

**DEPARTMENT OF THE ARMY
PERMIT EVALUATION AND DECISION DOCUMENT
Seattle District**

Applicant. Seattle Parks and Recreation

Application No. NWS 2006-52-NOW

I. Introduction.

A. This document constitutes the Environmental Assessment, Statement of Findings, and determination of compliance with the Section 404(b)(1) Guidelines for the work described in the attached Public Notice.

B. Decision. My decision is to issue a permit with special conditions for this work. The special conditions are discussed at the end of this document (section VIII).

II. Project Information.

A. Location. In wetlands adjacent to Lake Washington at Seattle, King County, Washington.

B. Description of the Proposed Work. The proposed work is to construct four regulation athletic fields and the sub-grade for a fifth future field, realign the existing cross-park trail, and construct new walking trails. This work would fill or adversely modify a maximum of 5.86 acres of palustrine emergent wetlands. Fields are intended to be used for soccer (north end of site) and adult baseball and youth softball (south end of site). In addition to the primary driver of the project (athletic fields), additional work is proposed to create and restore habitat and open space (which the applicant has merged with proposed on-site compensatory mitigation efforts). An existing informal "perimeter trail" that links north to south across the interior portion of the site will be upgraded and formalized. It will be handicapped accessible and will provide overlooks into the interior of the open space.

C. Description of the Proposed Mitigation. Mitigation is proposed on-site for adverse impacts to wetlands, via creation of new wetlands and rehabilitation of degraded wetlands. Refer to section VI, below, for a detailed description.

D. Jurisdiction. Lake Washington and its adjacent wetlands are waters of the United States. The Corps has regulatory jurisdiction over the proposed work pursuant to Section 404 of the Clean Water Act. The scope of analysis for this project consists of the wetlands/waters of the project site and the adjacent shorelines of Lake Washington. A completed JD form dated October 17, 2005 is in Corps file NWS 2005-00087-NO.

E. Purpose. The purpose of the project is to construct centrally located [clustered] athletic fields within the City of Seattle, adjacent to existing roads, parking, and restroom facilities, to meet demand for recreational fields for the citizens of the City of Seattle.

F. Project Need. An extensive presentation on development of project need was submitted to and evaluated by the Corps. The applicant (the City of Seattle) has projected demand for as many as 11 new athletic fields for adult and youth populations, especially in the areas north of the Ship Canal. This unmet need is being addressed by several methods, one of which is the proposed project for up to 5 fields. This was envisioned as long ago as 1965, when the Seattle Parks Department and the Seattle Planning Commission identified acquisition of the former Naval Air Station for development as a 340-acre "major park" with active and passive recreation *and* habitat/open space uses. These needs have been reiterated and refined qualitatively and quantitatively in subsequent planning studies undertaken for the park. After a full evaluation of this information, the Corps has not identified any substantive reason to disregard or dispute the premise that unmet demand exists for the type of facilities proposed.

G. Water Dependency. The project is not a water dependent activity.

III. Public Involvement.

A. Public Notice Date. A public notice for this proposal, describing the proposed work, and its purpose and intended use, was circulated on October 20, 2006. The formal expiration date for comments was November 20, 2006. However, the Corps held the administrative record open informally to accept additional public comment after that date. The Corps received and considered over 160 comments on the proposal before coming to a decision on the application.

B. Comments Received.

1. Federal Agencies.

a. Environmental Protection Agency (EPA). No comments received.

b. U.S. Fish and Wildlife Service (USFWS). No comments received.
[Refer to section V.C. for Endangered Species Act Section 7 consultation.]

c. National Marine Fisheries Service (NMFS). No comments received.
[Refer to section V.C. for Endangered Species Act Section 7 consultation.]

2. State and Local Agencies. In the State of Washington, the Department of

Ecology (Ecology) is the agency responsible for providing Water Quality Certification (WQC) and Coastal Zone Management (CZM) documentation on behalf of the State. On April 6, 2007 Ecology issued a conditioned WQC and a CZM determination of consistency for the proposed project as conditioned.

3. Indian Tribes. No Tribes provided comments.

4. Organizations and Individuals. Comments were received from Friends of Magunson Park, Sand Point Community Liaison Committee, Friends of the Athletic Fields, Seattle Youth Soccer Association, Phinney Ecovillage, NAME, Moss Bay Neighborhood Association, Loyal Heights Community Council, Hawthorne Hills Community Council, Thornton Creek Legal Defense Fund, and Magnuson Environmental Stewardship Alliance (MESA), and from numerous private individuals.

This section presents the main issues raised by the majority of individuals or organized groups submitting comment letters in response to the public notice comment period and those unsolicited comments received into the public record by interested parties. The comments are condensed and summarized to be representative of all comments received regarding a given topic. The applicant's responses to these issues is presented in Appendix A, attached to the end of this decision document.

(a) Extend the public notice comment period.

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: The Corps did not formally extend the public comment period. However, the administrative record was kept open for additional public comment after November 20, 2006, and all comments received as of the date of this decision have been considered and evaluated.

(b) Conduct a public hearing.

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: Refer to section III.C. of this document.

(c) Corps should conduct an alternatives analysis pursuant to Section 404(b)(1) of the Clean Water Act.

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: The Corps did an alternative analysis. Refer to section IV. of this document.

(d) The fields are not centrally located in the City of Seattle.

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: The Corps concurs with the applicant's response and notes that "centrally located" also refers to the fact that the proposal involves clustered athletic fields, versus fields dispersed around the City or dispersed around Magnuson Park.

(e) Access roads to the Park are residential, not arterial; Sand Point Way is near or at capacity now.

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: The Corps concurs with the applicant's response.

(f) Proposed fields are for adults, not children, and paying teams will use the fields, making them unavailable for families.

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: The Corps concurs with the applicant's response. There is a demonstrated demand for fields for adults, and the Corps notes that there are existing fields on-site that currently serve youth, including the Parade Ground Fields and the natural grass Sports Meadow. These would be preserved for use by youth under the current proposal. Additionally, the City's Joint Athletic Facilities Development Program (JAFDP) is funding field improvement projects and new athletic fields at or near schools throughout the city. The proposed project is in addition to such fields, not in lieu of them.

(g) Fields should be dispersed throughout the City, not concentrated in one location.

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: The Corps concurs with the applicant's response and also notes that there are existing athletic fields throughout the city and new synthetic, lit fields being funded by the JAFDP at such locations as Nathan Hale, Rainier Beach, Sealth, Summit, Genessee, and Ingraham. The record shows that the proposed project is an addition to these dispersed fields, not in lieu of them.

(h) Necessary facilities (restrooms) are not present or proposed within the Park.

Applicant's response: Refer to Appendix A to this decision document for the applicant's responses.

DE's response: The Corps concurs with the applicant's response and also notes that, in addition to existing permanent facilities, the applicant's revised plan drawings, show three locations for portable toilet facilities. The applicant has confirmed that these will receive regular service as is standard for portable restroom leases.

(i) It was challenging for interested parties to understand technical documents and drawings.

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: The Corps concurs with the applicant's response.

(j) The Department of Parks and Recreation will not be responsive to permit conditions; there is a risk of violations, per past history.

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: There have been two violations of the Clean Water Act at this park, in 2001 and 2005. The Department of Parks and Recreation will be reminded of their duty to comply with the general and special conditions of any Federal permits issued to them. They have stated that they will have a dedicated Construction Manager, to perform oversight of this project. In addition, one of the special conditions to be placed on any permit is the following: *The permittee shall provide a copy of the permit transmittal letter, permit form, and permit drawings to all contractors involved in the authorized work.* The Corps is responsible for and has the capability of enforcing compliance with any permit and permit conditions, and can and will take enforcement actions whenever necessary.

(k) Lighting will adversely affect nearby residences, residents of Kirkland, and wildlife habitat areas; noise will affect nearby residences.

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: Corps staff have reviewed and evaluated the data on night field lighting and effects thereof which are presented in the State Environmental Policy Act (SEPA) Final Environmental Impact Statement (FEIS) and supplemental

materials. We find that a reasoned decision was made to allow for lighted fields, and that several changes have been made to the field design in response to concerns about night time lighting. They are discussed in section V.E. Noise impacts from the proposed project can occur to both nearby residential areas and to wildlife. These are also discussed in section V.E.

(l) Wetland mitigation has a 50% failure rate, therefore no wetland fill should be permitted, or mitigation should be monitored for more than 2 to 3 years.

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: The Corps concurs with applicant's response and in addition notes that the Mitigation Monitoring Plan dated February 9, 2006 (incorporated as Appendix F in the *Final Wetland Compensation Plan for Magnuson Park Phase 2 Development, Seattle, Washington* dated November 20, 2007) will be implemented as well. It has a set of very specific Monitoring Schedules (Tables A through H) which require monitoring of some parameters as often as once a year and for some parameters at least in years 1, 2, 3, 5, 7 and/or 10. Implementation of the mitigation and monitoring plan dated November 20, 2007 will be a special condition of permit issuance. (They are also conditions of the State's Section 401 Water Quality Certification.)

(m) The City failed to consider any other location for such a regional sports complex.

