



MEMORANDUM

To: Kirkland Hearing Examiner

From: Eric Shields, Planning Director, SEPA Responsible Official
Jon Regala, Senior Planner

Date: February 7, 2012

Subject: APPEAL OF SEPA DETERMINATION OF NONSIGNIFICANCE FILE NO. SEP11-00020
BIG FINN HILL PARK FIELD CONVERSION PROJECT
APPEAL FILE NOS. APL12-00001 AND APL12-00002

I. INTRODUCTION

- A. Appellants: Two separate appeals were filed regarding the State Environmental Policy Act (SEPA) Determination of Nonsignificance for the Big Finn Hill Park field conversion project issued by the City of Kirkland.

The appeal filed by Concerned Neighbors of Big Finn Hill Park represented by Bob & Ginny Christofferson and Bryan & Alberta Allen was assigned file number APL12-000001 (see Enclosure 1).

The appeal filed by Rainer Kirschner was assigned file number APL12-00002 (see Enclosure 2).

- B. Applicant: Kirkland Youth Lacrosse and King County Parks
- C. Action Being Appealed: SEPA Responsible Official (Planning Director) decision to issue a Determination of Nonsignificance (DNS) for the Big Finn Hill Park field conversion project (see Enclosure 3). The SEPA review was conducted in conjunction with a grading permit in review with King County under file number L11CG124. See Section III.C for additional information regarding permit review authority for the project as a result of the subject property being incorporated into the City of Kirkland on June 1, 2011.
- D. Appeal: The appeal filed by Concerned Neighbors of Big Finn Hill Park states their disagreement with the City's Determination of Nonsignificance regarding the following topics: lighting, noise, and use of synthetic turf.

The appeal filed by Mr. Kirschner requests that an Environmental Impact Statement (EIS) be required due to inadequate analysis of impacts of crumb rubber to nearby wildlife and salmon and an increased risk of flooding on the appellant's property. Mr. Kirschner also expresses concern regarding the noise and lighting impacts associated with the field conversion project.

See Sections V and VI for more information regarding the appeal issues and staff analysis.

II. **RULES AND CRITERIA FOR APPEAL AND DECISION**

- A. **Rules:** Kirkland Municipal Code (KMC) Sections 24.02.220 through 24.02.240 set forth the rules for SEPA appeals. In the event that a project permit does not include an open record public hearing, the SEPA appeal will be heard and decided upon by the hearing examiner using the provisions of KMC Subsections 24.02.230 (g), (h), and (i), which include hearing notice, participation, and staff report requirements.
- B. **Criteria for Submission of an Appeal:** Under KMC Section 24.02.230, an appeal must be filed with the environmental coordinator within fourteen calendar days of the date of the determination is issued by the responsible official. Additionally, the appeal must be in written form and must contain a brief and concise statement of the matter being appealed, the specific components or aspects that are being appealed, the appellants basic rationale or contentions on appeal, and a statement demonstrating standing to appeal. The appeal may also contain whatever supplemental information the appellant wishes to include.
- C. **Participation in the Appeal:** Only the applicant or proponent, city staff, and persons who have appealed the SEPA determination may participate in the appeal. These persons may participate in the appeal in either or both of the following ways:
 - 1. Submit written testimony to the Planning Department prior to distribution of the staff report (eight days prior to the appeal hearing).
 - 2. Appear at the hearing and submit oral or written testimony directly to the hearing body. The hearing body may reasonably limit the extent of oral testimony to facilitate the orderly and timely conduct of the hearing.
- D. **Hearing Scope and Considerations:** KMC Section 24.02.230(i)(1-4) sets for the following additional appeal procedures.
 - 1. The matters to be considered and decided upon in the appeal are limited to the matters raised in the notice of appeal.
 - 2. The decision of the responsible official shall be accorded substantial weight.
 - 3. All testimony will be taken under oath.
 - 4. The decision of the hearing body hearing the appeal shall be the final decision on any appeal of a threshold determination including a mitigated determination of nonsignificance.
- E. **Decision on the Appeal:** Pursuant to KMC Section 24.02.230(h), the hearing body shall consider all information and material within the scope of the appeal submitted by persons entitled to participate in the appeal. The hearing body shall either:
 - 1. Affirm the decision being appealed; or
 - 2. Reverse the decision being appealed; or
 - 3. Modify the decision being appealed.

III. **BACKGROUND AND SITE DESCRIPTION**

- A. **Site Location:** Big Finn Hill Park is located at 8106 NE 138th Street (see Enclosure 4).
- B. **Zoning and Land Use:** Big Finn Hill Park is zoned P (Park). The entire park contains approximately 220 acres and remains largely undeveloped. The developed portion of the park contains four baseball/softball fields, a picnic/play area, a grass soccer field, and surface parking stalls (see Enclosure 5).
- C. **Development Review Process:** On June 1, 2011, the unincorporated area north of Kirkland which includes Big Finn Hill Park was annexed into Kirkland. Prior to the

annexation date, Kirkland Youth Lacrosse submitted a grading permit and SEPA application materials for the project to King County for review. According to the Annexation Interlocal Agreement (ILA) (see Enclosure 6) and subsequent Memorandum of Understanding between King County and the City of Kirkland (see Enclosure 7), it was agreed that review of the grading permit would be conducted by King County Department of Development and Environmental Services (DDES) based on the County's regulations while the environmental review will be completed and issued by the City of Kirkland. The City of Kirkland would be responsible for issuing the grading permit and subsequent inspections. King County would continue to own and maintain the park and associated activities.

With regard to SEPA, King County Department of Parks & Recreation was the initial lead agency for the environmental determination for the project and issued a preliminary SEPA Determination of Non-Significance as part of their initial review of the project. The public comment period was from June 30, 2011 through July 21, 2011. King County Parks & Recreation received public comment and responded to the comments and/or questions. Pursuant to the ILA, the City has now assumed lead agency for the environmental determination.

On December 7, 2011, the City issued a SEPA Determination of Nonsignificance (see Enclosure 3). During the comment and appeal period following the environmental determination, two appeals and three comment letters were submitted to the City.

