OHWM		wetlands extends 30-60 m from OHWM		wetlands extends >200 m from OHWM
(max 9)		< 20% shoreline developed		20 to 60 % shoreline developed		>60% shoreline developed

Water Quality Improvement						
points		rapid flow through site		moderate flow through site	3	slow flow through site
12		< 50% veg cover		50-80% veg cover	3	>80% veg cover
(max 15)		< 20%upstream in basin from wetland is undeveloped	2	20 to 50% of basin upstream from wetland is undeveloped		>50% of basin upstream from wetland is undeveloped
		result from table 2	2	result from table 2		result from table 2
		soil coarse-gravel, sand, sandyloam	2	soil organic mineral mix		soil heavy organic muck and peat

Table 2: Overland Flow Contained in Wetland

Attribute		Low (1pt.)		Medium (2pts.)		High (3pts.)	Total
Configuration		Plate-shaped		Shallow Bowl-shaped		Deep Bowl-shaped	1
Drainage Basin Size		< 2 acres		2-5 acres		> 5 acres	2
Outlet		Unconstrained		Semi-constrained		Constrained	3
Input		Groundwater only		Surface flow and groundwater		Surface flow	2
Basin Condition		< 20% impervious		20-40% impervious		> 40% impervious	2
Flow Contained							Score/5 2

	Group 1 1 pt		Group 2 2 pts		Group 3 3 pts
Natural Biological Support					
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
21		low connectivity to veg'd buffers	2	mod connectivity to veg'd buffers		high connectivity to veg'd buffers
(max 36)		ag land, low veg structure		2 layers of vegetation	3	high vegetation structure
	1	seasonal surface water		permanent surface water		open water pools through summer
		one habitat type (PAB POW PEM PSS PFO EST)	2	two habitat types (PAB POW PEM PSS PFO EST)		≥ 3 habitat types (PAB POW PEM PSS PFO EST)
		low plant diversity (<6 species)	2	moderate plant diversity (7-15 species)		high plant diversity (>15spp)
		> 50% invasive species	2	10 to 50% invasive species		<10% invasive species
		low organic accumulation	2	moderate organic accumulation		high organic accumulation
	1	low organic export		moderate organic export		high organic export
		few habitat features	2	some habitat features		many habitat features
	1	buffers very disturbed		buffers slightly disturbed		buffers not disturbed
		isolated from upland habitats	2	partially connected to upland habitats		well connected to upland habitats

Overall Habitat Functions						
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
5		low habitat diversity	2	moderate habitat diversity		high habitat diversity
(max 9)		low sanctuary or refuge	2	moderate sanctuary or refuge		high sanctuary or refuge

Specific Habitat Functions						
points		low invertebrate habitat	2	moderate invertebrate habitat		high invertebrate habitat
8	1	low amphibian habitat		moderate amphibian habitat		high amphibian habitat
(max 15)	1	low fish habitat		moderate fish habitat		high fish habitat
		low mammal habitat	2	moderate mammal habitat		high mammal habitat
		low bird habitat	2	moderate bird habitat		high bird habitat

Cultural/ Socioeconomic						
points	1	low educational opportunities		moderate education opportunities		high education opportunities
10		low aesthetic value	2	moderate aesthetic value		high aesthetic value
(max 18)	1	lacks commercial fisheries, agriculture, renewable resources		moderate commercial fisheries, agriculture, renewable resources		high commercial fisheries, agriculture, renewable resources
	1	lacks historical or archaeological resources		historical or archaeological site		important historical or archaeological site
		lacks passive and active recreational opportunities	2	some passive and active recreational opportunities		many passive and active recreational opportunities
		privately owned		privately owned, some public access	3	unrestricted public access

N/A = Not Applicable, N/I = No information available

Dominant Vegetation:

Wildlife:

2000 Wetland and Buffer Functions and Semi-quantitative Performance Assessment updated 8/04

Wetland #: A17 FIELD NE OF SOCCER FIELDS
Staff: JC
Date: 5/10/2005

Table 1: Determining Wetland Size in Landscape Context

Attribute	Low (1pt.)	Medium (2pts.)	High (3pts.)	Total
Absolute Size	<5 acres	5-10 acres	>10 acres	2
Wetland Loss In Basin	< 20%	20-60%	> 60%	2
Size Relative to Other Wetlands in Basin (on NWI maps)	< 100% of average size	100-200 % of average size	> 200% of average size	1
Buffer Size	< 75 feet	75-200 feet	> 200 feet	2
Buffer Condition	> 60% disturbed	20-60% disturbed	< 20% disturbed	1
Relative Size	If score is = 1.4 then give the question a 1 If score is = 1.5 to 2.4 then give the question a 2 If score is 2.5 to 3 then give the question a 3			Score/5 1.6

Function		Criteria				
		Group 1 1 pt		Group 2 2 pts		Group 3 3 pts
Flood/ Storm Water Control						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
8	1	riverine or shallow depression		mid-sloped wetland		lake, depressions, headwaters, bogs
(max 15)		<10% forested cover	2	10-30% forested cover		>30% forested cover
		unconstrained outlet	2	semi-constrained outlet		culvert/bermed outlet
	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage
Base Flow/Ground Water Support						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
7	1	riverine or lakeshore wetland		mid-sloped wetland		Lake,depressions, headwaters, bogs
(max 15)	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage
		temporally flooded or saturated	2	seasonally or semi-permanently flooded or saturated		permanently flooded or saturated, or intermittently exposed
	1	vegetation < 20% OBL species		vegetation 20 to 40 % OBL species		vegetation >40% OBL species
Erosion/ Shoreline Protection						
points		sparse grass/herbs or no veg along OHWM		sparse wood or veg along OHWM		dense wood or veg along OHWM
N/A		wetlands extends <30 m from OHWM		wetlands extends 30-60 m from OHWM		wetlands extends >200 m from OHWM
(max 9)		< 20% shoreline developed		20 to 60 % shoreline developed		>60% shoreline developed

Water Quality Improvement						
points		rapid flow through site		moderate flow through site	3	slow flow through site
12		< 50% veg cover		50-80% veg cover	3	>80% veg cover
(max 15)		< 20%upstream in basin from wetland is undeveloped	2	20 to 50% of basin upstream from wetland is undeveloped		>50% of basin upstream from wetland is undeveloped
		result from table 2	2	result from table 2		result from table 2
		soil coarse-gravel, sand, sandyloam	2	soil organic mineral mix		soil heavy organic muck and peat

Table 2: Overland Flow Contained in Wetland

Attribute		Low (1pt.)		Medium (2pts.)		High (3pts.)	Total
Configuration		Plate-shaped		Shallow Bowl-shaped		Deep Bowl-shaped	1
Drainage Basin Size		< 2 acres		2-5 acres		> 5 acres	3
Outlet		Unconstrained		Semi-constrained		Constrained	2
Input		Groundwater only		Surface flow and groundwater		Surface flow	2
Basin Condition		< 20% impervious		20-40% impervious		> 40% impervious	1
Flow Contained							Score/5 1.8