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: The Corps concurs with the applicant's statement and in addition notes that the applicant did prepare an alternatives analysis for the Corps permit process. The Corps has independently reviewed and evaluated alternatives available and practicable to the applicant, and compared those relative to practicability and environmental impact. Refer to section IV of this document.

(n) Field #3 (subgrade for 5th field) should not be placed in wetlands, but moved to the west (with zero wetland impact).

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: The Corps concurs with applicant's statement and in addition notes that the Parade Ground Fields are currently used by youth for wide-ranging passive activities, including model aircraft flying, model rocket launching, and summer camp activities. If this area is converted to new lit fields (largely for adult play), the current use by youth would be lost. Many commenters did not wish to see a

reduction of youth fields and activities to occur via the addition of adult fields at Magnuson Park. In addition, it would place the lit fields much closer to the transitional housing area.

(o) Natural wetlands on the site are functioning well and will be adversely affected by the project (long-term direct and indirect impacts).

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: The Corps concurs with applicant's statement and in addition adds that the Corps independently reviewed and evaluated the functions and value of the existing wetlands. The wetlands are largely driven by surface water and primarily provide surface water (including flood flow) attenuation functions, for water that flows across the site to Lake Washington. They also provide habitat for Pacific Chorus frogs and passerines (small birds). They are largely rated as Class III by Ecology's rating system, meaning that they perform at a moderate level of function and typically have been disturbed in some way. One of the wetlands is Category IV, which is the lowest level of function (these typically have been highly disturbed). Refer to sections V(C) and V(I) for additional discussion of this issue.

(p) There is inadequate funding identified in the Parks budget for long-term monitoring and maintenance of wetland mitigation.

Applicant's response: Refer to Appendix A to this decision document for the applicant's responses.

DE's response: Comment noted. The Corps notes that the Mitigation Monitoring Plan dated February 9, 2006 will be implemented as well as the Mitigation Plan dated January 27, 2006. The Mitigation Monitoring Plan has a set of very specific Monitoring Schedules (Tables A through H) which will require monitoring of some parameters as often as once a year and for some parameters at least in years 1, 2, 3, 5, 7 and/or 10. Implementation of the mitigation and monitoring plan will be a special condition of permit issuance. Further, their reply dated October 11, 2007, indicates that the applicant does have dedicated funding for these requirements. A permittee is required to implement all general and special conditions of the permit. The Corps is responsible for and has the capability of enforcing compliance with any permit and permit conditions, and can and will take enforcement actions whenever necessary.

(q) Magnuson Park has one of the richest bird populations in the Seattle Area, and these would be adversely affected.

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: The Corps concurs with applicant's statement. The anticipated changes are not considered to be significant impacts, as discussed in section V.C.

(r) Piecemeal applications for wetland fills over time avoid assessment of cumulative effects.

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: Cumulative impacts of wetland fills have been considered. There have been four Corps permits issued over the last five years for various activities at Magnuson Park, and two violations [discussed above in reply (j)]. Two of these permit actions underwent review through the Nationwide Permit process, which culminated in a determination that the actions were minimal both individually and cumulatively. The others, for a log boom and boat launch in the North Shore Recreation Area and for replacement of a boat ramp and gangway, were permitted after evaluation via the Standard Individual Permit process, and evaluation of cumulative impacts was a part of each of these. In this document, cumulative impacts are discussed in section V(F).

(s) There will be water quality impacts to wetlands, Lake Washington, and Puget Sound from the field runoff; no baseline monitoring is proposed.

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: The Corps concurs with the applicant's response.

(t) Existing Pacific Chorus Frog breeding population will be affected by changes in hydroperiod (and runoff during Phase 2 construction).

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: The Corps concurs with the applicant's response.

(u) Existing Parks Department 1970's-era sewer system through the park might pollute Lake Washington.

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: The Corps concurs with the applicant's response.

(v) It is inappropriate for the City to use volunteers to conduct water quality monitoring; this should be done by professionals.

Applicant's response: Refer to Appendix A to this decision document for the applicant's response.

DE's response: The Corps certainly recognizes that many volunteers can be highly experienced, but has stated to the applicant that experts will need to be heavily involved in the mitigation monitoring process. Additional information on training and supervision has been received from the applicant and is discussed below in section VI.C.

(w) The permit should be denied.

Applicant's response: No comment.

DE's response: Refer to sections VII, VIII, IX, and X of this document for the agency decision.

In addition to the foregoing comments from the majority of individuals and organized groups, there were a few comments supporting the Magnuson Park Phase 2 project as proposed in the Corps' public notice.

C. Requests for Public Hearing. The Corps received approximately 70 individual and group comments generated by our public notice on this project. The majority of the comment letters and emails the Corps received expressed a desire for more time to provide comment and a public hearing in which to provide oral comments. Many of the comments also noted concerns regarding a variety of environmental impacts associated with the project.

The Corps can hold a public hearing in connection with the consideration of a Department of the Army (DA) permit application or a Federal project whenever a public hearing is needed for making a decision on such permit application or Federal project [33 CFR 327.4]. Public hearings are also discussed in the Corps' Standard Operating Procedures (SOP) for the Regulatory Program dated October 15, 1999. The SOP states that public hearings are to provide additional information not otherwise available which would enable a thorough evaluation of pertinent issues.

The Corps received no comments that indicated new or additional information from that which the Corps had already received would have been provided by a public hearing. In addition to written comments, the Corps obtained and reviewed the "Sand Point Magnuson Park DSEIS Hearing Transcript of Public Comments" dated April 7, 2003. This document contains the testimony of 38 parties who commented during the SEPA Supplemental EIS process. The comments the Corps received were essentially the same as those generated during the SEPA process¹. The Corps also extended the public comment period well beyond the 30-days indicated in the public notice. We did not

¹The key comments we received are discussed in Section III.B.4 of this document.

refuse consideration of any comments regardless of when they were provided to us -- many were submitted well after the closure date of the public notice.

The Corps believes the comments we received present a very comprehensive list of concerns. We also provided ample opportunity to the interested public to review and comment on supporting documents generated by the applicant in support of the permit application. We received numerous independent technical submittals as well as numerous critiques of the applicant's supporting documents. We believe we have a thorough understanding of the issues of concern. A public hearing would not have provided new or substantially different information from that already in the administrative record. As such, I have determined that a valid interest would not have been served by holding a public hearing.

IV. Alternatives. [33 CFR 320.4(b)(4), 40 CFR 230.10]. The Corps, as a Federal agency, is issuing a permit under the Department of the Army (DA) regulatory program. Appendix B to 33 CFR 325 contains the guidance implementing the application of NEPA to the DA regulatory program. According to that Appendix, the decision options available to the Corps, which embrace all of the applicant's alternatives, are 1) issue the permit, 2) issue the permit with modifications, or 3) deny the permit. Provided below is an evaluation of alternatives to the proposed project:

A. Proposed Project. The current proposal includes filling or adversely modifying a maximum of 5.86 acres of wetlands. Pursuant to the State Environmental Policy Act EIS (prepared by the applicant), the proposed fill is in conjunction with a plan by the City of Seattle to:

“Undertake the development of a new sports field and court complex, wetland and habitat restoration and drainage facilities at Sand Point Magnuson Park (SPMP) in the City of Seattle.”

A full description of all components of the project are contained in the applicant's JARPA and SEPA documentation (Final EIS), which are incorporated by reference in this document. Additionally, specific examples of wetland impact avoidance and minimization during field placement were provided by the applicant via their agent (OTAK) on October 11, 2007. The project purpose (refer to section II.E. above) includes concentrating the fields, rather than scattering them across Magnuson Park or across the City of Seattle.

B. Other Project Designs. We fully evaluated the applicant's configuration of the project site and ultimately were convinced that they made all reasonable efforts to avoid and minimize impacts to wetlands. We concur with a minimum size of 11 acres for the athletic fields. Throughout the Corps' review process, we worked closely with the applicant to assure that on-site avoidance and minimization measures had been incorporated into the proposal. Corps personnel walked the site on several occasions, both with and without the applicant, to fully understand the opportunities and limitations associated with the site. We have also reviewed the applicant's extensive information

developed during the SEPA process as well as their many modifications incorporated into the project as a result of the public process. We are satisfied that the proposed wetland fill represents the least environmentally damaging practicable on-site alternative to meet the project purpose. Details of this process are found in the SEPA Final EIS and Supplemental EIS for this project. We have also documented our site visits and discussions with the applicant. This is contained in the project record.

C. Other Sites. The City did not look at offsite alternatives to determine if there were less damaging alternatives to their proposal during the SEPA process. They had evaluated resources throughout the City in their development of a specific plan for the project site, but not with the intent of evaluating potential alternatives that would have less environmental damage to the aquatic ecosystem than the proposed project. We directed the City to develop an analysis of available off-site alternatives (encompassing opportunities and constraints based on cost, logistics, and technology) with the goal of identifying and comparing alternatives that meet the project purpose. Their submittal, dated April 6, 2007 provided an analysis and included a discussion of three other properties owned by the applicant with rationale explaining their process.