IV. COMMENTS ON SEPA DETERMINATION

- A. Comments Received. KMC 24.02.230(g)(3)(ii) requires that all written comments submitted to the responsible official be included in the staff report on the appeal. As mentioned above, three comment letters/emails were submitted to the City prior to the SEPA Determination of Nonsignificance comment and appeal period ending (see Enclosures 8, 9, and 10). Several of the comments described below were listed in the appeal letter filed by Rainer Kirschner (see Enclosure 2). The comments, organized by the commenter, are summarized below.
1. *FHNA (Finn Hill Neighborhood Alliance)*
 - Noise. King County should confirm compliance with their noise regulations.
 - Wetland Impacts. King County should confirm compliance with their wetland regulations.
 - Drainage System. King County should be required to perform or commit to perform maintenance and/or repair procedures to the existing drainage system to ensure that it works properly. Specifically:
 - Maintenance of Bioswale and Retention Pond
 - Repair or Replacement of Standpipe FCS-2
 2. *Concerned Neighbors of Big Finn Hill Park (Christofferson's and Allen's. Note – these parties also filed an appeal)*
 - Lighting. Lighting (allowing field use past dusk) and artificial turf are not allowed by the Big Finn Hill Park Master Plan.
 - Process. Neighbors feel betrayed by the King County Park system (Park Master Plan process) and the SEPA determination ignored neighbor's concerns.
 - Long Term Effects. Proposed changes will affect value of homes and quality of life.

3. *Rainer Kirschner (Note – the comments below were included within his appeal letter as comments, not items for the appeal)*

- The SEPA checklist should be corrected to identify wet soil plants in the retention pond.
- The SEPA checklist should be corrected to indicate fish near the subject property.
- Applicant should not mislead by stating that the synthetic turf will be an environmental benefit to the site due to reduced field irrigation or fertilization.
- The SEPA checklist should be corrected in that noise is restricted to mostly day time and weekend use during the spring and summer months. It is rare that organized events run past 9:00 p.m. during the summer.
- Confirm any lighting impacts to his property
- Requested information on funding for the field, the demand for recycled turf fields, and the name of the engineering company that designed the project

4. *Janice Gerrish*

- Process. Complaint about SEPA deadline being December 21, 2011 right before a major holiday and delay in creating the final SEPA document.
- Lighting and Noise. SEPA determination adequately addresses the issues of lighting and noise.
- Security. Concern regarding security of the park, trespassing, vandalism, and disturbance of the peace. Potential solutions include:
 - Fence to mark the park boundary
 - Formalize park entry points
 - Discourage trespassing onto private property
 - Police patrols and monitoring.
 - Restricting hours of 'lighted' field use
- Maintenance. Asks if there is money set aside for daily maintenance for:
 - Police security
 - Field maintenance
 - Garbage pickup
 - Bathrooms

B. Staff Response to SEPA comments. On December 28, 2011, King County responded to the Concerned Neighbors of Big Finn Hill Park's comments which included a response to items not related to SEPA such as security and maintenance of the park (see Enclosure 11). To the extent that the comments are related to the issues raised by the appellants, see Sections V and VI below for further discussion. Otherwise, staff's response regarding the SEPA *comment* topics are as follows:

1. Noise. The proposal should comply with Kirkland noise regulations (instead of King County noise regulations as previously mentioned in the SEPA determination memo) since 'noise' is not a vested development regulation. Now that Big Finn Hill Park is a part of the City of Kirkland, Kirkland would enforce noise violations

as it relates to WAC 173-60 which the City has adopted by reference. See Section VI.2 for additional discussion on this topic.

2. Wetland. The proposal should comply with King County wetland regulations since wetland regulations vested with the King County grading permit. King County Code (KCC) Section 21A.24.045 allows alterations to recreational facilities within a sensitive area or buffer if the footprint of the recreational facility is not expanded. The applicant has submitted a summary from King County Department of Development and Environmental Services (DDES) confirming compliance with the County's wetland regulations (see Enclosure 12).
3. Drainage System. The City of Kirkland requires that private storm water facilities (facilities that are not maintained by the City of Kirkland) comply with maintenance requirements as specified in Appendix A of the 2009 King County Surface Water Design Manual and the City of Kirkland Addendum to the 2009 King County Surface Water Design Manual KMC 15.52.120(e)(2). Inspections and violations of these requirements are subject to the following Municipal Code sections.
 - *KMC 15.52.130(a)(3) Inspection and Sampling. Inspection for Maintenance and Source Control Best Management Practices. The director or designee may inspect storm water facilities in order to ensure continued functioning of the facilities for the purposes for which they were constructed, and to ensure that maintenance is being performed in accordance with the standards of this chapter and any maintenance schedule adopted during the plan review process for the property. The director also may enter the site for the purposes of observing source control best management practices. The property owner or other person in control of the site shall allow any authorized representative of the director or designee access during regular business hours, or at any other time reasonable in the circumstances, for the purpose of inspection, sampling, and records examination.*
 - *KMC 15.52.140 Enforcement, Violations, and Penalties. Enforcement of violations of this chapter shall be conducted pursuant to KMC Chapter 1.12. (Ord. 4280 § 5, 2011)*

King County Parks has stated that they will submit a repair and maintenance plan of the existing/proposed storm water facility as part of their grading permit. Reference to the above Municipal Code sections should also be included as conditions of the grading permit.
4. Lighting and Artificial Turf not allowed by Master Plan. Staff has determined that this item is not a SEPA issue. See Section VI.A below for additional discussion on this topic.
5. Review Process. Staff has determined that this item is not a SEPA issue. In regards to the County's Master Plan process, see Section VI.A for additional discussion. In regards to the SEPA process, additional time was needed in order to fully analyze the impacts of the proposal and to coordinate with King County due to the annexation of Big Finn Hill Park. The City complied with SEPA procedures described in KMC Chapter 24.02 – SEPA Procedures and Policies.
6. SEPA Checklist Corrections. The SEPA Checklist corrections described by Mr. Kirschner have been accepted as corrections.
7. Miscellaneous. Information requested by Mr. Kirschner in regard to funding for the field, the demand for recycled turf fields, and the name of the engineering

company that designed the project, have been forwarded to the applicant for a response.