	Group 1 1 pt		Group 2 2 pts		Group 3 3 pts
Natural Biological Support					
points	size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
20	low connectivity to veg'd buffers	2	mod connectivity to veg'd buffers		high connectivity to veg'd buffers
(max 36)	ag land, low veg structure	2	2 layers of vegetation		high vegetation structure
1	seasonal surface water		permanent surface water		open water pools through summer
	one habitat type (PAB POW PEM PSS PFO EST)	2	two habitat types (PAB POW PEM PSS PFO EST)		≥ 3 habitat types (PAB POW PEM PSS PFO EST)
	low plant diversity (<6 species)	2	moderate plant diversity (7-15 species)		high plant diversity (>15spp)
	> 50% invasive species	2	10 to 50% invasive species		<10% invasive species
1	low organic accumulation		moderate organic accumulation		high organic accumulation
1	low organic export		moderate organic export		high organic export
	few habitat features	2	some habitat features		many habitat features
1	buffers very disturbed		buffers slightly disturbed		buffers not disturbed
	isolated from upland habitats	2	partially connected to upland habitats		well connected to upland habitats

Overall Habitat Functions						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
6		low habitat diversity	2	moderate habitat diversity		high habitat diversity
(max 9)		low sanctuary or refuge	2	moderate sanctuary or refuge		high sanctuary or refuge

Specific Habitat Functions						
points		low invertebrate habitat	2	moderate invertebrate habitat		high invertebrate habitat
9		low amphibian habitat	2	moderate amphibian habitat		high amphibian habitat
(max 15)	1	low fish habitat		moderate fish habitat		high fish habitat
		low mammal habitat	2	moderate mammal habitat		high mammal habitat
		low bird habitat	2	moderate bird habitat		high bird habitat

Cultural/ Socioeconomic						
points	1	low educational opportunities		moderate education opportunities		high education opportunities
9		low aesthetic value	2	moderate aesthetic value		high aesthetic value
(max 18)	1	lacks commercial fisheries, agriculture, renewable resources		moderate commercial fisheries, agriculture, renewable resources		high commercial fisheries, agriculture, renewable resources
	1	lacks historical or archaeological resources		historical or archaeological site		important historical or archaeological site
	1	lacks passive and active recreational opportunities		some passive and active recreational opportunities		many passive and active recreational opportunities
		privately owned		privately owned, some public access	3	unrestricted public access

N/A = Not Applicable, N/I = No information available

Dominant Vegetation:

Wildlife:

2000 Wetland and Buffer Functions and Semi-quantitative Performance Assessment updated 8/04

Wetland #: **B7 TIBBETTS MOUTH TRAIL**
Staff: JC
Date: 5/10/2005

Table 1: Determining Wetland Size in Landscape Context

Attribute	Low (1pt.)	Medium (2pts.)	High (3pts.)	Total
Absolute Size	<5 acres	5-10 acres	>10 acres	1
Wetland Loss In Basin	< 20%	20-60%	> 60%	1
Size Relative to Other Wetlands in Basin (on NWI maps)	< 100% of average size	100-200 % of average size	> 200% of average size	1
Buffer Size	< 75 feet	75-200 feet	> 200 feet	2
Buffer Condition	> 60% disturbed	20-60% disturbed	< 20% disturbed	2
Relative Size	If score is = 1.4 then give the question a 1 If score is = 1.5 to 2.4 then give the question a 2 If score is 2.5 to 3 then give the question a 3			Score/5 1.4

Function		Criteria			
		Group 1 1 pt	Group 2 2 pts		Group 3 3 pts
Flood/ Storm Water Control					
points	1	size cumulative score (see table 1)	size cumulative score (see table 1)		size cumulative score (see table 1)
9		riverine or shallow depression	mid-sloped wetland	3	lake, depressions, headwaters, bogs
(max 15)		<10% forested cover	10-30% forested cover	3	>30% forested cover
	1	unconstrained outlet	semi-constrained outlet		culvert/bermed outlet
	1	located in lower 1/3 of drainage	located in middle 1/3 of drainage		located in upper 1/3 of drainage
Base Flow/Ground Water Support					
points	1	size cumulative score (see table 1)	size cumulative score (see table 1)		size cumulative score (see table 1)
8		riverine or lakeshore wetland	mid-sloped wetland	3	Lake,depressions, headwaters, bogs
(max 15)	1	located in lower 1/3 of drainage	located in middle 1/3 of drainage		located in upper 1/3 of drainage
		temporally flooded or saturated	2 seasonally or semi-permanently flooded or saturated		permanently flooded or saturated, or intermittently exposed
	1	vegetation < 20% OBL species	vegetation 20 to 40 % OBL species		vegetation >40% OBL species
Erosion/ Shoreline Protection					
points		sparse grass/herbs or no veg along OHWM	sparse wood or veg along OHWM	3	dense wood or veg along OHWM
7		wetlands extends <30 m from OHWM	wetlands extends 30-60 m from OHWM	3	wetlands extends >200 m from OHWM
(max 9)	1	< 20% shoreline developed	20 to 60 % shoreline developed		>60% shoreline developed

Water Quality Improvement						
points		rapid flow through site	2	moderate flow through site		slow flow through site
11		< 50% veg cover		50-80% veg cover	3	>80% veg cover
(max 15)		< 20%upstream in basin from wetland is undeveloped	2	20 to 50% of basin upstream from wetland is undeveloped		>50% of basin upstream from wetland is undeveloped
		result from table 2	2	result from table 2		result from table 2
		soil coarse-gravel, sand, sandyloam	2	soil organic mineral mix		soil heavy organic muck and peat

Table 2: Overland Flow Contained in Wetland

Attribute		Low (1pt.)		Medium (2pts.)		High (3pts.)	Total
Configuration		Plate-shaped		Shallow Bowl-shaped		Deep Bowl-shaped	1
Drainage Basin Size		< 2 acres		2-5 acres		> 5 acres	3
Outlet		Unconstrained		Semi-constrained		Constrained	1
Input		Groundwater only		Surface flow and groundwater		Surface flow	2
Basin Condition		< 20% impervious		20-40% impervious		> 40% impervious	1
Flow Contained							Score/5 1.6

	Group 1 1 pt		Group 2 2 pts		Group 3 3 pts	
Natural Biological Support						
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
23		low connectivity to veg'd buffers	2	mod connectivity to veg'd buffers		high connectivity to veg'd buffers
(max 36)		ag land, low veg structure		2 layers of vegetation	3	high vegetation structure
		seasonal surface water	2	permanent surface water		open water pools through summer
		one habitat type (PAB POW PEM PSS PFO EST)		two habitat types (PAB POW PEM PSS PFO EST)	3	≥ 3 habitat types (PAB POW PEM PSS PFO EST)
		low plant diversity (<6 species)	2	moderate plant diversity (7-15 species)		high plant diversity (>15spp)
		> 50% invasive species	2	10 to 50% invasive species		<10% invasive species
	1	low organic accumulation		moderate organic accumulation		high organic accumulation
	1	low organic export		moderate organic export		high organic export
		few habitat features	2	some habitat features		many habitat features
		buffers very disturbed	2	buffers slightly disturbed		buffers not disturbed
		isolated from upland habitats	2	partially connected to upland habitats		well connected to upland habitats

Overall Habitat Functions						
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
6		low habitat diversity		moderate habitat diversity	3	high habitat diversity
(max 9)		low sanctuary or refuge	2	moderate sanctuary or refuge		high sanctuary or refuge

Specific Habitat Functions						
points		low invertebrate habitat		moderate invertebrate habitat	3	high invertebrate habitat
12		low amphibian habitat	2	moderate amphibian habitat		high amphibian habitat
(max 15)		low fish habitat	2	moderate fish habitat		high fish habitat
		low mammal habitat	2	moderate mammal habitat		high mammal habitat
		low bird habitat		moderate bird habitat	3	high bird habitat