The applicant proposed some general assessment criteria, which we have summarized below:

- (1) **The project must support 5 fields clustered in a single location.** The Corps concurred with this criterion after taking into consideration the extensive amount of planning the applicant has engaged in to meet recreational demands. The Corps concurs with the applicant's assessment that locating individual fields in smaller areas would have many of the same impacts as would a single facility and they would be spread throughout the City. In addition, many of the smaller locations have other plans already in place that would occur regardless of the propose project, not in lieu of it. We concur that a minimum size of 11 acres is a reasonable limitation for areas able to support the project purpose.
- (2) **The project must be adjacent to existing traffic infrastructure (roads, parking).** While it is technically feasible for the applicant to develop new roads and infrastructure for a potential facility, the Corps finds that given the lack of significant impacts at the project site, it would unwarranted for the applicant to assume the expense of new traffic infrastructure to meet the project purpose. The Corps concurs that it is reasonable to limit the location of offsite alternatives to those with some existing traffic infrastructure.
- (3) **The project cannot result in significant increases in arterial traffic.** Given the known high concerns for traffic within the City of Seattle, the Corps concurs that a criterion limiting traffic congestion is reasonable.
- (4) **The project must remove existing impervious surfaces.** The Corps does not see this as a limiting factor in determining the availability of off-site alternatives. This appears to be more of a desire of the applicant for improving the proposed project site rather than a site-selection criterion.
- (5) **The project must incorporate the opportunity to treat existing untreated storm water.** As above, the Corps does not see this as a limiting factor.

Again, this appears to be an amenity at the proposed project site rather than a criterion for evaluating the potential of other sites.

- (6) **The project must avoid or minimize habitat fragmentation.** The Corps' analysis of alternatives allows the consideration of all environmental impacts at a potential alternative location, including those to aquatic ecosystems. The Guidelines also allow that other environmental impacts may result in greater impacts than those proposed for the aquatic environment and can be considered to have greater environmental impact than the impacts to the aquatic environment. The Corps concurs that environmental impacts to wetlands and other imported resources, such as forests, meadows, and shorelines should also be avoided to the maximum extent practicable. As such, the Corps concurs that this is a reasonable criterion.
- (7) **The project must increase wetlands on-site.** The Corps does not see this as a limiting factor for reasons outlined in (4) and (5) above.
- (8) **The project must not result in significant impacts to historic/cultural resources.** The Corps views this as a consideration of potential impacts, but not necessarily a limiting factor for the alternatives analysis.
- (9) **The project must minimize impacts to nearby residential areas.** The Corps views this as a consideration of potential impacts, but not necessarily a limiting factor for the alternatives analysis.

In summary, the Corps considered that it was reasonable to consider locating the 5 fields in close proximity with a minimum size of 11 acres, to consider areas with existing infrastructure, to minimize environmental impacts, and to consider potential impacts to historical/cultural resources and impacts to nearby residential areas. Other factors the Corps considered as desirable elements of the proposed project site, but not a requirement of constructing playfields.

The applicant only looked at properties that it owned. We considered this closely for suitability as a potential reasonable limitation by the applicant. The Corps determined that this was a reasonable limitation even though the City of Seattle (applicant) is a public entity with condemnation authorities. In making this determination, the Corps considered whether this was reasonable or practicable in light of the potential impacts of the proposed project. The 404(b)(1) Guidelines clearly allow for flexibility in how rigorous the Guidelines are applied on a case-by-case basis. The Corps does not believe that the wetlands impacted by this proposal would result in significant impacts to the aquatic environment (see discussion in section V. below). Our independent assessment is supported by the lack of any wetland-related comments from other Federal and State resources agencies. The general public comments largely focused on the change of use at Magnuson Park and the potential impacts to nearby residential areas. While lack of specific comment does not allow the Corps to ignore wetland impacts, it is an indication that the proposed wetland impacts are not considered significant by any authority, including the Corps. The Corps concurs that limiting the evaluation to sites within the applicant's current ownership is reasonable and involves a consideration of a reasonable range of alternatives.

The applicant submitted the following off-site alternatives for consideration:

- (1) **Lincoln Park.** The applicant considered this site because it was of sufficient size to support the 11 acres for playfields. It also had access to parking and roads. The applicant rejected this alternative due to the potential impacts to mature forests (up to 75 years old), impacts to the adjacent marine sanctuary, unstable slopes that would require significant grading and engineering, lack of sufficient parking infrastructure, increased traffic on existing arterials, and close proximity to existing residential areas. Up to 181 new parking spaces and 180 lineal feet of new access roads would need to be constructed, along with major stormwater handling improvements, all at a cost of hundreds of thousands of dollars. The Corps evaluated the applicant's rationale and concurred that this site has substantive site development constraints and greater potential for environmental impacts than the proposed site. Lincoln Park provides for more passive uses such as picnicking, walking, unlit playfields, and hiking appropriate to its location and the presence of mature forests. The forested areas also provide a visual and noise buffer to the adjacent marine sanctuary and the park is immediately adjacent to established residential neighborhoods. The Corps concurs with the applicant's findings.
- (2) **Discovery Park.** The applicant considered this site because it was of sufficient size and also had access to roads and parking. The applicant rejected this alternative because of the need for upgrades to the existing roadways and parking facilities, engineered retaining walls to create level places for fields, potential increases to arterial traffic, the adjacency of the Ft. Lawton historic zone, unstable slopes, and impacts to sensitive habitats. Up to 181 new parking spaces and 1,200 lineal feet of new access roads would need to be constructed, along with major stormwater handling improvements, all at a cost of hundreds of thousands of dollars. Existing residential areas are not in close proximity, but access to the park must traverse existing residential neighborhoods where traffic concerns by residents are already high and closely monitored. The Corps concurs with the applicant's findings.
- (3) **Jefferson Park.** The applicant considered this alternative because it is currently undergoing a master planning process and could feasibly support the 5 playing fields. The applicant rejected this as an alternative because of engineering implications (the fields would be on top of a water reservoir cap). The Corps, however, was most intrigued by this site because it met most of the applicant's criteria and would result in no impacts to wetlands. We concurred that the site would have greater light impacts because of the nearby residential areas. The lights would be elevated above the surrounding neighborhoods and would, therefore, have greater potential to disturb the area through increased nighttime light nuisance. We requested further information from the applicant regarding the practicability of this site, which they supplied on October 11, 2007. Up to 181 new parking spaces and 500 lineal feet of new access roads would need to be constructed, along with major stormwater handling improvements, all at a cost of hundreds of thousands of dollars.

Based on the Corps' evaluation and the City's supplemental information, the Corps concurs with the applicant's findings.

- (4) **Others.** The applicant also submitted information regarding their planning process for all City Parks. This supported the applicant's long intent to develop a multi-purpose regional park at Magnuson Park. This analysis reiterated what the Corps has accepted as a reasonable limitation. That is, the extensive planning process has identified potential uses for each of its athletic facilities. If the applicant divided up the 5 playfields (a "scattered fields" alternative) instead of concentrating them at one site, it would displace other planned uses within the park. It would essentially eliminate the large uninterrupted habitat area, eliminate the opportunity to create a "flow-through" system for drainage from the fields moving through wetlands from west to east, and most likely would also eliminate daylighting of the storm drain that currently exists under the site. It would also require improvements to parking, at an additional cost of about \$60,000. It would impact approximately 1.7 acres of wetlands. The Corps finds it reasonable to accept the applicant's extensive regional planning process as adequate to support the clustering of 5 playing fields at a single location, and this is congruent with the project purpose. No other sites were considered.

D. No Action. Under this alternative, no work would be performed and impacts would not occur. The project purpose would not be accomplished.

Summary of Alternatives Analysis. The Corps concludes that the applicant has adequately rebutted the presumption of the availability of less environmentally damaging, practicable alternatives to meet the project purpose. On-site configuration of the project avoided and minimized impacts to the maximum extent practicable. Off-site alternatives had either greater environmental impact or were not practicable. The Corps concludes that the potential impacts associated with the project are not severe and did not warrant directing the applicant to engage in a complete re-evaluation of the park planning process. The Corps also acknowledges the inclusive public process that the applicant has engaged in for the purposes of planning recreational needs throughout the City and acknowledges the investment of substantial effort by the applicant to accommodate local residential concerns.

Nothing in the public record suggests the existence of a less damaging practicable alternative than the applicant's proposal. There was an extensive public process at the local level associated with the applicant's proposal. In that process, most commenters were concerned about potential impacts to nearby residential areas. The Corps also received comments similar to those the applicant received throughout their local public involvement process. They are summarized in this document in section III.

I have conducted an independent analysis of the project alternatives. My conclusion is that the project represents the least environmentally damaging practicable alternative available to the applicant and capable of achieving the project purpose. All presumptions

involving practicable alternatives in special aquatic sites have been adequately rebutted. I find that the proposal is in compliance with the Section 404(b)(1) Guidelines.

V. Environmental/Public Factors Considered and Factual Determinations. The Corps has evaluated both the individual and cumulative impacts of the proposed work. Possible alternatives to reduce identified adverse impacts have also been considered and incorporated where practicable [33 CFR 320.4(a)(1) and 40 CFR 230.11]. The results of these evaluations are discussed in the following sections.

A. Affected Environment. The applicant's proposed project is to develop new athletic fields, restore wetland and upland habitat, and provide an integrated drainage system within a large area of Sand Point Magnuson Park. Sand Point Magnuson Park (including all of the project site for the proposed action) is located within the former boundaries of the Puget Sound Naval Station, Sand Point, a major military installation operated by the U.S. Navy. A portion of the former naval station, which primarily included the land used for a military airfield, was transferred to the City for park use in 1970. The Navy transferred another parcel including administrative, residential and operations buildings to the City in 1997.