8. Long Term Effects. The purpose of SEPA and the County and City regulations are to mitigate project impacts. The City did not identify any short term or long term significant adverse environmental impacts as part of the SEPA review.

V. APPEAL ISSUES

On December 21, 2011, two timely appeal letters were submitted to the City in regard to the SEPA Determination of Nonsignificance for the Big Finn Hill Park field conversion project (see Enclosures 1 and 2). In their letters, the appellants assert a number of issues as grounds for an appeal. The appellant's appeal issues are summarized below by appellant and topic. The Kirschner appeal letter also included several comments which were summarized in Section IV.A above.

A. Concerned Neighbors of Big Finn Hill Park (Christofferson's and Allen's) Appeal Issues

1. Lighting

The appellants claim that the proposed lighting is in violation of the King County Master Plan for Big Finn Hill Park which prohibits lighted sport fields.

2. Noise

The appellants disagree with staff's analysis of noise impacts for the following reasons:

- a. The County currently does not enforce the prohibition of amplified sounds at Big Finn Hill Park.
- b. Noise impacts during the evening hours will increase during the winter months as a result of lighting the field since no sport activities currently occur during this time period.
- c. The noise analysis by City staff using the Magnuson Park noise study is not relevant to the Big Finn Hill Park proposal in terms of park characteristics and sporting event use.
- d. The noise analysis by City staff is not complete and should include other factors such as increased use during the evening hours, traffic, decrease of vegetation, and sound absorption.
- e. Current noise impacts can be heard as far as 5 to 6 blocks east and north of the park.

3. Artificial Turf

The appellants claim that the proposed artificial turf field is in violation of the King County Master Plan for Big Finn Hill Park which prohibits artificial turf fields.

B. Kirschner Appeal Issues

1. Crumb Rubber/Artificial Turf

- a. Nearby wildlife and salmon could be adversely impacted by crumb rubber tracked away by users of the artificial turf field and from maintenance such as blowing and disinfecting of the field.
- b. Nearby wildlife could be adversely impacted by an increase in temperature caused by crumb rubber during the summer months.

2. Water Runoff

- a. There would be an increased risk of more frequent flooding to the appellant's property due to the proposed changes to the water table and increase of impervious area.
- b. Erosion of material into Denny Creek would increase during construction.

3. Lighting & Noise

- a. An increase in park use during the darker winter hours would conflict with wildlife behavior in terms of lighting and noise.
- b. Lighting and noise would affect the quality of life of the surrounding neighborhood.

VI. STAFF RESPONSE TO APPEAL ISSUES

The SEPA "threshold determination" is the formal decision as to whether the proposal is likely to cause a significant adverse environmental impact for which mitigation cannot be easily identified. The SEPA Rules state that *significant* "means a reasonable likelihood of more than a moderate adverse impact on environmental quality [WAC 197-11-794(1)]". In addition, *significant* involves an analysis of the context, intensity, and severity of the impact.

Many environmental concerns have been addressed and incorporated in the City's codes and development regulations. Where City regulations have been adopted to address an environmental impact, it is presumed that such regulations are adequate to achieve sufficient mitigation [WAC 197-11-660(1)(e)]. Therefore, when requiring project mitigation based on adverse environmental impacts, the City would first consider whether a regulation has been adopted for the purpose of mitigating the environmental impact in question. The City would then look at the project site and proposed use and determine if it presents unusual circumstances or impacts as a result of different site size or shape, transition between uses, topography, or inadequate infrastructure. Mitigation may then be required if the proposal results in significant adverse environmental impacts which substantially exceed the limitations anticipated with the adopted City codes.

In light of this approach, the City has reviewed the appellants appeal issues and provides the following finding of facts and conclusions.

A. Big Finn Hill Park Master Plan

1. Fact: In reviewing King County's response to this topic, King County has stated that the Big Finn Hill Park Master Plan is a document that is meant to provide guidance for the development of the park and does not have regulatory effect (see Enclosure 3, page 60). It was not adopted by the King County Council. A copy of the Big Finn Hill Master Plan can be found in Enclosure 13.
2. Conclusion: Staff defers to King County with respect to its position that the Big Finn Hill Park Master Plan does not have regulatory effect. In any event, staff is of the view that compliance with the Big Finn Hill Park Master Plan is not an issue to be dealt with as part of the SEPA process.

B. Noise

1. Facts:
 - a. The proposal is required to comply with Kirkland noise regulations instead of King County noise regulations because 'noise' is not a vested development

regulation. Now that Big Finn Hill Park is a part of the City of Kirkland, noise violations would be enforced using Kirkland noise regulations found in WAC 173-60 which the City has adopted by reference.

- b. King County Parks does not prohibit use of amplified sound at other areas of the park. For example, the baseball fields have a sound system that is used and special events at the park may also utilize a sound system. King County Parks has proposed to prohibit the use of a sound system at the soccer/lacrosse field in order to reduce noise impacts associated with that use. To formalize this restriction, King County Park staff has indicated that King County and Kirkland Youth Lacrosse will prohibit the use of an amplified sound system through a use agreement. A final draft of the use agreement can be found in Enclosure 14. The use agreement is currently going through the King County Executive submittal/Council approval process.
- c. In terms of noise characteristics, soccer and lacrosse are very similar in that both are field sports with one or more referees and multiple players on each team trying to score a goal. Differences would include the use of air horns and potentially more whistle blowing with lacrosse games. However, King County Park staff has indicated that King County and Kirkland Youth Lacrosse will prohibit the use of air horns at the field through a use agreement. A final draft of the use agreement can be found in Enclosure 14. The use agreement is currently going through the King County Executive submittal/Council approval process.
- d. WAC 173-60-040 – *Maximum Permissible Environmental Noise Levels* requires that noise from a park use (Class A EDNA – Environmental Designation for Noise Abatement) cannot exceed 55 dBA when entering residential property (Class A EDNA) during the hours of 7:00 a.m. and 10:00 p.m. Between the hours of 10:00 p.m. and 7:00 a.m., the noise level cannot exceed 45 dBA.