Cultural/ Socioeconomic						
points	1	low educational opportunities		moderate education opportunities		high education opportunities
10		low aesthetic value	2	moderate aesthetic value		high aesthetic value
(max 18)	1	lacks commercial fisheries, agriculture, renewable resources		moderate commercial fisheries, agriculture, renewable resources		high commercial fisheries, agriculture, renewable resources
		lacks historical or archaeological resources	2	historical or archaeological site		important historical or archaeological site
		lacks passive and active recreational opportunities	2	some passive and active recreational opportunities		many passive and active recreational opportunities
		privately owned	2	privately owned, some public access		unrestricted public access

N/A = Not Applicable, N/I = No information available

Dominant Vegetation:

Wildlife:

2000 Wetland and Buffer Functions and Semi-quantitative Performance Assessment updated 8/04

Wetland #: B8 REED CANARYGRASS AREA BY BASEBALL FIELDS
Staff: JC
Date: 5/3/2005

Table 1: Determining Wetland Size in Landscape Context

Attribute	Low (1pt.)	Medium (2pts.)	High (3pts.)	Total
Absolute Size	<5 acres	5-10 acres	>10 acres	1
Wetland Loss In Basin	< 20%	20-60%	> 60%	2
Size Relative to Other Wetlands in Basin (on NWI maps)	< 100% of average size	100-200 % of average size	> 200% of average size	1
Buffer Size	< 75 feet	75-200 feet	> 200 feet	1
Buffer Condition	> 60% disturbed	20-60% disturbed	< 20% disturbed	1
Relative Size	If score is = 1.4 then give the question a 1 If score is = 1.5 to 2.4 then give the question a 2 If score is 2.5 to 3 then give the question a 3			Score/5 1.2

Function		Criteria: Group 1 1 pt		Group 2 2 pts		Group 3 3 pts
Flood/ Storm Water Control						
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
7	1	riverine or shallow depression		mid-sloped wetland		lake, depressions, headwaters, bogs
(max 15)	1	<10% forested cover		10-30% forested cover		>30% forested cover
		unconstrained outlet		semi-constrained outlet	3	culvert/bermed outlet
	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage

Base Flow/Ground Water Support						
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
5	1	riverine or lakeshore wetland		mid-sloped wetland		Lake,depressions, headwaters, bogs
(max 15)	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage
	1	temporally flooded or saturated		seasonally or semi-permanently flooded or saturated		permanently flooded or saturated, or intermittently exposed
	1	vegetation < 20% OBL species		vegetation 20 to 40 % OBL species		vegetation >40% OBL species

Erosion/ Shoreline Protection						
points		sparse grass/herbs or no veg along OHWM		sparse wood or veg along OHWM		dense wood or veg along OHWM
N/A		wetlands extends <30 m from OHWM		wetlands extends 30-60 m from OHWM		wetlands extends >200 m from OHWM
(max 9)		< 20% shoreline developed		20 to 60 % shoreline developed		>60% shoreline developed

Water Quality Improvement						
points		rapid flow through site		moderate flow through site	3	slow flow through site
13		< 50% veg cover		50-80% veg cover	3	>80% veg cover
(max 15)		< 20%upstream in basin from wetland is undeveloped		20 to 50% of basin upstream from wetland is undeveloped	3	>50% of basin upstream from wetland is undeveloped
		result from table 2	2	result from table 2		result from table 2
		soil coarse-gravel, sand, sandyloam	2	soil organic mineral mix		soil heavy organic muck and peat

Table 2: Overland Flow Contained in Wetland

Attribute		Low (1pt.)		Medium (2pts.)		High (3pts.)	Total
Configuration		Plate-shaped		Shallow Bowl-shaped		Deep Bowl-shaped	1
Drainage Basin Size		< 2 acres		2-5 acres		> 5 acres	1
Outlet		Unconstrained		Semi-constrained		Constrained	3
Input		Groundwater only		Surface flow and groundwater		Surface flow	2
Basin Condition		< 20% impervious		20-40% impervious		> 40% impervious	1
Flow Contained							Score/5 1.6

	Group 1 1 pt			Group 2 2 pts			Group 3 3 pts
Natural Biological Support							
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)			size cumulative score (see table 1)
13	1	low connectivity to veg'd buffers		mod connectivity to veg'd buffers			high connectivity to veg'd buffers
(max 36)	1	ag land, low veg structure		2 layers of vegetation			high vegetation structure
	1	seasonal surface water		permanent surface water			open water pools through summer
	1	one habitat type (PAB POW PEM PSS PFO EST)		two habitat types (PAB POW PEM PSS PFO EST)			≥ 3 habitat types (PAB POW PEM PSS PFO EST)
	1	low plant diversity (<6 species)		moderate plant diversity (7-15 species)			high plant diversity (>15spp)
	1	> 50% invasive species		10 to 50% invasive species			<10% invasive species
		low organic accumulation	2	moderate organic accumulation			high organic accumulation
	1	low organic export		moderate organic export			high organic export
	1	few habitat features		some habitat features			many habitat features
	1	buffers very disturbed		buffers slightly disturbed			buffers not disturbed
	1	isolated from upland habitats		partially connected to upland habitats			well connected to upland habitats

Overall Habitat Functions						
points	1	size cumulative score (see table 1)		size cumulative score (see table 1)		size cumulative score (see table 1)
3	1	low habitat diversity		moderate habitat diversity		high habitat diversity
(max 9)	1	low sanctuary or refuge		moderate sanctuary or refuge		high sanctuary or refuge

Specific Habitat Functions						
points	1	low invertebrate habitat		moderate invertebrate habitat		high invertebrate habitat
5	1	low amphibian habitat		moderate amphibian habitat		high amphibian habitat
(max 15)	1	low fish habitat		moderate fish habitat		high fish habitat
	1	low mammal habitat		moderate mammal habitat		high mammal habitat
	1	low bird habitat		moderate bird habitat		high bird habitat

Cultural/ Socioeconomic						
points	1	low educational opportunities		moderate education opportunities		high education opportunities
8	1	low aesthetic value		moderate aesthetic value		high aesthetic value
(max 18)	1	lacks commercial fisheries, agriculture, renewable resources		moderate commercial fisheries, agriculture, renewable resources		high commercial fisheries, agriculture, renewable resources
	1	lacks historical or archaeological resources		historical or archaeological site		important historical or archaeological site
	1	lacks passive and active recreational opportunities		some passive and active recreational opportunities		many passive and active recreational opportunities
		privately owned		privately owned, some public access	3	unrestricted public access

N/A = Not Applicable, N/I = No information available

Dominant Vegetation:

Wildlife:

2000 Wetland and Buffer Functions and Semi-quantitative Performance Assessment updated 8/04

Wetland #: C4 GREENWOOD PROPERTY
Staff: JC
Date: 5/3/2005

Table 1: Determining Wetland Size in Landscape Context

Attribute	Low (1pt.)	Medium (2pts.)	High (3pts.)	Total
Absolute Size	<5 acres	5-10 acres	>10 acres	3
Wetland Loss In Basin	< 20%	20-60%	> 60%	2
Size Relative to Other Wetlands in Basin (on NWI maps)	< 100% of average size	100-200 % of average size	> 200% of average size	2
Buffer Size	< 75 feet	75-200 feet	> 200 feet	1
Buffer Condition	> 60% disturbed	20-60% disturbed	< 20% disturbed	1
Relative Size	If score is = 1.4 then give the question a 1 If score is = 1.5 to 2.4 then give the question a 2 If score is 2.5 to 3 then give the question a 3			Score/5 1.8