Sand Point Magnuson Park currently includes a total area of 352 acres; the geographic scope of the proposed action includes approximately 95 acres, or about 27% of the total park area. Existing uses within the project site include two areas with multiple grass-surfaced athletic fields, six tennis courts, two picnic areas, park roadways and trails, parking lots, a public boat launch, restroom facilities, some remaining naval station buildings and related facilities, and extensive, unmanaged open space areas. Some of these uses would be redeveloped or reconfigured in their present locations, while others would be replaced under the proposal. Park uses within the original property and adjacent to the project site, including a boat launch, a beach area and an off-leash dog exercise area, would remain in their current (or currently proposed) configuration and would not be modified as part of the proposed action. Similarly, the scope of the proposed action does not extend into the area of former Navy buildings along the western edge of the Sand Point site, which are being redeveloped for a variety of community, recreational and residential uses.

Up to 5.86 acres palustrine emergent wetlands would be lost or adversely affected as a result of the proposal. These areas are shallow depressions that formed on top of a former fill area (broken up taxi-ways and roads from the old air station intermixed with soil and vegetation). Their hydrology is driven by precipitation, not groundwater.

B. Physical and/or Chemical Characteristics and Anticipated Changes (check all that apply and describe).

(x) Substrate: The existing soils within the interior portions of the project site are not parent material but are modified materials resulting from the grading, filling, construction and deconstruction activities on the Sand Point site since the early 1900s. Field investigations for wetlands work have identified that all portions of the site

examined are fill. Anecdotal information from the applicant indicates that the former Sand Point Head and the northern portions of Promontory Point were cut and graded to provide the fill material used to eliminate the wetlands, fill lake bays and expand the shoreline of the original peninsula. Field sampling has shown soils to be variable, but consistently hard in nature (i.e., impermeable in many instances, even with mechanical post-hole diggers). Soil types include cobble, gravelly sands, sandy gravelly cobble, and gravelly silts. Almost all soils have a very low permeability (as evidenced by extensive surface ponding and no infiltration below the top 4 inches even after heavy storm events). The on-site soils and sediments that would be graded are not contaminated, based on testing conducted by the City.

Development of the proposed action would result in phased clearing and grading of virtually all of the 95-acre Phase 2 site for the construction of athletic fields, drainage features, wetlands, trails, and utilities. Over 12 acres of existing pavement and impervious surfaces on the project site would be removed. A relatively small area of natural vegetation would be converted to synthetic turf. It is anticipated that construction of the proposed fields and open space/mitigation area would be accomplished together within the 3-year life of a Corps permit. The site would be graded to generally drain from the western and northern edges of the site toward Lake Washington. Most of the grading would be required to construct the athletic fields and the wetlands/ponds, and will be balanced as much as possible. Constructing the wetlands/ponds would create roughly 400,000 cubic yards of cut and constructing the fields would require roughly 370,000 cubic yards of fill. Construction of the athletic fields would require roughly importing 60,000 cubic yards of base sand and or gravel. The current substrate of the existing wetlands would be replaced by fill that was either moved from the existing site or imported. I have determined that the impacts to substrate are not contrary to the public interest.

(x) Currents, circulation, and drainage patterns: Surface water which collects on the site (due in large part to impervious surfaces) currently drains south and east, untreated, to Lake Washington. Existing sheet flow from 65th Street is currently collected in a storm drain system and is discharged untreated to Lake Washington. The proposed project will create drainage from the new and existing fields toward the wetland mitigation area, and the flow from 65th Street will be collected, pre-treated, and then also directed toward the wetland mitigation area. The water directed through the mitigation area, consisting of created and rehabilitated wetlands (hundreds of linear feet long), will then discharge through an existing outfall into Lake Washington. Drainage patterns will not be adversely affected by the proposed project. I have determined that the impacts to drainage patterns are not contrary to the public interest and the proposed improvements are in the public interest.

(x) Suspended particulates, turbidity: During project construction, the possibility of elevated levels of suspended particulates and water turbidity exists. However, the City will be required to comply with all stormwater requirements within the National Pollutant Discharge Elimination System (NPDES) Stormwater General Permit issued by Ecology for this project. Additionally, the proponent will be required by

Ecology to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) and Best Management Practices (BMPs) prior to start of construction, to avoid and/or minimize impacts to water quality from suspended particulates or turbidity. No long-term turbidity or suspended particulate impacts are likely to occur once construction of both fields and mitigation areas is complete. The proposal, as conditioned, will have minimal impacts on these water quality parameters. I have determined that the impacts to water quality from suspended particulates and turbidity are not contrary to the public interest.

(x) Water quality: Virtually all of the wetlands and ponded areas existing on the site are driven by precipitation, not groundwater. Thus, this discussion focuses on impacts to surface water quality. The proposed action would include several different systems and facilities to provide water quality treatment on site and to protect the receiving waters of Lake Washington. These systems include biofiltration swales, filter strips, wetponds; and water quality vaults. The natural-turf athletic fields would provide filtration of rainfall that lands on the field and flows through the sand/gravel field bases, similar to a sand filter. Stormwater would drain vertically through the field top- and base-course layers and would migrate to the subdrainage pipe system. Although the synthetic-turf athletic fields would also provide water quality treatment through the same filtration process, water quality treatment would not be required for those surfaces because the field materials are inert and would not be fertilized. However, the field drainage systems would provide treatment for pollutants from the air that are attached to precipitation.

The existing storm drainage systems on the site are deteriorated and in some case inoperable. The existing storm drain systems would either be abandoned or removed during construction of the proposed action. The proposed storm drain facilities would greatly improve the conveyance and treatment of stormwater leaving the project area.

The applicant also proposes to use a system of wetlands/ponds on the site to improve water quality. The types of ponds would range from "paddies," an area of concentrated shallow localized depressions that would fill up during early winter months and operate as flow-through ponds during the remainder of the winter, to continuous all-season ponds that contain water throughout the year. The ponds designed for water quality treatment are ponds that would receive untreated or partially treated runoff from impervious surfaces. Stormwater runoff from impervious paved surfaces would receive water quality treatment before leaving the site and entering Lake Washington. The proposed water quality measures include biofiltration swales/ditches, filter strips, wetponds, and water quality vaults. On April 6, 2007, Ecology issued a conditioned Water Quality Certification (WQC) for the proposed project. Compliance with a WQC is a general condition of any standard individual Corps permit (General Condition 5). The Corps expects a positive water quality impact as a result of the project, as proposed and conditioned. I have determined that the impacts to water quality are not contrary to the public interest and the proposed improvements are in the public interest.

(x) Flood control functions: The site currently retains some precipitation before releasing it down-gradient to Lake Washington. Once the project is complete, with proposed mitigation in place, the site will retain more water for a longer period of time. One of the project benefits will be increased floodwater storage. With the addition of special conditions (d) through (h) listed at the end of this document, I have determined that the impacts to flood storage are not contrary to the public interest and the proposed improvements are in the public interest.

- () Erosion and accretion patterns: Not applicable
- () Storm, wave and erosion buffers: Not applicable
- () Aquifer recharge: Not applicable
- () Baseflow: Not applicable
- () Mixing zone: Not applicable

C. Biological Characteristics and Anticipated Changes (check all that apply and describe).

(x) Special aquatic sites [wetlands, mudflats, coral reefs, pool and riffle areas, vegetated shallows, sanctuaries, and refuges, as defined in 40 CFR 230.40-45]: The entire project site supports emergent wetlands, shrub wetlands, and forested wetlands. Wetland loss would result from the direct placement of fill in existing palustrine emergent wetlands. These wetlands are dominated by herbaceous vegetation such as common rush species, plus patches of native and non-native (blackberry) thicket. Functions associated with these wetlands include water quality improvement, natural biological support, and overall habitat functions associated with the shoreline /meadowland/forest ecology of the site. The Corps finds that the applicant has proposed adequate mitigation to offset wetland and aquatic resource impacts, which will be included as special conditions to the permit (refer to section VI. for mitigation discussion). With the addition of special conditions (d) through (h) listed at the end of this document, I have determined that the impacts to the wetlands are not contrary to the public interest.

(x) Habitat for fish and other aquatic organisms: The site is habitat for herptiles (amphibians and reptiles), but not fish. Pacific chorus frogs (or Pacific tree frogs) have successfully bred on the project site for many years, despite human interactions. For example, the area known locally as "Frog Pond" experienced a change in hydroperiod due to changes in the placement of silt fencing around the perimeter of the pond. This fencing was installed in an attempt to protect it from silt from the adjacent haul road, but was sliced open in several locations, allowing silt to enter the pond. A temporary by-pass culvert was installed at the pond to allow water to leave the pond by flowing under the haul road, rather than across it. In spite of these and other changes over time, the population still appears to be viable. So filling portions of the site where this species exists would cause temporal impacts. The proposed flow-through emergent "rice paddy" wetlands in the mitigation plan are designed to mimic the seasonal inundation regime of Frog Pond, with the intention of ultimately providing a substantial increase in amphibian and aquatic invertebrate habitat over existing conditions. With the addition of special

conditions (d) through (h) listed at the end of this document, I have determined that predicted impacts to frogs and other aquatic organisms are not contrary to the public interest.