At any hour of the day or night the applicable noise limitations described above may be exceeded for any receiving property by no more than:

- 5 dBA for a total of 15 minutes in any one-hour period; or
- 10 dBA for a total of 5 minutes in any one-hour period; or
- 15 dBA for a total of 1.5 minutes in any one-hour period.

In addition, WAC Sections 173-60-050(4)(a) and (k) exempts sounds created by motor vehicles as well as natural phenomena and unamplified human voices from the maximum noise levels described above.

- e. Staff's review of noise impacts involved applying noise impacts studied at Sand Point Magnuson Park. Chapter 3.6 - *Noise - Final Supplemental Environmental Impact Statement* (FSEIS) for Sand Point Magnuson Park issued July 12, 2002, contains noise levels taken at 100 feet from a soccer game during the peak use time of 7 p.m. (see Enclosure 3, page 107).

This information was determined to be relevant to Big Finn Hill Park because the distance of the noise readings were taken at 100 feet without any barriers. Therefore, the noise levels from the Magnuson Park study were used in calculating the noise levels for soccer and lacrosse games at Big Finn Hill Park. Below are the results of staff's calculations.

Calculated Noise Levels – <i>Adult Soccer</i>		
Closest Distance to Residential Property Lines (approximate distance measured from the perimeter of soccer field at centerline)	Predicted Noise Level with source of 48 dBA (L ₂₅)	Predicted Noise Level with source of 69 dBA (L _{max})
354 feet to southwest	37.02	58.02
486 feet to southeast	34.27	55.27
772 feet to north	30.25	51.25

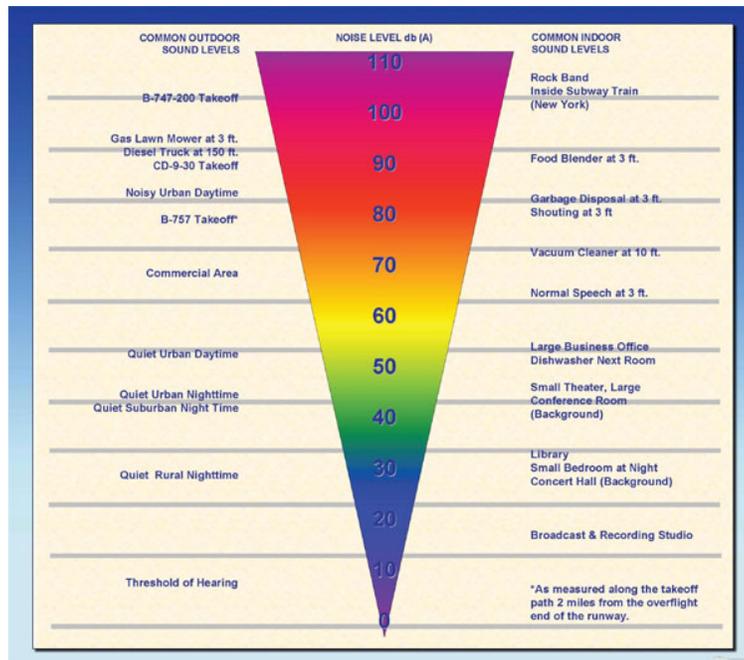
Calculated Noise Levels – <i>Youth Soccer</i>		
Closest Distance to Residential Property Lines (approximate distance measured from the perimeter of soccer field at centerline)	Predicted Noise Level with source of 55 dBA (L ₂₅)	Predicted Noise Level with source of 75 dBA (L _{max})
354 feet to southwest	44.02	64.02
486 feet to southeast	41.27	61.27
772 feet to north	37.25	57.25

The L₂₅ column contains the estimated noise level which will be exceeded by 5 dBA for 15 minutes of every hour and corresponds to the maximum noise levels allowed by code. The L_{max} column estimates the maximum noise level that may occur and is typically associated with the code exemption which allows a 15 dBA increase to the noise maximum for a total of 1.5 minutes within any one-hour period.

The results of the calculations are very conservative in nature and do not include other factors which would reduce the sound levels i.e. lower crowd attendance at late night games/practices, topography, vegetation, and sound absorption by the atmosphere and the field. Even with this conservative approach, both adult and youth soccer uses would comply with the noise regulations during the hours of 7:00 a.m. and 10:00 p.m.

After 10:00 p.m., youth soccer would not comply with the L_{max} limit of 60 dBA. However, according to King County Park staff, this would not be an issue since youth soccer will not utilize the field after 10:00 p.m. Adult soccer noise between 10:00 p.m. and 11:00 p.m. is estimated to have an L_{max} of 58.02 dBA at the closest property line which is below the code L_{max} limit of 60 dBA.

- f. Comparative noise levels are provided in the following diagram. *Source:* http://www.airportsites.net/lambert-stl/workshop1/nc_b29.aspx



- g. Noise from vehicular traffic along Juanita Drive impacts the area south of the soccer field in terms of noise. Using information from the Handbook of Environmental Acoustics, by James P. Cowan, page 150 (Source: www.nonoise.org/resource/trans/highway/spnoise.htm), staff was able to estimate the amount of existing vehicular traffic noise 375 feet and 750 from Juanita Drive.

Calculated Noise Levels – <i>Vehicle Traffic</i>			
Approximate distance measured from Juanita Drive centerline	Predicted Noise Level with source of 64 dBA at 50' - Auto at 35 mph	Predicted Noise Level with source of 76 dBA at 50' - Medium Truck at 35 mph	Predicted Noise Level with source of 82 dBA at 50' - Heavy Truck at 35 mph
375 feet east of Juanita Drive	46.50	58.50	64.50
750 feet east of Juanita Drive	40.48	52.48	58.48

2. **Conclusion:** The majority of the noise from adult and youth soccer activities is predicted to range from 34 dBA to 64 dBA along the park's south property line and from 30 dBA to 57 dBA at the north property line. Both scenarios are below the code maximums of 55 dBA and 70 dBA (L_{max}) between the hours of 7:00 a.m. and 10:00 p.m. During the proposed adult soccer timeframe between 10:00 p.m. and 11:00 p.m., noise levels range from 30 to 37 dBA and 51 – 58 dBA (L_{max}) and therefore complies with the code required 45 dBA and 60 dBA (L_{max}). Staff concludes that the estimated noise levels which would result from use of the completed field complies with the City's noise regulations. Noise from motor vehicles is exempt from the noise regulations.