Function		Criteria				
		Group 1 1 pt		Group 2 2 pts		Group 3 3 pts
Flood/ Storm Water Control						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
6	1	riverine or shallow depression		mid-sloped wetland		lake, depressions, headwaters, bogs
(max 15)	1	<10% forested cover		10-30% forested cover		>30% forested cover
	1	unconstrained outlet		semi-constrained outlet		culvert/bermed outlet
	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage

Base Flow/Ground Water Support						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
6	1	riverine or lakeshore wetland		mid-sloped wetland		Lake,depressions, headwaters, bogs
(max 15)	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage
	1	temporally flooded or saturated		seasonally or semi-permanently flooded or saturated		permanently flooded or saturated, or intermittently exposed
	1	vegetation < 20% OBL species		vegetation 20 to 40 % OBL species		vegetation >40% OBL species

Erosion/ Shoreline Protection						
points		sparse grass/herbs or no veg along OHWM		sparse wood or veg along OHWM	3	dense wood or veg along OHWM
7		wetlands extends <30 m from OHWM		wetlands extends 30-60 m from OHWM	3	wetlands extends >200 m from OHWM
(max 9)	1	< 20% shoreline developed		20 to 60 % shoreline developed		>60% shoreline developed

Water Quality Improvement						
points		rapid flow through site		moderate flow through site	3	slow flow through site
12		< 50% veg cover		50-80% veg cover	3	>80% veg cover
(max 15)		< 20%upstream in basin from wetland is undeveloped	2	20 to 50% of basin upstream from wetland is undeveloped		>50% of basin upstream from wetland is undeveloped
		result from table 2	2	result from table 2		result from table 2
		soil coarse-gravel, sand, sandyloam	2	soil organic mineral mix		soil heavy organic muck and peat

Table 2: Overland Flow Contained in Wetland

Attribute		Low (1pt.)		Medium (2pts.)		High (3pts.)	Total
Configuration		Plate-shaped		Shallow Bowl-shaped		Deep Bowl-shaped	1
Drainage Basin Size		< 2 acres		2-5 acres		> 5 acres	3
Outlet		Unconstrained		Semi-constrained		Constrained	1
Input		Groundwater only		Surface flow and groundwater		Surface flow	2
Basin Condition		< 20% impervious		20-40% impervious		> 40% impervious	2
Flow Contained							Score/5 1.8

	Group 1 1 pt		Group 2 2 pts		Group 3 3 pts
Natural Biological Support					
points	size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
19	low connectivity to veg'd buffers	2	mod connectivity to veg'd buffers		high connectivity to veg'd buffers
(max 36)	1 ag land, low veg structure		2 layers of vegetation		high vegetation structure
	1 seasonal surface water		permanent surface water		open water pools through summer
	one habitat type (PAB POW PEM PSS PFO EST)	2	two habitat types (PAB POW PEM PSS PFO EST)		≥ 3 habitat types (PAB POW PEM PSS PFO EST)
	1 low plant diversity (<6 species)		moderate plant diversity (7-15 species)		high plant diversity (>15spp)
	1 > 50% invasive species		10 to 50% invasive species		<10% invasive species
	low organic accumulation	2	moderate organic accumulation		high organic accumulation
	low organic export	2	moderate organic export		high organic export
	few habitat features	2	some habitat features		many habitat features
	1 buffers very disturbed		buffers slightly disturbed		buffers not disturbed
	isolated from upland habitats	2	partially connected to upland habitats		well connected to upland habitats

Overall Habitat Functions						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
5	1	low habitat diversity		moderate habitat diversity		high habitat diversity
(max 9)		low sanctuary or refuge	2	moderate sanctuary or refuge		high sanctuary or refuge

Specific Habitat Functions						
points	1	low invertebrate habitat		moderate invertebrate habitat		high invertebrate habitat
7	1	low amphibian habitat		moderate amphibian habitat		high amphibian habitat
(max 15)		low fish habitat	2	moderate fish habitat		high fish habitat
	1	low mammal habitat		moderate mammal habitat		high mammal habitat
		low bird habitat	2	moderate bird habitat		high bird habitat

Cultural/ Socioeconomic						
points	1	low educational opportunities		moderate education opportunities		high education opportunities
8	1	low aesthetic value		moderate aesthetic value		high aesthetic value
(max 18)	1	lacks commercial fisheries, agriculture, renewable resources		moderate commercial fisheries, agriculture, renewable resources		high commercial fisheries, agriculture, renewable resources
		lacks historical or archaeological resources	2	historical or archaeological site		important historical or archaeological site
	1	lacks passive and active recreational opportunities		some passive and active recreational opportunities		many passive and active recreational opportunities
		privately owned	2	privately owned, some public access		unrestricted public access

N/A = Not Applicable, N/I = No information available

Dominant Vegetation:

Wildlife:

2000 Wetland and Buffer Functions and Semi-quantitative Performance Assessment updated 8/04

Wetland #: C8 E. LAKE SAMMAMISH PARKWAY WETLAND
Staff: JC
Date: 5/10/2005

Table 1: Determining Wetland Size in Landscape Context

Attribute		Low (1pt.)		Medium (2pts.)		High (3pts.)	Total
Absolute Size		<5 acres		5-10 acres		>10 acres	3
Wetland Loss In Basin		< 20%		20-60%		> 60%	2
Size Relative to Other Wetlands in Basin (on NWI maps)		< 100% of average size		100-200 % of average size		> 200% of average size	3
Buffer Size		< 75 feet		75-200 feet		> 200 feet	1
Buffer Condition		> 60% disturbed		20-60% disturbed		< 20% disturbed	1
Relative Size		If score is = 1.4 then give the question a 1 If score is = 1.5 to 2.4 then give the question a 2 If score is 2.5 to 3 then give the question a 3					Score/5 2

Function	Criteria					
	Group 1 1 pt		Group 2 2 pts		Group 3 3 pts	
Flood/ Storm Water Control						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
9		riverine or shallow depression		mid-sloped wetland	3	lake, depressions, headwaters, bogs
(max 15)	1	<10% forested cover		10-30% forested cover		>30% forested cover
		unconstrained outlet	2	semi-constrained outlet		culvert/bermed outlet
	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage

Base Flow/Ground Water Support						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
9		riverine or lakeshore wetland		mid-sloped wetland	3	Lake,depressions, headwaters, bogs
(max 15)	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage
		temporally flooded or saturated	2	seasonally or semi-permanently flooded or saturated		permanently flooded or saturated, or intermittently exposed
	1	vegetation < 20% OBL species		vegetation 20 to 40 % OBL species		vegetation >40% OBL species

Erosion/ Shoreline Protection						
points		sparse grass/herbs or no veg along OHWM		sparse wood or veg along OHWM	3	dense wood or veg along OHWM
7		wetlands extends <30 m from OHWM		wetlands extends 30-60 m from OHWM	3	wetlands extends >200 m from OHWM
(max 9)	1	< 20% shoreline developed		20 to 60 % shoreline developed		>60% shoreline developed

Water Quality Improvement						
points		rapid flow through site		moderate flow through site	3	slow flow through site
11		< 50% veg cover		50-80% veg cover	3	>80% veg cover
(max 15)	1	< 20%upstream in basin from wetland is undeveloped		20 to 50% of basin upstream from wetland is undeveloped		>50% of basin upstream from wetland is undeveloped
		result from table 2	2	result from table 2		result from table 2
		soil coarse-gravel, sand, sandyloam	2	soil organic mineral mix		soil heavy organic muck and peat