(x) Wildlife habitat [breeding, cover, food, travel, general]: The project would result in the disruption of wildlife use throughout the project site and in the loss of existing wetland habitat. There is considerable use by migratory and resident birds and wildlife. The reduction in area of meadow, savannah, and blackberry thicket is likely to result in reduced numbers of ground-breeding and -dwelling birds (including Savannah sparrow and introduced ring-necked pheasant and California quail) and birds that forage and take cover in meadows and shrub thickets. Lighted sports fields associated with the proposed project might disorient migrating birds. However, many species of birds may use artificial light to extend their feeding period into the night. The mitigation and restoration aspects of the project will increase the area of wetland habitat, and the increase in the structure and diversity of habitat with succession, non-native plant removal, and brush piles is expected to create a net decrease in mammal habitat and an increase in mammal diversity. Assuming meadow voles and mice are currently at maximum density in the park, the reduction of meadow and savannah habitat is expected to cause these species to decline in abundance. Rats, rabbits, and other ground-dwelling animals that do not favor forested areas are also expected to decline. Eastern gray squirrels, Douglas squirrels, and mountain beaver, if present, are expected to increase slightly as forests mature and native trees and shrubs are increased. Mammals not currently present, other than aquatic species, are not expected to colonize the park due to its isolation from other natural areas.

Sports field lights might extend the daily feeding periods of wading birds in shallow wetlands adjacent to the sports fields. Significant impacts from sports field lights on reptiles and amphibians are not expected. To minimize impacts to other wetland fauna, a hybridized fast-growing Douglas fir will be planted around the ball field lights, which will get established quickly. In addition to lights, noise from construction and subsequent use of the fields may affect wildlife. The applicant has proposed a comprehensive mitigation plan (see section VI. below) that would result in the increase of habitat and habitat diversity. It is expected that some species (e.g., Lincoln Sparrow) that prefer dry open grassland habitats will diminish, while other species (e.g., wading birds, waterfowl, and songbirds) associated with upland thickets and forests will likely increase over time. While the project will result in the loss of some kinds of habitat for specific species, it is predicted to have an overall benefit to the wildlife support functions of the site. With the addition of special conditions (d) through (h) listed at the end of this document, I have determined that predicted impacts to birds and other wildlife are not contrary to the public interest.

(x) Endangered or threatened species: Refer to the biological evaluation entitled *Warren G. Magnuson Park: Drainage, Wetland/Habitat Complex and Sports Fields/Courts Project, Phase 2: Draft Biological Evaluation*, dated January 17, 2006, prepared by Sheldon and Associates, Inc., incorporated by reference. It provides supporting documentation to the Corps' findings. Subsequent to this report, on

August 8, 2007, the bald eagle was delisted as a Federally threatened species in the state of Washington. (Federal agencies may still evaluate potential impacts to this bird pursuant to the Fish and Wildlife Coordination Act and NEPA. The bird remains protected by the Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, Lacey Act, and Bald Eagle Protection Act.) The Corps determined there will be No Effect on other listed species and critical habitat in the action area provided the measures described in the BE are implemented. To assure that effects of the project will be as determined, special condition (b) will become a condition of the permit. I have determined that the proposed project, as conditioned, is in compliance with Section 7 of the Endangered Species Act and in compliance with Corps regulations. I have determined that impacts to threatened and endangered species and their critical habitat are not contrary to the public interest.

(x) Essential fish habitat: In accordance with the Magnuson-Stevens Fishery Conservation and Management Act (MSA), the Corps assessed the potential impacts of the project on Essential Fish Habitat (EFH). The project area includes EFH for Pacific salmon. I have determined that impacts to essential fish habitat are not contrary to the public interest and the proposed improvements to fish habitat (via water quality) are in the public interest.

() Biological availability of contaminants: Not applicable

D. General Evaluation of Dredged and Fill Material (230.60). Not applicable. Refer to the "substrate" discussion above (in section V(B)) for the nature of the proposed fill materials.

E. Human Use Characteristics and Impacts (check all that apply and describe).

() Water supplies and water conservation: Not applicable

() Recreational, or commercial fisheries: Not applicable

() Other water-related recreation: Not applicable

() Aesthetics of the aquatic ecosystem: Not applicable

() National Parks, National & Historic monuments, National Seashore, Wild & Scenic Rivers, wilderness areas, research sites: Not applicable

(x) Traffic, transportation patterns: Traffic is an issue of concern raised during the public review process for the proposed project. The applicant's analysis is included within the SEPA FEIS and EIS addendum and is summarized here, along with additional supplemental information submitted to and reviewed by the Corps. The SEPA EIS analysis applied full build-out traffic load of the fully implanted Master Plan (11 fields at that time), and noted that in doing so, traffic impacts were frontloaded based on the likelihood that the Master Plan would be completed in multiple phases over ~10 years, if at all. The proposed Phase 2 project under Corps review is reduced in both scale (5 fields) and hours of operation (evening hours till 10 p.m. instead of 11 p.m., with no field lighting on Sundays). These changes cause a 27% reduction in lighted field hours per field from the hours studied in the SEPA process – with a commensurate reduction in

traffic impacts. Still, the majority of the anticipated users are located north of the ship canal and some fraction can be expected to access the site by auto. The park is accessible via arterials from south, west, and north directions, and the site is also served by transit. Both programmed scheduling of the fields and passive users (those who run or walk on trails) will vary from day to day, and thus effects to traffic patterns will also vary. Traffic patterns on-site would remain essentially as-is, with use of existing roads and parking at existing lots (over 900 stalls are adjacent to the proposed fields, with ample capacity for parking except during special events when parking demand may exceed supply).

During construction, the proposed project would result in unavoidable short-term impacts resulting from increased traffic related to construction worker vehicle trips, delivery of construction supplies and equipment, removal of demolition waste, and delivery of fill material needed for sports field construction. After construction, there would be minor disruptions of traffic due to the periodic use of the playfields, but is not deemed significant in light of current transportation patterns. The SEPA process concluded that no significant unavoidable adverse impacts were identified for the operating period of the proposed action (11 fields). The Corps has independently reviewed this analysis and finds it adequate for the purposes of this decision document. I have determined that predicted impacts to traffic volumes and patterns are not contrary to the public interest.

- Energy consumption or generation: Not applicable
- Navigation: Not applicable
- Safety: Not applicable

Air quality: Construction activities could cause direct impacts, primarily to particulate levels. These activities would occur during daylight hours, and some dust would be visible from and could potentially migrate to the on-site residential area, however it would be of short duration and extremely minor amounts, resulting in *de minimis* impact. The proposed project has been analyzed for conformity applicability, pursuant to regulations implementing Section 176(c) of the Clean Air Act and it has been determined that the activities proposed under this permit will not exceed *de minimis* levels of direct emissions of a criteria pollutant or its precursors and are exempted by 40 CFR Part 92.153. Any later indirect emissions are generally not within the Corps continuing program responsibility. These emissions generally cannot be practicably controlled by the Corps and for these reasons, a conformity determination is not required for a permit.

Noise: Noise was a major concern in many of the comments we received. We carefully reviewed the information provided in the SEPA FEIS, FSEIS, EIS addendum, and other submittals provided by the applicant. We concluded that while it is an issue to local residents, impacts from noise are not significant. The proposed action would create temporary, intermittent noise associated with construction and demolition activities. These activities would occur during daylight hours. It is likely that construction noise would be audible at times in the residential areas on-site and off-site. However, it is unlikely that noticeable construction noise from the project would be extensive throughout the surrounding area, or that project noise would be intrusive much or most of

the time in the residential areas closest to the project site. The proposed action could also result in new or increased ongoing noise sources created by the uses of the new park facilities. The existing fields at Magnuson are used during daylight hours only. The primary potential sources of operational noise impacts over existing conditions would be related to seasonal programmed activities, such as participant and crowd noise associated with outdoor sports and public events. Traffic noise would be similar to that now, as existing parking areas would be used. Sports field use would produce intermittent noise during selected portions of the day (primarily late afternoon and evening hours on weekdays, plus more daytime hours on weekends), rather than on a constant basis. These types of activities also would not generate particularly high noise levels at the source, and the noise carried off-site might well be lower than the background noise levels existing on the periphery of the site. I have determined that predicted noise impacts to residential areas are not contrary to the public interest.

(x) Historic properties [Section 106 of the National Historic Preservation Act]: The work would occur on lands of the former Sand Point Naval Air Station, which is a filled and highly altered landform. No former air station buildings, historic or otherwise, will be impacted by the proposed project. On the project site there are only remnants of broken up taxi-ways and runways intermixed with soil and vegetation, including one area known locally as the "central parking lot." No comments were received from the State Historic Preservation Officer or from Tribes or other interested parties on the public notice, regarding concerns over historic or pre-contact cultural resources. I have determined that the proposed project, as conditioned, is in compliance with Section 106 of the National Historic Preservation Act and in compliance with Corps regulations. I have determined that impacts to historic resources are not contrary to the public interest.