In addition, the noise impacts do not create a significant adverse environmental impact to wildlife habitat south of the field since estimated vehicular traffic noise from Juanita Drive is comparable and may even exceed the noise from use of the field. Also, the projected noise levels from the field at the property lines are

similar to a 'quiet suburban night time' scenario as shown in the noise level chart in the previous section.

C. **Lighting**

1. **Fact:**

- a. The applicant is proposing to install four 70-foot tall light standards using the Musco Light-Structure Green lighting system which consists of a 'spill and glare light control visor' and 'die-cast aluminum reflector housing' to help reduce light impacts to adjoining properties (see Enclosure 3, pages 80-93).
- b. The applicant submitted revised photometric information that shows lighting levels which extend to the south property line (see Enclosure 15). The information shows that lighting levels at the south property line is at approximately 0.007 foot candles as estimated by staff. The photometric information does not take into account existing trees which would further reduce lighting levels.
- c. Light from the light standards located at the north end of the sports field will be oriented to the south in order to light the field and are approximately 690 feet to 800 feet away from the homes to the south. The light standards on the south end of the field will be orientated to the north and are approximately 460 feet to 630 feet from the homes to the south. Light from the northern light standards will be more visible to the homes south of the field due the light fixture orientation.
- d. While existing mature trees (evergreen and deciduous) surround the field, the area southeast of the field consists primarily of deciduous trees. During the fall and winter months, the screening qualities of the trees will be diminished and visibility of the lighting at the field will be more apparent.
- e. King County Code (KCC) requires that light levels should not exceed 1 foot candle from onsite lighting systems as measured at the property line. This is an interpretation that King County uses (based on a Hearing Examiner decision in the 90's) in applying the general lighting standards referred to in KCC 21A.18.110(G) – *Parking and Circulation* and KCC 21A.08.040(B).1.b. – *Recreational/Cultural Land Uses* which states that lighting for structures and fields shall be directed away from residential areas.
- f. For comparative outdoor lighting levels, the following chart was provided as part of staff's SEPA lighting analysis.

Condition	Illumination (foot candles)
Sunlight	10,000
Full Daylight	1,000
Overcast Day	100
Very Dark Day	10
Twilight	1
Deep Twilight	.1
Full Moon	.01
Quarter Moon	.001
Starlight	.0001
Overcast Night	.00001

Source: www.EngineeringToolBox.com

Conclusion: The estimated lighting level of .007 foot candles at the south property line meets King County regulations. A lighting level of .007 foot candles would be compared to that of a half-moon based on the above lighting level chart. And although the lights atop the light standards may still be visible at night through the existing trees, the following site characteristics greatly minimize any adverse impacts created by the proposed lighting:

- The large distance between the lights and adjoining residential properties
- The existing mature trees act as a natural buffer in most areas during most times of the year
- The combination of the topography change and height of trees reduce sight lines to the proposed lighting
- The orientation of the lights and light shielding design

Staff concludes that the proposed lighting system does not create a significant adverse environmental impact.

D. Crumb Rubber

1. Facts:

- a. Studies. During the SEPA review process, the applicant submitted various studies that provide background information regarding environmental concerns regarding synthetic turf fields. The studies can be found online at the project website under the SEPA heading:

http://www.kirklandwa.gov/depart/Planning/Development/BFHP_Renovation.htm

- b. Heat Effects. A study provided by the applicant during the SEPA review (*Assessment of Environmental, Health, and Human Safety Concerns Related to the Synthetic Turf Surface at Maple Park in Ridgewood, NJ*. Ridgewood Environmental Advisory Committee. January – October 2009) found that synthetic field surfaces are hotter than natural grass fields by as much as 30° F on average. In contrast, tennis court surfaces were measured to be 44° F hotter than natural grass fields. However, at heights of 12" and 39" above both field surface types, the average ambient air temperature above both surfaces differed by only 3° F at 12" above the surface and approximately 2° F at 39". Turf fields averaged an increase of 7.3° F at 12" and 7.9° F at 39" above the surface while grass fields averaged an increase of 4.3° F at 12" and 5.7° F at 39" above the field surface.

- c. Migration of Crumb Rubber and Impact on Denny Creek. Denny Creek has been classified as a salmon bearing stream. King County regulations require that 115 foot buffer is required from fish bearing streams (see Enclosure 16). Enclosure 16 shows the 115 foot stream buffer mapped on Kirkland's Geographic Information System software.

The following study provided by the applicant addresses the leaching qualities of crumb rubber: *An Assessment of Chemical Leaching, Releases to Air and Temperature at Crumb-Rubber Infilled Synthetic Turf Fields*. New York State Department of Environmental Conservation. New York State Department of Health. May 2009. The study concluded that when using a conservative methodology, crumb rubber from truck tires may have an impact on aquatic life due to the release of zinc whereas crumb rubber derived from mixed tires would pose insignificant impacts. However, when the methodology was revised to be more representative of field conditions, this model resulted in no adverse impacts to water quality.

Also, during the timeframe of the referenced study, one surface water sample was collected. While the test result showed no adverse impacts, additional studies were going to be conducted in the future since no conclusion could be drawn from one sample. In regards to ground water, 32 samples were collected and no organics or zinc were detected. Additional studies were also planned to sample shallower groundwater levels.

To address this potential issue, King County has proposed a water quality sand filter for the field conversion project in order to provide *enhanced* basic treatment. This will result in a more stringent water quality treatment than typically required. The treatment includes basic treatment (80% of suspended solids in the water) as well as removal of metals including a 50% reduction of total zinc. In addition, runoff from the parking lot will pass through a vegetated bioswale south of the field which contains several check dams. This will also act as a filter for any crumb rubber that makes it way from the parking lot.