Table 2: Overland Flow Contained in Wetland

Attribute		Low (1pt.)		Medium (2pts.)		High (3pts.)	Total
Configuration		Plate-shaped		Shallow Bowl-shaped		Deep Bowl-shaped	1
Drainage Basin Size		< 2 acres		2-5 acres		> 5 acres	3
Outlet		Unconstrained		Semi-constrained		Constrained	2
Input		Groundwater only		Surface flow and groundwater		Surface flow	2
Basin Condition		< 20% impervious		20-40% impervious		> 40% impervious	2
Flow Contained							Score/5 2

	Group 1 1 pt		Group 2 2 pts		Group 3 3 pts	
Natural Biological Support						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
17	1	low connectivity to veg'd buffers		mod connectivity to veg'd buffers		high connectivity to veg'd buffers
(max 36)	1	ag land, low veg structure		2 layers of vegetation		high vegetation structure
		seasonal surface water	2	permanent surface water		open water pools through summer
		one habitat type (PAB POW PEM PSS PFO EST)		two habitat types (PAB POW PEM PSS PFO EST)	3	≥ 3 habitat types (PAB POW PEM PSS PFO EST)
	1	low plant diversity (<6 species)		moderate plant diversity (7-15 species)		high plant diversity (>15spp)
	1	> 50% invasive species		10 to 50% invasive species		<10% invasive species
		low organic accumulation	2	moderate organic accumulation		high organic accumulation
	1	low organic export		moderate organic export		high organic export
	1	few habitat features		some habitat features		many habitat features
	1	buffers very disturbed		buffers slightly disturbed		buffers not disturbed
	1	isolated from upland habitats		partially connected to upland habitats		well connected to upland habitats

Overall Habitat Functions						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
5	1	low habitat diversity		moderate habitat diversity		high habitat diversity
(max 9)		low sanctuary or refuge	2	moderate sanctuary or refuge		high sanctuary or refuge

Specific Habitat Functions						
points		low invertebrate habitat	2	moderate invertebrate habitat		high invertebrate habitat
9		low amphibian habitat	2	moderate amphibian habitat		high amphibian habitat
(max 15)	1	low fish habitat		moderate fish habitat		high fish habitat
		low mammal habitat	2	moderate mammal habitat		high mammal habitat
		low bird habitat	2	moderate bird habitat		high bird habitat

Cultural/ Socioeconomic						
points	1	low educational opportunities		moderate education opportunities		high education opportunities
11		low aesthetic value	2	moderate aesthetic value		high aesthetic value
(max 18)	1	lacks commercial fisheries, agriculture, renewable resources		moderate commercial fisheries, agriculture, renewable resources		high commercial fisheries, agriculture, renewable resources
		lacks historical or archaeological resources	2	historical or archaeological site		important historical or archaeological site
		lacks passive and active recreational opportunities	2	some passive and active recreational opportunities		many passive and active recreational opportunities
		privately owned		privately owned, some public access	3	unrestricted public access

N/A = Not Applicable, N/I = No information available

Dominant Vegetation:

Wildlife:

2000 Wetland and Buffer Functions and Semi-quantitative Performance Assessment updated 8/04

Wetland #: C10 FIELD SOUTH OF ISSAQUAH CREEK
Staff: JC
Date: 5/11/2005

Table 1: Determining Wetland Size in Landscape Context

Attribute	Low (1pt.)	Medium (2pts.)	High (3pts.)	Total
Absolute Size	<5 acres	5-10 acres	>10 acres	3
Wetland Loss In Basin	< 20%	20-60%	> 60%	2
Size Relative to Other Wetlands in Basin (on NWI maps)	< 100% of average size	100-200 % of average size	> 200% of average size	2
Buffer Size	< 75 feet	75-200 feet	> 200 feet	2
Buffer Condition	> 60% disturbed	20-60% disturbed	< 20% disturbed	2
Relative Size	If score is = 1.4 then give the question a 1 If score is = 1.5 to 2.4 then give the question a 2 If score is 2.5 to 3 then give the question a 3			Score/5 2.2

Function		Criteria				
		Group 1 1 pt		Group 2 2 pts		Group 3 3 pts
Flood/ Storm Water Control						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
7	1	riverine or shallow depression		mid-sloped wetland		lake, depressions, headwaters, bogs
(max 15)	1	<10% forested cover		10-30% forested cover		>30% forested cover
		unconstrained outlet	2	semi-constrained outlet		culvert/bermed outlet
	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage

Base Flow/Ground Water Support						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
7	1	riverine or lakeshore wetland		mid-sloped wetland		Lake,depressions, headwaters, bogs
(max 15)	1	located in lower 1/3 of drainage		located in middle 1/3 of drainage		located in upper 1/3 of drainage
		temporally flooded or saturated	2	seasonally or semi-permanently flooded or saturated		permanently flooded or saturated, or intermittently exposed
	1	vegetation < 20% OBL species		vegetation 20 to 40 % OBL species		vegetation >40% OBL species

Erosion/ Shoreline Protection						
points		sparse grass/herbs or no veg along OHWM		sparse wood or veg along OHWM		dense wood or veg along OHWM
N/A		wetlands extends <30 m from OHWM		wetlands extends 30-60 m from OHWM		wetlands extends >200 m from OHWM
(max 9)		< 20% shoreline developed		20 to 60 % shoreline developed		>60% shoreline developed

Water Quality Improvement						
points		rapid flow through site		moderate flow through site	3	slow flow through site
12		< 50% veg cover		50-80% veg cover	3	>80% veg cover
(max 15)		< 20%upstream in basin from wetland is undeveloped	2	20 to 50% of basin upstream from wetland is undeveloped		>50% of basin upstream from wetland is undeveloped
		result from table 2	2	result from table 2		result from table 2
		soil coarse-gravel, sand, sandyloam	2	soil organic mineral mix		soil heavy organic muck and peat

Table 2: Overland Flow Contained in Wetland

Attribute		Low (1pt.)		Medium (2pts.)		High (3pts.)	Total
Configuration		Plate-shaped		Shallow Bowl-shaped		Deep Bowl-shaped	1
Drainage Basin Size		< 2 acres		2-5 acres		> 5 acres	3
Outlet		Unconstrained		Semi-constrained		Constrained	2
Input		Groundwater only		Surface flow and groundwater		Surface flow	2
Basin Condition		< 20% impervious		20-40% impervious		> 40% impervious	2
Flow Contained							Score/5 2

	Group 1 1 pt			Group 2 2 pts			Group 3 3 pts
Natural Biological Support							
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)	
20		low connectivity to veg'd buffers	2	mod connectivity to veg'd buffers		high connectivity to veg'd buffers	
(max 36)		ag land, low veg structure	2	2 layers of vegetation		high vegetation structure	
	1	seasonal surface water		permanent surface water		open water pools through summer	
		one habitat type (PAB POW PEM PSS PFO EST)	2	two habitat types (PAB POW PEM PSS PFO EST)		≥ 3 habitat types (PAB POW PEM PSS PFO EST)	
		low plant diversity (<6 species)	2	moderate plant diversity (7-15 species)		high plant diversity (>15spp)	
	1	> 50% invasive species		10 to 50% invasive species		<10% invasive species	
		low organic accumulation	2	moderate organic accumulation		high organic accumulation	
	1	low organic export		moderate organic export		high organic export	
	1	few habitat features		some habitat features		many habitat features	
		buffers very disturbed	2	buffers slightly disturbed		buffers not disturbed	
		isolated from upland habitats	2	partially connected to upland habitats		well connected to upland habitats	