(x) Land use classification: Not applicable (the land is currently planned and zoned for a regional City park, and that status will not change).

() Economics: Not applicable

() Prime and unique farmland [7 CFR Part 658]: Not applicable

() Food and fiber production: Not applicable

(x.) General water quality: Refer to sections V(B) and V(C) above

() Mineral needs: Not applicable

() Consideration of private property: Not applicable

(x) Other issues:

Light. We received many comments concerning light impacts. Information provided in the SEPA FEIS, the Supplemental SEPA FEIS, and the JARPA (plus supplemental information) submitted by the applicant is summarized here. There will be 4 lit fields: two soccer fields in the northern part of the site and two ball fields in the southern part of the site (adult baseball & youth softball). Use of the fields must not exceed a City ordinance, which at the time of this permit decision limits lighting to

prescribed hours. In Seattle, such lights are allowed until 11 pm unless there is housing on at least two sides of a field. In the proposal to the Corps, the stated light hours would be Monday through Saturday from dusk to 10 pm only. These reduced hours reflect up to a 27% reduction in lighted field hours per field from the hours studied in the SEPA process (assuming full utilization of the fields in winter months).

The JARPA (and SEPA EIS) stated lights would consist of full-cut off lighting (at the two soccer fields) and shielded conventional lighting (at the two baseball fields). But the Parks Department committed to the Seattle City Council to reevaluate the selection of lighting fixtures prior to actual installation, to verify that the City will use the best technology available for reducing light impacts. They did just this and found that, since the SEPA EIS process was completed, new technology has become available: "aggressively visored" lighting systems. The Parks Department (the applicant) has decided to use these new systems at all four lighted fields, in lieu of the types of lighting selected previously.

Per the SEPA process (which evaluated lighting impacts from a total of 11 fields), the formerly selected lights would impact people in the surrounding vicinity as follows:

* *On-site residences* consist of low-income transitional housing, and there is housing directly adjacent to the park, to the south (Radford Court complex).

Spill light - On-site housing will be subject to spill light from the fields (light levels on their premises). In some instances it would be less than some of the ambient light levels already existing there. In other instances it would be an increase over current conditions, but still within Parks Department lighting performance standards. It would be the same or less than existing conditions at residences near several lighted fields in the city.

Glare - On-site housing will also be subject to glare from the fields. Glare affect is the discomfort or loss of performance caused by looking directly into a light source. To minimize this, the City's preferred alternative for the fields was designed to place them farther away from those residential areas. Field layout was modified to place the luminaries in the southernmost part of the complex where existing topography and vegetation act to minimize glare impacts. Lighting technologies were also selected to minimize glare. These included full cut-off fixtures on all but two of the lighted fields. Shielded conventional fixtures were proposed on the other two fields due to specific user needs (baseball).

Sky-glow & surface luminance - Sky-glow is the glow of light above the lighting installation, consisting of 1) light directly from the source, 2) light reflected off of the illuminated surface, and 3) light reflected on airborne particles. It can vary greatly depending on climatic conditions. Surface luminance is the light reflected off of the lighted surface. For the on-site residents, these effects would be less noticeable than spill light and glare.

* *Off-site residential areas* consist of the View Ridge, Hawthorne Hills, and Windermere neighborhoods, located west and south of the proposed fields. The majority of residences are in excess of 800 feet away from the fields, which is further than most other neighborhoods are from similar athletic fields. They are also largely above the elevation of the fields.

Spill light – Off-site residences will have no measurable increase in spill light (light levels on their premises).

Glare – The vast majority of off-site residences will not be subject to direct glare, particularly since the homes are higher in elevation than the field lighting.

Sky-glow & surface luminance – Off-site residences would be affected by sky-glow and, particularly, surface luminance. These residences look over and down on the park and currently see expansive areas of unlighted park, Lake Washington, and the lights of Kirkland and beyond. The fields, when lit, will provide a brighter foreground making the unlit areas, Lake Washington, and the lights of Kirkland less visible.

Relative to the impacts discussed above, the new “aggressively visored” lighting systems would: be placed at 4, not 11, fields; provide the same amount of foot candles on the fields for the players; provide tighter spill light control at all the fields (typically associated with shielded conventional lighting); greatly reduce glare impacts through the use of large hoods or visors over the lights, to levels less than the shielded conventional lighting impacts addressed in the SEPA FEIS (though greater than the glare impacts of full cut-off lighting); contain one 1500-Watt fixture, which will allow a reduction in glare and a reduction in the number of luminaries on each field by 1/3, thereby reducing the visual impact of pole-mounted luminaries during daytime hours; allow a reduction in the total number of light poles on the larger soccer and rugby fields, thereby reducing the visual impact during daylight hours at these fields; present no more surface luminance than the other types of lighting addressed in the SEPA FEIS; and offer energy savings over typical field lighting systems. The applicant has determined to implement this type of lighting because of the tighter spill light control and the reduction in glare, with no additional surface luminance.

Additionally, to minimize all the types of lighting effects, the applicant selected a lower level of lighting for the fields than desired by the field user groups. Lighting levels are in four major classes. Class 1 is highest level and is used in professional fields such as Safeco. Class 4 is the lowest level of lighting for safe recreational play, and is the level selected for the proposed fields. Additionally, to minimize spill light and glare, the open space (to contain trails and mitigation for wetland impacts) near the fields, with retained and increased vegetation, will act as a screening buffer between the fields and other areas in the park and across Lake Washington. Some of the new plantings around the proposed fields will consist of a hybridized fast-growing Douglas fir, to get the trees established quickly.

During the various public processes conducted by the applicant, the public received extensive opportunities to learn about field lighting, technology options, view lighting mock-ups on-site, and learn of locations around the region where they could see comparable systems and field lighting levels. The public was also provided extensive opportunity to comment on the proposed field lighting. The Corps viewed these comments as pertinent, as they will be impacts associated with use of the facility.

The Corps independently reviewed and evaluated the impacts to residential areas in and around the park and finds that a reasonable evaluation was conducted by the applicant and that appropriate and prudent mitigation measures have been employed to minimize effects to these areas from night time light. While there is no way to eliminate all lighting impacts, they have been minimized pursuant to public comment and are in line with similar parks around the city. The Corps finds that impacts from lighting are not contrary to the public interest provided they are implemented as described in the proposed project. I have determined that predicted light impacts to residential areas are not contrary to the public interest.

Environmental Justice. Executive Order 12898 requires that Federal agencies evaluate proposals they will fund or permit to assess whether the project will create or result in disproportionately high and adverse human health or environmental effects on minority populations and low-income populations. During local review of this project, concerns were raised that the placement of fields would be close enough to the transitional housing area (for homeless and mentally impaired individuals) that noise and night-time lighting would impact them. As a result, the fields which have the most spill light were relocated to the south, to be further away from this housing.

F. Summary of Secondary and Cumulative Impacts [230.11(h), 230.11(g)].

The project site is located along the western shoreline of Lake Washington. Lake Washington formed in a remnant depression after the retreat of the ice during the last glacial period approximately 10,000 to 15,000 years ago. Prior to European-American settlement, Lake Washington was surrounded by a series of wetlands (including peat bogs), forests, and many small deltas where surrounding streams discharged into the lake. This was an rich ecological environment due to the number of habitat types in close proximity (forests, wetlands, streams, shorelines). The lake and its environs supported abundant fish and wildlife populations. During the colonization of the area by European-American settlers, much of the surrounding forests were logged and replaced by agricultural lands (early 1900s). Extensive filling also occurred in wetlands surrounding the lake. In 1910, the Corps of Engineers completed the construction of the locks in Shilshore Bay which dropped the lake levels in both Lake Washington and Lake Sammamish by 10 feet. This resulted in further habitat loss and conversion. Activities at the site itself were typical to the process of urban development. The Navy converted the area known as Sand Point to a naval base in the 1930s and 40s which resulted in filling wetlands, modifying the shoreline, and clearing vegetation.

The major impacts to historic resources include: (1) loss of wildlife habitat from removal of native vegetation due to agricultural and silvicultural practices; (2) loss of fishery

habitat from shoreline development and wetland fills that resulted in altered hydrology and sediment transport into creeks and Lake Washington and a reduction in biodiversity; and (3) loss of wetlands and riparian areas due to logging, agricultural conversion, and currently, urban development. Major natural resources impacts include: (1) the loss of floodplain connectivity to Lake Washington; (2) riparian habitat loss along the shore of Lake Washington; and (3) habitat loss inland of the riparian area due to the development of the urban landscape. The current conditions of the project area are largely the result of the deconstruction of the former Sand Point Naval Air Station, which began in the 1970s after the land was deeded to the City of Seattle by the U.S. government.

Current land use practices are likely to continue (urban development) in the immediate area. The City Department of Parks and Recreation will continue to implement the Magnuson Park Master Plan. It is designed to accommodate active recreation and calls for more athletic fields beyond the 5 proposed for development now (which are the topic of this permit action). A total of up to 9 fields are potentially possible, of which 7 may be lit – so up to 4 more fields could potentially be constructed beyond the 5 proposed now, of which 3 could be lit. As they would likely involve fill in wetlands, a Corps permit and other permits would need to be applied for and secured for such an expansion to occur.