According to the engineers involved with the project (applicant and City), it is highly unlikely that crumb rubber will make its way into Denny Creek whether the crumb rubber is from the field or deposited in the parking lot. This is due to the type of filtering and/or settling of the crumb rubber that would occur given the design of the drainage systems and turf backing being used.

- d. Migration of Crumb Rubber and Impact on Neighboring Wildlife. The proposed turf field will be fenced around the perimeter with four gated field entrance/exits. The gates are all located at the north end of the field. Users of the field would arrive either by car or by foot from the surrounding neighborhood. Crumb rubber may exit the field with most or all of the crumb rubber falling off in the first few steps when leaving the field. However, crumb rubber may still remain located within shoes or lodged within clothing if contact was made with the field. If leaving by car crumb rubber may be deposited within the vehicle and/or at home. If leaving by foot, a small amount of crumb rubber may be deposited in the trails around the park. While it is uncertain how crumb rubber deposited on or near the trails would affect neighboring wildlife, staff anticipates that the crumb rubber would not be ingested by animals and would slowly deteriorate over time on the forest floor.
 - e. Turf Cleaning. According to King County Park staff, the artificial turf field will be cleaned by pressurized water. Primary maintenance will be grooming/sweeping the field with equipment that works with standard park maintenance vehicles. Blowers will rarely be used and only if there is a lot of debris on the field surface typically associated with large storm events. Blowers are not typically used since it causes migration and uneven infill areas on the field. To prevent the spread of crumb rubber, the use of water will be directed internal to the field.
2. Conclusion: Both turf and grass fields were found to increase air temperature above the field within 3° F of each other. With weather in the Seattle area averaging in the high 70°s during the summer months and the distance Denny Creek and neighboring wildlife habitat are from the field, an almost 8° F increase in temperature (as measured 39" above the field surface) would not be noticeable at greater distances. Another factor that would help reduce air temperature is the large forested area near the field since trees help cool the air by shading and water evaporation. Staff concludes that the heat produced by

the proposed turf field would not create a significant adverse environmental impact.

Also, since the likelihood of crumb rubber entering the stream and/or wetland area south of the field is very low and since the provided studies did not show significant adverse impacts to water quality or to aquatic life, staff concludes that use of crumb rubber would not create a significant adverse environmental impact.

E. Effects of Noise and Lighting on Wildlife Habitat

1. Facts:

- a. Lighting levels on the provided photometric drawing shows that lighting levels south of the field ranges from 0.95 foot candles (approximately 58 feet south of the field) to approximately 0.007 foot candles at the south property line a distance of approximately 338 feet from the field. According to the lighting level chart in Section VI.C.1.e above, this corresponds to lighting levels of 'twilight' at the brightest (light from a candle measured 1 foot away) and a 'half-moon' at the dimmest (approximately 99.3% dimmer than twilight).
- b. Noise information analyzed in Section IV.B.1 above showed that noise levels from vehicular traffic on Juanita Drive NE is similar and at certain areas exceeds the noise levels that are projected from the users of the sports field.

2. **Conclusion:** Staff concludes that the lighting levels resulting from the new lights and noise levels from the sport activities would not create a significant adverse environmental impact to wildlife habitat residing near the sports field.

F. Water Runoff

1. Facts:

- a. The project area is approximately 2.58 acres or 1.18% of the total park area of 220 acres. The project area includes areas in which actual work associated with the project will occur (the field, the sand filter, path improvement areas, the staging area, and the slope and parking areas to be revised). The amount of impervious surface within the project area will be increased with the addition of new field curbing, asphalt pavement pathways, and asphalt for the parking lot reconfiguration (8 new parking stalls), all of which total approximately 7,000 square feet. Current lot coverage of the project area is 4,792 square feet or 4.2% of the project area. Completion of the project would result in 11,761 square feet of impervious area or 10.5% of the project area.
- b. No changes to the water table are proposed nor anticipated with the project.
- c. The project is required to comply with 2009 King County Surface Water Design Manual – Appendix D, "Erosion and Sediment Control Standards." The purpose of the manual is to prevent the transport of sediment to streams, wetlands, lakes, drainage systems, and adjacent properties during construction, to the maximum extent practicable using best management practices. The applicant has proposed an erosion control plan consistent with the required standards (see Enclosure 3, pages 43-44 Sheets C2.0 and C2.1).
- d. The existing park area was constructed in 1996. The existing bioswale and detention pond were included in the park construction and were designed to treat and taper runoff from the site based on the most stringent requirements at the time. Because the storm water facility is man-made, it

would not be considered a wetland for regulation purposes. Periodic maintenance of the storm water facility, which may include vegetation removal, is required to ensure that the facility functions properly.

The current field renovation project is required per code to provide *conservation flow control* which is intended to protect streams that are downstream of a development area. However, the applicant is proposing to exceed that standard and provide the most stringent flow control requirement found in the 2009 King County design manual which would create flow rates approximately 72% lower than flow rates for the site as if it were completely forested (undeveloped). Therefore, the proposed project should not add additional flow to Denny Creek.

2. Conclusion: Staff concludes that the proposed storm water system exceeds King County requirements for storm drainage. Since the proposal is designed to create water flow rates lower than if the site were completely forested it would not result in a significant adverse environmental impact.

VII. STAFF RECOMMENDATION

A. Recommendation regarding SEPA Appeal Issues

Staff did not find any significant adverse environmental impacts regarding the project in terms of the proposed lighting, noise, use of crumb rubber, and drainage. Therefore, staff recommends that the Hearing Examiner uphold the December 7, 2011 SEPA Determination of Nonsignificance.

B. Recommendation regarding SEPA Comments

Staff recommends that a reference to the Municipal Code sections regarding repair and maintenance of the drainage system should be included as conditions of the grading permit. Since this is a code requirement, it should not be considered as SEPA mitigation.