Overall Habitat Functions						
points		size cumulative score (see table 1)	2	size cumulative score (see table 1)		size cumulative score (see table 1)
7		low habitat diversity	2	moderate habitat diversity		high habitat diversity
(max 9)		low sanctuary or refuge		moderate sanctuary or refuge	3	high sanctuary or refuge

Specific Habitat Functions						
points		low invertebrate habitat	2	moderate invertebrate habitat		high invertebrate habitat
8	1	low amphibian habitat		moderate amphibian habitat		high amphibian habitat
(max 15)	1	low fish habitat		moderate fish habitat		high fish habitat
		low mammal habitat	2	moderate mammal habitat		high mammal habitat
		low bird habitat	2	moderate bird habitat		high bird habitat

Cultural/ Socioeconomic						
points	1	low educational opportunities		moderate education opportunities		high education opportunities
11		low aesthetic value	2	moderate aesthetic value		high aesthetic value
(max 18)	1	lacks commercial fisheries, agriculture, renewable resources		moderate commercial fisheries, agriculture, renewable resources		high commercial fisheries, agriculture, renewable resources
		lacks historical or archaeological resources	2	historical or archaeological site		important historical or archaeological site
		lacks passive and active recreational opportunities	2	some passive and active recreational opportunities		many passive and active recreational opportunities
		privately owned		privately owned, some public access	3	unrestricted public access

N/A = Not Applicable, N/I = No information available

Dominant Vegetation:

Wildlife:

APPENDIX C

Example Cost Estimates

Lake Sammamish State Park					**Project A1**
					Stream/Wetland
Tibbetts Streambank Restoration					Tibbetts Creek South
ITEM	UNIT	ESTIMATED UNIT COST	TOTAL QUANT.	COST	COMMENTS
PREPARATION					
MOBILIZATION/DEMOBILIZATION	L.S.	$1,000.00	1	$1,000	
CLEARING AND GRUBBING	ACRE	$5,000.00	1.0	$5,000	
HAND GRUBBING (WEEDING)	EST.	$10,000.00	1	$10,000	
EROSION CONTROL					
SILT FENCE	L.F.	$5.00	2800	$14,000	
PLANTING					
TOPSOIL (3" depth)	C.Y.	$25.00	200	$5,000	
SEEDING	S.F.	$0.05	25000	$1,250	
MULCHING (3" depth)	C.Y.	$25.00	200	$5,000	
PLANTS & INSTALLATION	S.F.	$0.50	25000	$12,500	
OTHER ITEMS					
LOG HABITAT SNAG	EACH	$1,200.00	6	$7,200	
SPLIT-RAIL WOOD FENCE AND SIGNS (100' O.C.)	L.F.	$18.00	1000	$18,000	
ROADSIDE CLEANUP	EST.	$2,000	1	$2,000	
				$80,950	
NOTE: Costs as presented include site preparation and construction only. Monitoring, maintenance, plant replacement, and implementation of other contingencies are not included.					

Lake Sammamish State Park					**Project A2**
					Wetland/Lakeshore
Sunset Beach North Lakeshore Enhancement					Tibbetts Creek South
ITEM	UNIT	ESTIMATED UNIT COST	TOTAL QUANT.	COST	COMMENTS
PREPARATION					
MOBILIZATION/DEMOBILIZATION	L.S.	$10,000.00	1	$10,000	
CLEARING AND GRUBBING	ACRE	$5,000.00	1.0	$5,000	
HAND GRUBBING (WEEDING)	EST.	$1,000.00	5	$5,000	
EROSION CONTROL					
SILT FENCE	L.F.	$5.00	1000	$5,000	
TEMP. EROSION/WATER POLLUTION CONTROL	EST.	$1,000	1	$1,000	
PLANTING					
MULCHING (3" depth)	C.Y.	$25.00	500	$12,500	
PLANTS & INSTALLATION	S.F.	$1.50	50000	$75,000	
OTHER ITEMS					
SURFACING - CRUSHED ROCK	C.Y	$60.00	15	$900	
LOG HABITAT SNAG	EACH	$1,000.00	2	$2,000	
LOG WITH ROOTWAD	EACH	$1,150.00	8	$9,200	
				$125,600	
NOTE: Costs as presented include site preparation and construction only. Monitoring, maintenance, plant replacement, and implementation of other contingencies are not included.					

Lake Sammamish State Park					**Project A3**
					Wetland/Lakeshore
Sunset Beach South Wetland Restoration				Sunset Beach, South End	
ITEM	UNIT	ESTIMATED UNIT COST	TOTAL QUANT.	COST	COMMENTS
PREPARATION					
MOBILIZATION/DEMOBILIZATION	L.S.	$2,000.00	1	$2,000	
HAND GRUBBING (WEEDING)	EST.	$2,000.00	1	$2,000	
EROSION CONTROL					
SILT FENCE	L.F.	$5.00	200	$1,000	
PLANTING					
TOPSOIL (3" depth)	C.Y.	$25.00	200	$5,000	
SEEDING	S.F.	$0.05	25000	$1,250	
MULCHING (3" depth)	C.Y.	$25.00	200	$5,000	
PLANTS & INSTALLATION	S.F.	$1.50	25000	$37,500	
OTHER ITEMS					
LOG WITH ROOTWAD	EACH	$1,150.00	12	$13,800	
SPLIT-RAIL WOOD FENCE AND SIGNS (100' O.C.)	L.F.	$18.00	200	$3,600	
ROADSIDE CLEANUP	EST.	$2,000	1	$2,000	
				$73,150	
NOTE: Costs as presented include site preparation and construction only. Monitoring, maintenance, plant replacement, and implementation of other contingencies are not included.					

Lake Sammamish State Park					**Project B1**
					Stream
Issaquah Creek Streambank Enhancement		Issaquah Creek, Upper Reach Righ Bank			
ITEM	UNIT	ESTIMATED UNIT COST	TOTAL QUANT.	COST	COMMENTS
PREPARATION					
HAND GRUBBING (WEEDING)	EST.	$1,000.00	0.5	$500	
PLANTING					
SEEDING	S.F.	$0.25	5000	$1,250	
MULCHING (3" depth)	C.Y.	$25.00	50	$1,250	
PLANTS & INSTALLATION	S.F.	$1.50	5000	$7,500	
				$10,500	
NOTE: Costs as presented include site preparation and construction only. Monitoring, maintenance, plant replacement, and implementation of other contingencies are not included.					

Lake Sammamish State Park					**Project B2**
					Stream
Issaquah Creek Streambank Enhancement				Right bank of Lower Issaquah Creek	
ITEM	UNIT	ESTIMATED UNIT COST	TOTAL QUANT.	COST	COMMENTS
PREPARATION					
MOBILIZATION/DEMOBILIZATION	L.S.	$8,000.00	1	$8,000	
CLEARING AND GRUBBING	ACRE	$5,000.00	0.3	$1,500	
DEMOLITION: REMOVE OLD TRAIL	EST.	$2,500.00	1	$2,500	
HAND GRUBBING (WEEDING & CLEARING)	EST.	$1,000.00	2	$2,000	Areas of limited access
EROSION CONTROL					
SILT FENCE	L.F.	$5.00	500	$2,500	
PLANTING					
MULCHING (3" depth)	C.Y.	$25.00	150	$3,750	
PLANTS & INSTALLATION	S.F.	$1.50	13600	$20,400	
OTHER ITEMS					
SURFACING - CRUSHED ROCK	C.Y	$80.00	10	$800	
LOG WITH ROOTWAD	EACH	$1,150.00	3	$3,450	
PICNIC TABLE	EACH	$1,000.00	1	$1,000	
SPLIT-RAIL WOOD FENCE AND SIGNS (100' O.C.)	L.F.	$18.00	100	$1,800	
				$47,700	
NOTE: Costs as presented include site preparation and construction only. Monitoring, maintenance, plant replacement, and implementation of other contingencies are not included.					