The potential for cumulative and secondary impacts would be through significant impacts to the resources identified in the preceding sections (loss of aquatic and riparian habitat leading to loss of wildlife habitat, loss of fishery habitat, and reduction in biodiversity). The project, as specially conditioned, would result in modification to the current surface flow regime on-site and off-site. Some existing wetlands would be filled while others would be enhanced and created, and existing untreated stormwater flows to Lake Washington would receive treatment before entering the lake. The proposed compensatory mitigation is intended to create greater habitat diversity at the site, which will offset direct project impacts and which may restore some of the historic function over time.

We anticipate minor secondary impacts because the project will not result in additional activities in the project area (beyond the proposed project) that would also result in impacts to aquatic resources. In light of past, present, and reasonably foreseeable future conditions, I conclude that there will be no significant cumulative or secondary impacts associated with the proposed project, as conditioned. While the proposed project as conditioned (e.g., with mitigation) does not reverse past adverse impacts in this area, it does not further contribute to the degradation of the aquatic environment.

G. General Evaluation [33 CFR 320.4(a)(2)]: Corps permit regulations require that three general criteria will be considered in the evaluation of every application:

1. Relative extent of the public and private need for the proposed structure or work. The public need for the proposed project has been demonstrated by the applicant via information in the JARPA, SEPA FEIS, and subsequent supporting information. Refer to sections **II(F)** and **IV(B)** above for additional discussion.

2. Where there are unresolved conflicts as to resource use, the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work. Reasonable alternative locations and methods are discussed in the alternatives analysis in section IV.

3. Extent and permanence of the beneficial and/or detrimental effects which the proposed structure or work is likely to have on the public and private uses to which the area is suited. Work will be conducted within a public regional park. As proposed and conditioned, there will be long-term detrimental effects upon night views of the park from some of the residences in the vicinity of the proposed project between dusk and 10:00 p.m., six days per week (Mondays through Saturdays). Some parties may experience these effects more adversely than others. There may also be minor to modest increases in noise during play times, and increases in traffic on local arterials before and after games, both of which can be experienced as detrimental effects by some parties. There will be long-term beneficial effects upon user groups around the city that utilize athletic fields which, given the amount of unmet demand, is considered substantive. There will be beneficial effects upon user groups around the city that utilize the cross-park trail, as that trail will be enhanced and additional trails will be added. There will also be a positive increase in the functions of wetlands and waterways on the site with a commensurate increase in their value to society. More diverse habitats will be established, while cleaning up stormwater from both on and off the site and improving those waters draining directly to Lake Washington. This is also considered a substantive benefit, since the lake was recently named by the State Department of Ecology as the second most polluted fresh water in the state.

VI. Mitigation

As part of the original application, the applicant voluntarily submitted a mitigation plan designed to compensate for loss or adverse impact to 5.86 acres of moderately disturbed, palustrine emergent wetlands. In addition, the mitigation plan included an adequate explanation of minimization and avoidance measures implemented to reduce impacts to wetlands from the original proposal. Avoidance measures include concentrating the athletic fields on higher ground within the western half of the site, wherever possible, the athletic fields and paved surfaces were placed on existing uplands areas and impacts to forest stands and wetlands were avoided, ball field configurations were shifted to avoid and minimize wetland impacts, measures were implemented to prevent de-watering, and the total number of proposed ball fields per the approved master plan was reduced from 11 to 9, of which 4 fields and the subgrade for a 5th field are the subject of this permit action.

Mitigation was proposed as outlined in the documents entitled *Conceptual Wetland Compensation Plan for Magnuson Park Phase 2 Development* dated January 27, 2006, *Monitoring Plan for Wetland Compensatory Mitigation for Magnuson Park Phase 2 Development* dated February 9, 2006 and "addendum" dated October 11, 2007. Both reports and the October 11th "addendum" were prepared by OTAK, Inc. (formerly Sheldon & Associates). After review and comment by the Corps, a final plan was submitted entitled *Final Wetland Compensation Plan for Magnuson Park Phase 2*

Development, Seattle, Washington dated December 12, 2007. This final plan was also prepared by OTAK, Inc.

A. Mitigation Rationale. Per the *Final Wetland Compensation Plan for Magnuson Park Phase 2* (December 12, 2007), the proposed wetland fill activities will affect the potential for the wetlands to provide water quality, water quantity and habitat suitability functions. As compensatory mitigation the applicant plans to remove approximately 12.4 acres of existing pavement and impervious surfaces on the project site, to both reduce runoff and to improve water quality of remaining runoff; create just over 10 acres of emergent, shrub and forested wetlands; rehabilitate just over 4 acres of disturbed emergent wetlands; daylight an existing storm drain crossing the southern portion of the site; and, after pre-treating stormwater via mechanical filters (to be placed west of the project area), direct the water through nearly 1,000 linear feet of the created and rehabilitated wetlandsh prior to discharge through an existing outfall into Lake Washington. Existing sheet flow from 65th street that is currently collected in a storm drain system and discharged untreated to the lake would also be collected, pre-treated, and then directed through the hundreds of linear feet of created and rehabilitated wetlands prior to discharge through the existing outfall into Lake Washington, providing for improved water quality in the lake. There will be placements of large woody debris or brush piles and also rocks, for habitat for small prey species and reptiles. Additionally, trees and shrubs would be planted in upland areas that are adjacent to (and intermixed with) the wetland areas, to provide for screening of lights and to provide for additional wildlife habitat. For example, hybridized fast-growing Douglas firs will be planted around the ball field light poles, to get trees established quickly and further reduce temporal impacts to wetland fauna.

The mitigation goals, including those for on-site and off-site water quality and for habitat parameters, are to create new wetlands with a diversity of community types and hydrogeomorphic (HGM) types out of existing low-quality upland habitats, preserve the hydro-period of existing wetlands to remain on the site and maintain the general movement of water across the site; rehabilitate the functions of remaining wetlands within the project area through passive and active means such as increasing the depth/duration of hydro-periods, increasing native species richness, removing and controlling invasive species, increasing physical complexity, and improving conditions in adjacent habitats; maintain or improve the physical connectivity between habitats on the site; improve water quality conditions draining into Lake Washington by removing 12.4 acres of impervious surface, appropriately treating stormwater runoff from some paved surfaces (that is untreated in existing conditions); and improve access for education and passive interpretation of the various habitats and water features in the project area.

B. Mitigation Function. The proposed mitigation will provide additional water quantity and quality functions, enhance wildlife habitat and habitat diversity, enhance food web support, increase floodwater storage, and improve buffering of contaminants.

C. Mitigation Monitoring and Reporting. The mitigation plan will be implemented concurrently with site development activities. As discussed in Appendix F

in the *Final Wetland Compensation Plan*, created and rehabilitated wetlands will be monitored for 10 years after project completion. The City does plan to utilize trained volunteers to assist City staff and/or consultants with monitoring. There will be a volunteer coordinator and funding to pay for professional wetland consultants to train volunteers and oversee data collection. All data would be compiled and analyzed by professional wetland ecologists for preparation and submittal of the annual monitoring reports.

D. Mitigation Acceptance. The Corps has evaluated the proposed Final Wetland Compensation (Mitigation) Plan. I have determined that the Mitigation Plan will result in the establishment and rehabilitation of wetlands in a rough proportionality to the project impact, considering the permanent and temporal loss of palustrine emergent wetlands and the nature of and extent of that impact. The proposal exceeds guidance on mitigation ratios suggested in the interagency document entitled *Wetland Mitigation in Washington* (2006). The mitigation plan proposed by the applicant is reasonable, has been specifically designed for this project site to compensate for the loss of wetlands and their functions, which will occur during project construction. I have determined that the impacts to wetlands with the addition of special conditions (d) through (h) listed in section VIII, are not contrary to the public interest and in compliance with the Guidelines.

VII. Compliance with Other Federal and State Laws and Treaty Rights.

A. Federal and State Laws. As discussed in preceding sections of this document, I have determined that the work is in compliance with Section 7 of the Endangered Species Act, the Magnuson Stevens Fishery Conservation and Management Act, Section 106 of the National Historic Preservation Act, the Coastal Zone Management Act, and Section 401 of the Clean Water Act.

B. Environmental Justice Issues. (E.O. 12898) I have determined that the proposed work will not create or result in disproportionately high and adverse human health or environmental effects on minority populations and low-income populations. I have determined that the proposed project is in compliance with Executive Order 12898.

C. Treaty Rights. In the mid-1850's, the United States entered into treaties with a number of Indian tribes in Washington. These treaties guaranteed the signatory tribes the right to "take fish at usual and accustomed grounds and stations . . . in common with all citizens of the territory" [*U.S. v. Washington*, 384 F.Supp. 312 at 332 (WDWA 1974)]. In *U.S. v. Washington*, 384 F.Supp. 312 at 343 - 344, the court also found that the Treaty tribes had the right to take up to 50 percent of the harvestable anadromous fish runs passing through those grounds, as needed to provide them with a moderate standard of living (Fair Share). Over the years, the courts have held that this right comprehends certain subsidiary rights, such as access to their "usual and accustomed" fishing grounds. More than de minimis impacts to access to usual and accustomed fishing area violates this treaty right [*Northwest Sea Farms v. Wynn*, F.Supp. 931 F.Supp. 1515 at 1522 (WDWA 1996)]. In *U.S. v. Washington*, 759 F.2d 1353 (9th Cir 1985) the court indicated

that the obligation to prevent degradation of the fish habitat would be determined on a case-by-case basis. The Ninth Circuit has held that this right also encompasses the right to take shellfish [U.S. v. Washington 135 F.3d 618 (9th Cir 1998)].