VIII. JUDICIAL REVIEW (KMC24.02.240)

Judicial review of SEPA determinations is by RCW 43.21C.075 required to be heard only at the time of judicial review of the underlying action, i.e. approval or disapproval of the proposal for which SEPA review was required. For rules on perfecting and timing of the SEPA determination and judicial appeal, see RCW 43.21C.075 and WAC 197-11-680(4). The notice required by WAC 197-11-680(5) shall be appended to the permit or "notice of appeal" at the time of final city action. (Ord. 4150 § 2 (part), 2008)

IX. ENCLOSURES

1. Christofferson and Allen Appeal Letter
2. Kirschner Appeal Letter
3. SEP11-00020 DNS and Staff Memo
4. Vicinity Map
5. Aerial Map
6. Interlocal Agreement
7. Memorandum of Understanding
8. FHNA Comment Letter
9. Concerned Neighbors of BFHP Comment Letter
10. Gerrish Comment Email
11. King County Response Email
12. DDES Stream and Wetland Compliance Letter
13. Big Finn Hill Master Plan
14. Draft Use Agreement
15. Updated Photometric Information
16. Stream Buffer Map

WRITTEN NOTICE OF APPEAL
CASE #: SEP11-00020

TO: City of Kirkland Planning Department
Jon Regala, Senior Planner

FROM: Concerned Neighbors of Big Finn Hill Park
Bob & Ginny Christofferson christoffersonbg@comcast.net
Bryan & Alberta Allen brybert5@yahoo.com

DATE: December 20, 2011

SUBJECT: Appeal of SEPA Environmental Determination
Big Finn Hill Park - Field Conversion

A. Lighting

This proposal is in direct violation of the King County Master Plan dated August 1, 1994. This is a direct quote from the mentioned King County Master Plan, Page 11:

"All soccer and baseball fields will be natural turf and unlighted"

C. Noise

We are in disagreement with this analysis for several reasons.

Currently King County Parks is not enforcing amplified sounds as stated in paragraph 3 under section C. Noise analysis. For example, this past year a MFG Cyclocross event was held at Big Finn Hill Park on September 11, 2011, which began at 9 a.m. and went on until 6 that evening. Throughout the event there were loudspeakers used to blast music throughout the neighborhood as well as loud cowbells, horns, whistles etc. King County did not enforce their own noise restrictions during that event.

In paragraph 4 under section C. Noise you state:

Since the park is currently open until 10:00 p.m. during the summer months, the new lighting system would allow use of the park until 10:00 p.m. during the darker months. The noise impacts should be the same as during the summer months.

We strongly disagree with this statement, as the noise impact will increase because presently we have no noise impact during the winter months in the evening and at night because the park closes at dusk (approximately 4:30 p.m.).

In paragraph 5 under section C. Noise you state:

The applicant did not submit a noise study with the SEPA checklist, however I was able to review Chapter 3.6 - Noise - Final Supplemental Environmental Impact Statement (FSEIS) for Sand Point Magnuson Park issued July 12, 2002 (see Attachment 11). In the noise study, sound level measurements were taken at various sporting events to understand the types of noise associated with the different events. I found this information to be relevant with the proposal at Big Finn Hill Park.

We would like to know how you found this information to be relevant as direct comparison of noise data between these two parks is impossible. Magnuson Park is not located in a neighborhood setting such as Big Finn Hill Park. At Magnuson Park, there are houses on the south and east end of the park and the homes are at a distance much farther from the park whereas Big Finn Hill Park is surrounded by homes. "The closest home is 400 feet away through a buffer of trees. 99% of the homes are between 700 feet and 2000 feet away from the field." as stated in the SEPA response by King County.

In paragraph 7 under section C. Noise you state:

At 10:00 p.m., Big Finn Hill Park will be used by adults. Therefore the Magnuson Park data for adult soccer games is being used as part of staff's analysis. The results of the calculations below are very conservative in nature and do not include other factors which would reduce the sound levels i.e. lower crowd attendance, topography, vegetation, and sound absorption by the atmosphere and the ground.

We strongly disagree with this statement and feel you should include other factors in your calculations some of those being, the increase in park hours and the addition of lights will increase the noise impact to the surrounding area that does not presently exist during the winter months. The increase of traffic in and out of the park, the decrease in vegetation during the winter months (majority of trees in the park are deciduous and lose their leaves), sound absorption by the atmosphere and ground differentiate throughout the year. We also believe you have no direct comparison between the noise levels of lacrosse games versus soccer games that should be an integral part of your analysis as the intent of this field conversion will be to play lacrosse.

In paragraph 8 under section C. Noise you state:

occur intermittently during the games. For comparison, normal human conversation heard at approximately 3 feet away generates a noise level which ranges anywhere from 40 to 60 dBA. The peak noise level for the field is likely to be even lower given that factors that reduce sound were not included in the calculation. Therefore, staff has not identified any significant impacts regarding this topic that would warrant any project mitigation. However, King County should confirm compliance with County noise regulations as part of their grading permit process.

We strongly disagree with this statement as we have collected data from the neighborhood and have found there is a noise impact from activities at Big Finn Hill Park. We have listed the following addresses where noise from the park is routinely heard, these addresses are approximately 5-6 blocks east and north of the park.

8436 NE 143rd Street 13814 90th Ave NE NE 139th St. NE 141st St.

We also reference King County Master Plan dated August 1, 1994 where it is stated as follows:

4. The siting of sport fields and community amenities will consider NOISE as the #1 factor affecting neighborhoods. An acoustical environmental consultant (Eric Hansen, TRC Environmental Corporation) researched and advised the Citizens Advisory Committee and, as a result, acoustical factors will be a major criteria in the Master Plan revision and will be reviewed during implementation.

The County itself recognizes sporting fields have a substantial noise impact on the neighborhood surrounding Big Finn Hill Park.

F. Synthetic Turf

This proposal is in direct violation of the King County Master Plan dated August 1, 1994. This is a direct quote from the referenced King County Master Plan, Page 11:

"All soccer and baseball fields will be natural turf and unlighted"

In conclusion, we find that the determination of non-significance from the city of Kirkland is in direct conflict with many of the directives set forth by King County and King County is in direct violation of their own standard public process as cited in Big Finn Hill Park Master Plan revision dated August 1, 1994 shown below:

CITIZENS ADVISORY COMMITTEE ROLES AND RESPONSIBILITIES

King County is adopting a standard public process for planning efforts by Citizens Advisory Committees. The process was explained and summarized for this report by Linda Dougherty, Acting Manager of King County Parks Division.