Lake Sammamish State Park					**Project B7**	
					Wetland, Stream, Lakeshore	
Tibbetts Creek Trail Enhancement					Tibbetts Creek Mouth Trail	
ITEM	UNIT	ESTIMATED UNIT COST	TOTAL QUANT.	COST	COMMENTS	
PREPARATION						
MOBILIZATION/DEMOBILIZATION	L.S.	$8,000.00	1	$8,000		
CLEARING AND GRUBBING	ACRE	$5,000.00	0.5	$2,500		
STRUCTURE						
BOARDWALK	L.F.	$200.00	50	$10,000		
EROSION CONTROL						
SILT FENCE	L.F.	$5.00	450	$2,250		
PLANTING						
TOPSOIL (3" depth)	C.Y.	$25.00	250	$6,250		
MULCHING (3" depth)	C.Y.	$25.00	250	$6,250		
PLANTS & INSTALLATION	S.F.	$1.50	25000	$37,500		
OTHER ITEMS						
SURFACING - WOOD CHIPS	C.Y	$50.00	15	$750		
IRRIGATION	S.F.	$0.75	25000	$18,750		
				$92,250		
NOTE: Costs as presented include site preparation and construction only. Monitoring, maintenance, plant replacement, and implementation of other contingencies are not included.						

APPENDIX D

Natural Resource Maps

D-1. Wetland Delineation Maps
D-2. Soils Map
D-3. Floodway/Floodplain Map

Lake Sammamish State Park

Wetlands Map

Washington State Parks and Recreation Commission

Figure 2A

Legend

- Wetland Boundary
- Upland side of boundary
- Wetland side of boundary
- Wetland Buffer
- Limit of Wetland Delineation Area

Lake Sammamish Shore Line

10C

10B

10A

5A

7A

6

Isolated Uplands

Issaquah Creek

Isolated Uplands

Tibbetts Creek

9

Upland

Upland

7B

6A

6C

6B

8

Park Property Line

NW Sammamish Rd.

56th Ave

Scale in Feet

0 200 400 800

NOTE: This map is from the *Wetlands Inventory for the Lake Sammamish State Park Property*, prepared by The Coot Company in January 2005. It is included here for reference only. The wetland numbers shown do not correspond to the project numbers used in the *Lake Sammamish State Park Wetland, Stream and Lakeshore Restoration Plan*.

Lake Sammamish State Park

Wetlands Map

Washington State Parks and Recreation Commission

Figure 2B

Legend

- Wetland Boundary
- Upland side of boundary
- Wetland side of boundary
- Wetland Buffer
- Limit of Wetland Delineation Area

SE 43rd Way

Park Property Line

5B

1B

3

1A

Laughing Jacobs Creek

Lake Sammamish Shore Line

2

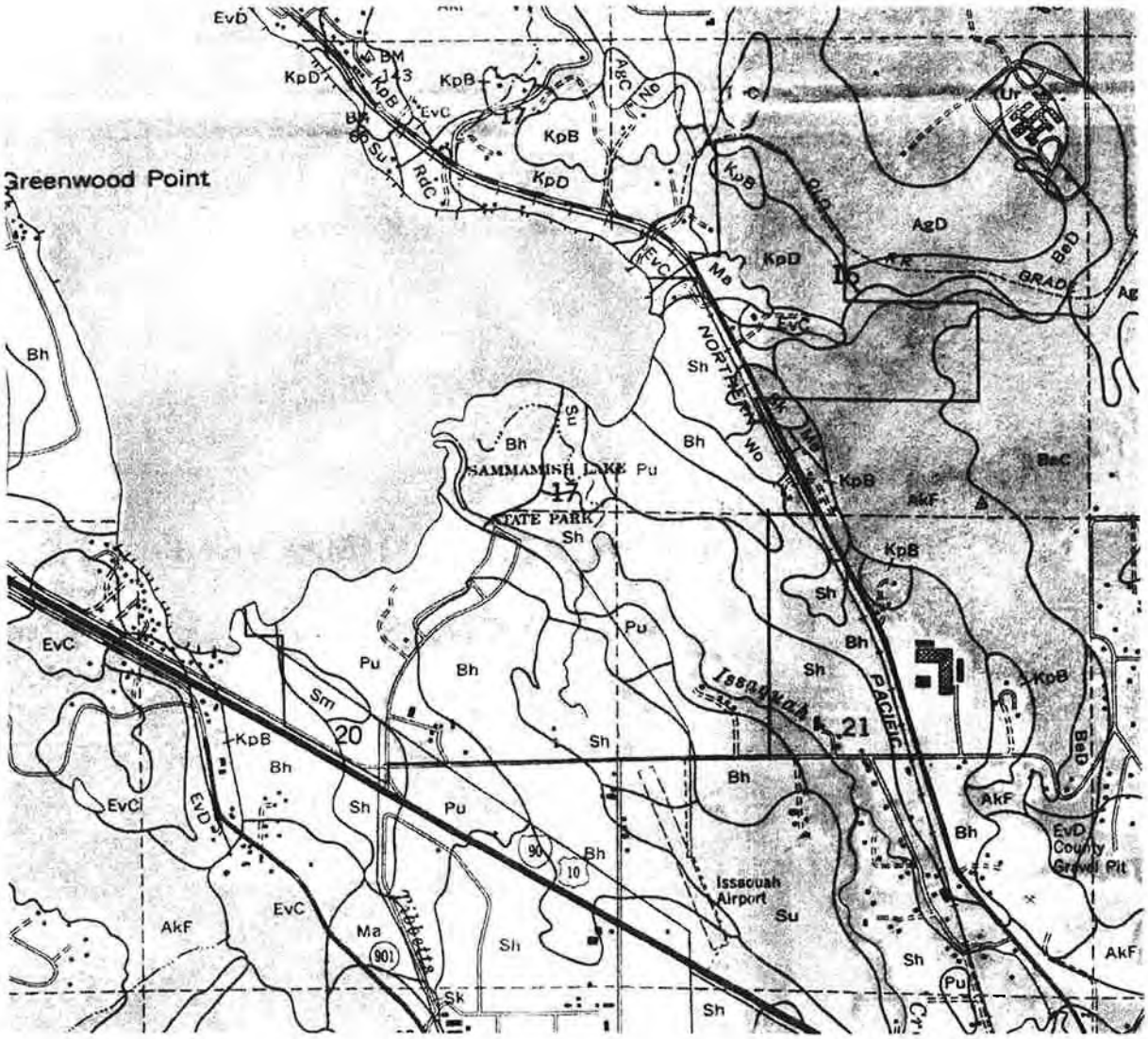
4

East Lake Sammamish Parkway

Scale in Feet

0 200 400 800

NOTE: This map is from the *Wetlands Inventory for the Lake Sammamish State Park Property*, prepared by The Coot Company in January 2005. It is included here for reference only. The wetland numbers shown do not correspond to the project numbers used in the *Lake Sammamish State Park Wetland, Stream and Lakeshore Restoration Plan*.