D. Treaty Determinations. The work proposed in this application has been analyzed with respect to its effects on the treaty rights described above, and my conclusions are that (1) the work will not interfere with access to usual and accustomed fishing grounds or with fishing activities or shellfish harvesting; (2) the work will not cause the degradation of fish runs and habitat so as to infringe on Treaty rights; and (3) the work will not impair the tribes' ability to meet moderate living needs.

VIII. Special Conditions.

A. The permittee must comply with the General Conditions placed on all standard Individual Permits. In addition, the following Special Condition is being added to the permit to ensure compliance with the terms and conditions of the permit:

a. You must provide a copy of the permit transmittal letter, the permit form, and drawings to all contractors and sub-contractors performing any of the authorized work.

B. The following Special Condition is being added to ensure protection of threatened and endangered species in the project action area:

b. You must implement and abide by the ESA requirements and/or agreements set forth in the biological evaluation entitled *Warren G. Magnuson Park: Drainage, Wetland/Habitat Complex and Sports Fields/Courts Project, Phase 2: Draft Biological Evaluation*, dated January 17, 2006, in their entirety. The Corps came to a finding of No Effect on all species and/or critical habitat based on this document. Failure to comply with the commitments made in this document constitutes non-compliance with the ESA and your Corps permit.

C. The following Special Condition is being added to ensure that construction debris is not temporarily stockpiled in waterways or wetlands:

c. All construction debris shall be properly disposed of on uplands in such a manner that it cannot enter into the waterway or cause water quality degradation.

D. The following Special Conditions are being added to ensure the required compensatory mitigation is constructed and protected:

d. The wetland area created and rehabilitated as compensatory mitigation for work authorized by this permit, shall not be made the subject of a future individual or general Department of the Army permit application for fill or other development, except for the purposes of enhancing or restoring the mitigation associated with this project. In addition, a description of the mitigation area

identified in the final mitigation plan as approved, and any subsequent permit mitigation area revisions, will be recorded with the Registrar of Deeds or other appropriate official charged with the responsibility for maintaining records to or interest in real property. Proof of this recorded documentation must be provided to the Corps, Seattle District, Regulatory Branch within 60 days from the date of permit issuance.

e. A status report on the mitigation construction, including as-built drawings, must be submitted to the Corps, Seattle District, Regulatory Branch, due 13 months from the date of permit issuance. Annual status reports on mitigation construction are required until mitigation construction is complete.

f. The permittee shall implement and abide by the mitigation and monitoring plan entitled *Final Wetland Compensation Plan for Magnuson Park Phase 2 Development, Seattle, Washington* (the Plan), dated December 12, 2007. Mitigation monitoring reports will be due as described in the Plan, including annually in years 1, 2, 3, 5, 7, and 10 from the due date of the as-built drawings of the mitigation site [*or reference exact month if specified in the mitigation or monitoring plan*]. All reports must be submitted to the Corps, Seattle District, Regulatory Branch and must prominently display the reference number NWS-2006-52-NOW. The mitigation monitoring reports must be submitted in the format shown on the enclosed "Mitigation Monitoring Report Format" dated August 3, 2006. Reports should be submitted in hard copy or electronically.

g. Your responsibility to complete the required compensatory mitigation as set forth in Special Condition "f" will not be considered fulfilled until you have demonstrated mitigation success and have received written verification from the U.S. Army Corps of Engineers.

h. If you choose to use volunteers to assist in data collection for mitigation monitoring, you will submit to the Corps a detailed training plan for any service performed by a non-professional. The permittee must assure that all data collection is conducted in a scientifically sound manner to reflect actual conditions at the mitigation site. The permittee must also assure adequate oversight of any work performed by non-professional volunteers. The plan must be submitted to the Corps 60-days in advance of the commencement of training and will not be considered valid unless approved by the Corps.

IX. Determinations/Findings.

A. Finding of No Significant Impact. [33 CFR PART 325] Performance of this work will not significantly affect the quality of the human environment. Further, I have determined that the issuance of this particular permit is a Federal action not having a significant impact on the environment. I have thus concluded that the preparation of a formal Environmental Impact Statement is not required.

B. Evaluation/Determination of Compliance with Section 404(b)(1)

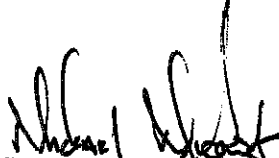
Guidelines. The work was evaluated pursuant to Section 404(b)(1) of the Clean Water Act in accordance with the guidelines promulgated by the Environmental Protection Agency (40 CFR 230.10) for evaluation of the discharge of dredged or fill material into waters of the United States. In addition, consideration has been given to the need for the work and to such water quality standards as are appropriate and applicable by law. Alternatives not requiring the discharge of dredged or fill material into water of the U.S. are not available OR are more damaging to the aquatic ecosystem. The proposed discharge represents the least environmentally damaging practicable alternative and includes all appropriate and practicable measures to minimize adverse effects on the aquatic environment. The work will not result in the unacceptable degradation of the aquatic environment. The discharges and methods specified in the proposed work are in accordance with the Section 404(b)(1) Guidelines [40 CFR 230.12].

C. Section 176(c) of the Clean Air Act General Conformity Rule Review. The proposed project has been analyzed for conformity with the regulations implementing Section 176(c) of the Clean Air Act. I have determined that the activities proposed under this permit will not exceed *de minimis* levels of direct emissions of a criteria pollutant or its precursors and are exempted by 40 CFR Part 93.153. Any later indirect emissions are generally not within the Corps continuing program responsibility and generally cannot be practicably controlled by the Corps. For these reasons a conformity determination is not required for this project.

D. Public Interest Determination. The work is consistent with national policy, statutes, and administrative directives. I find that issuance of a specially conditioned Department of the Army permit for this work is based upon a thorough analysis of the various evaluation factors and determinations that have been identified herein. The proposed work is not contrary to the public interest. I have determined that issuance of a Department of the Army permit with special conditions is the course of action available to the Corps that best achieves the general public interest.

X. Permit Decision. My decision is to issue a permit with special conditions for this work.

14 December 2007
Date



Michael McCormick
Colonel, Corps of Engineers
District Engineer



US Army Corps
of Engineers ®
Seattle District

Mitigation Monitoring Report Format

August 3, 2006



Mitigation monitoring reports must be concise and effectively provide the information necessary to assess the status of the compensatory mitigation project. Reports must provide information necessary to describe the site conditions and whether the compensatory mitigation project is meeting the performance standards.

Annual monitoring reports must follow a 10-page maximum report format for assessing mitigation sites, as follows:

A. Project Overview (1 page)

- (1) Corps Permit Number
- (2) Name and contact information of permittee and consultant
- (3) Name of party responsible for conducting the monitoring and the date(s) the inspection was conducted.
- (4) A summary paragraph defining the purpose of the approved project, acreage and type of aquatic resources impacted, and mitigation acreage and type of aquatic resources authorized to compensate for the aquatic impacts.
- (5) Written description on the location and any identifiable landmarks of the compensatory mitigation project including information to locate the site perimeter(s).
- (6) Directions to the mitigation site
- (7) Dates compensatory mitigation commenced and/or was completed.
- (8) Short statement on whether the performance standards are being met
- (9) Dates of any recent corrective or maintenance activities conducted since the previous report submission.
- (10) Specific recommendations for any additional corrective or remedial actions.

B. Requirements (1 page)

List the monitoring requirements and performance standards, as specified in the approved mitigation plan and special conditions of the permit, and evaluate whether the compensatory mitigation project site is successfully achieving the approved performance standards or trending towards success. A table is one option for comparing the performance standards to the conditions and status of the developing mitigation site.

C. Summary Data (maximum of 4 pages)

Summary data must be provided to substantiate the success and/or potential challenges associated with the compensatory mitigation project. Photo documentation may be provided to support the findings and recommendations referenced in the monitoring report and to assist the Corps in assessing whether the compensatory mitigation project is successful for the monitoring period. Submitted photos must fit on a standard 8 " X 11" piece of paper, dated, and clearly labeled with the direction from which the photo was taken. The photo sites must also be identified on the appropriate maps.

D. Maps (maximum of 3 pages)

Maps must be provided to show the location of the compensatory mitigation site relative to other landscape features, habitat types, locations of photographic reference points, transects, sampling data points, and/or other features pertinent to the mitigation plan. In addition, the submitted maps must clearly delineate the mitigation site perimeter(s), which will assist the Corps in locating the mitigation area(s) during subsequent site inspections. Each map or diagram must fit on a standard 8 " X 11" piece of paper and include a legend and the location of any photos submitted for review.

E. Conclusions (1 page)

A general statement must be included describing the conditions of the compensatory mitigation project. If performance standards are not being met, a brief explanation of the difficulties and potential remedial actions proposed by the permittee, including a timetable, must be provided. The Corps will ultimately determine if the mitigation site is successful for a given monitoring period.