LAKE SAMMAMISH STATE PARK PROJECT

SOILS MAP

↑ N
Scale 1:24,000

* - Hydric Soils

Soil Survey of King County
Soil Conservation Service

-All locations approximate-

BeD	Beausite gravelly sandy loam
Bh	Bellingham silt loam
EvC	Everett gravelly sandy
KpB	Kitsap silt loam
KpD	Kitsap silt loam
Ma	Mixed alluvial land
*Pu	Puget silty clay loam
*Sh	Sammamish silt loam
*Sm	Shalcar muck
Su	Sultan silt loam
*Wo	Woodinville silt loam

THE COOT COMPANY

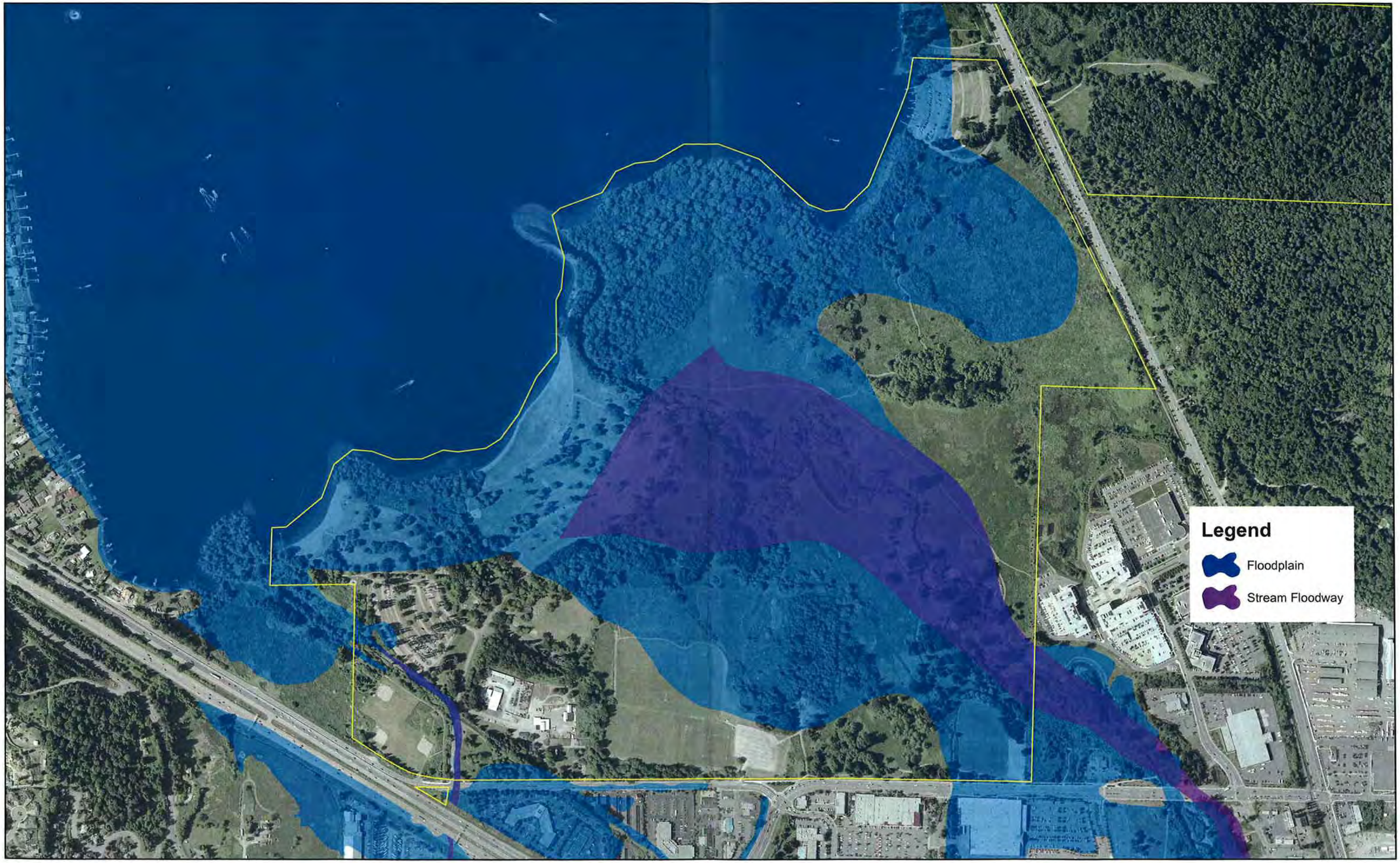
FIGURE 3

NOTE: This map is from the *Wetlands Inventory for the Lake Sammamish State Park Property*, prepared by The Coot Company in January 2005. It is included here for reference only.

Lake Sammamish State Park

1 inch equals 600 feet

N



APPENDIX E

GIS Data

Lake Sammamish State Park

Appendix E - Park Data

Group	Site ID	Wetland	Stream	Lakeshore	Upland	Recreation	X coord. (m)	Y coord. (m)
A	A1	wetland	stream				407087.0127	62229.61875
A	A2	wetland		lakeshore	upland		407353.6509	63140.62282
A	A3	wetland		lakeshore			407166.5154	62723.44183
A	A4	wetland					406929.0931	62422.27482
A	A5		stream				407358.0435	63043.98629
A	A6		stream				407414.4242	62938.84391
A	A7	wetland					406874.2362	62706.46401
A	A8	wetland			upland		407650.6136	62999.79601
A	A9a	wetland			upland	recreation	407402.9957	62383.41786
A	A9b	wetland			upland	recreation	407671.9468	62271.41836
A	A10	wetland				recreation	406895.5694	62244.75182
A	A11	wetland			upland		408116.1353	62802.46357
A	A12	wetland		lakeshore			407005.7594	62704.84497
A	A13	wetland					407580.0425	62707.7021
A	A14	wetland			upland		407987.6597	62210.5615
A	A15				upland		407111.4732	62596.27403
A	A16	wetland					407205.7585	62139.13325
A	A17	wetland			upland		407660.0421	62456.27467
A	A18				upland		407830.5175	62255.3232
B	B1		stream				408136.1114	62556.15517
B	B10		stream			recreation	408052.7784	62614.48824
B	B3		stream				408117.0639	62434.72715
B	B6		stream				407982.5407	62716.86872
B	B9		stream			recreation	407857.5412	62834.72533
B	B2		stream				407407.5433	63100.20032
B	B5	wetland	stream				407127.7826	62145.44275
B	B4		stream				407143.2588	62212.10911
B	B8	wetland				recreation	407051.5925	62239.48994
B	B7	wetland	stream	lakeshore		recreation	406662.3086	62601.39306
C	C9	wetland	stream				406751.5939	62495.44116
C	C4	wetland	stream	lakeshore		recreation	406728.9749	62383.5369
C	C7		stream				407711.1133	62769.24944
C	C5		stream				407777.7797	62739.48767
C	C3		stream				407899.2077	62675.20225
C	C10	wetland			upland		407955.1598	62582.34552
C	C6		stream				408071.826	62541.86952
C	C8	wetland		lakeshore		recreation	408190.873	63094.24796
C	C1		stream			recreation	408264.6822	62365.67984
C	C2		stream			recreation	408227.7776	62512.10775