For each plan, the Division appoints an advisory committee to assist the Division by providing a diverse citizen perspective throughout the planning process. These Citizen Advisory Committees are generally comprised of individuals who have varied parks and recreation interests and experiences and who will be able to assist the Division in addressing the planning issues at any given park from a broader perspective. After an Advisory Committee has made their recommendations and a conceptual plan or design has been developed, a series of public meetings are held to inform the general public of their recommendations, process, rationale, and to receive public comments. These are education/information sessions. Following the public meetings, the Advisory Committee and the Parks Division carefully consider public comments and concerns and incorporate the desirable and feasible recommendations in the proposed master plan which is first presented for approval by the Division Manager and Management Team and, as approved, forwarded to the Parks, Open Space and Natural Resources Committee of the King County Council for their review and comment.

King County Parks has made a commitment to keep the BFHP Advisory Committee apprised of meetings which will address their issues. An Advisory Committee member may be asked to participate in the presentations. Or, as a citizen, any member of the Advisory Committee may speak at any public hearing.

We believe the above statements present a strong and factual rebuttal to the determination of non-significance from the City of Kirkland. We also believe that before this project can proceed King County must first comply with its own rules established in the Master Plan for Big Finn Hill Park.

Rainer Kirschner
13433 78th PL NE
Kirkland, WA 98034

December 20,2011

Eric Shields, Director
Department of Planning and Community Development
City of Kirkland
123 5th Avenue
Kirkland, WA 98033-6189

Reference case #SEP11-00020

Dear Mr. Shields,

We are writing this note to formally appeal the proposal of the synthetic turf field at location 8106 NE 138th Street (Big Finn Hill Park).

An environmental impact statement (EIS) should be required due to:

- Salmon fry spotted in Denny Creek in front of 13429 and 13433 78th PL NE, Kirkland WA approximately 500 feet from the proposed location. Salmon are a protected species under the Endangered Species Act (ESA).
- Pacific Tree frog habitat including the reservoir adjacent to the proposed field as well as the wetlands just south of the proposed field.
- Beaver residing in the entire Big Finn Park vicinity near all water areas
- An increased risk of more frequent flooding to our property due to the man-made change of the water table

We strongly feel that an EIS is warranted to determine the impact to the above-referenced wildlife that was not mentioned in your review. The impact includes rubber crumb that will be introduced into the wildlife habitat along with the regular maintenance including blowing and disinfecting, the increase in temperature of the surrounding areas in the summer months, the disruption to wildlife due to human activity after dusk which conflicts with wildlife behavior, the erosion of material into Finn Creek during construction, the additional 10% of impervious structure.

It is mentioned in the report that it is not a concern that rubber crumb would leave the immediate area of the playing field. There are trails that not only surround the current field but also lead down to and across Denny Creek (approximately 400 feet away). Pedestrians leaving the fields and using the trails will most certainly be taking these rubber crumbs that are stuck on their shoes/socks, etc. into the surrounding areas...potentially entering Denny Creek. **This could have a significant impact on the salmon and amphibians of Denny Creek.** I know when my children have played on turf fields, rubber crumbs are all over our vehicle and enter our home as well. They are not left at the ball field!

Specific corrections and comments to the State Environmental Policy Act (SEPA) Checklist:

4.a Plants (page 8)

Correction: There are wet soil plants on location. There is cattail and water lily in the retention pond. The current pond has a healthy macro-invertebrate population including tadpoles and two species of dragon fly larva. This pond has been used as a study for a pre-school environmental program.

4.b Plants (Page 9)

Correction: Cattail and water lily will be removed or altered in the retention pond.

5.a Animals (Page 9)

Correction: No check mark was indicated for fish. Four separate neighbors at different times this past year have spotted and observed Salmon fry in Denny Creek in front 13429 78th Pl. NE and 13433 78th Pl. NE. This was exciting news! This has been the first year of the sightings and observations since we have been in the neighborhood.

5.b Animals (Page 9)

Correction: **Salmon are a protected species under the Endangered Species Act (ESA).**

6.c Energy and natural resources (Page 10)

Correction: I have never seen the current field irrigated or fertilized. Do not mislead by stating that the synthetic turf will be an environmental benefit to this specific site. Can you also provide more information on the sanitizer (I believe it is called Rainwater). It has been stated that the sanitizer is biodegradable. Please indicate any adverse impact this product may have on Salmon nearby as well as potential rubber crumbs might have on the salmon and other wildlife in the very close vicinity. What is the time in which the product fully biodegrades? How much rubber crumb is acceptable in the steams that will not impact salmon close by? What is the impact of the heat that the fields will retain during summer months to the water table?

7.a Environmental health (Page 11)

Comment: Is there any toxicity level that is acceptable regarding the sanitizer that will be used?

7.b 1. Noise (Page 11)

Correction: Currently the noise is restricted to mostly day time and weekends during the spring and summer months. Very rarely is an organized event scheduled that runs past 9 pm even in the middle of summer.

7.b 3. Noise (Page 11)

Comment: My family happens to live in the unfortunate house that is closest to this proposal. What will be done to mitigate the year long noise till 11:00pm every night? We have two young school children.

11. a & b Light and glare (page 14)

Comment/ question: if the light drops off to darkness starting at 150 feet then can I assume that my house which is approximately 450 feet away will not have any glow, glare or light whatsoever from the towers?

Although our primary concern is the protection to the salmon and other wildlife, I also have other concerns that impact my family and property directly:

In the event that the field is changed to turf, we feel that keeping the park open and lit until 11:00pm is excessive. The residential neighborhood would be affected as there are residents who have to get up for work at 5 a.m. To listen to park noise past 10 p.m. is grievous and unnecessary.

It seems as if the monetary potential interest is greater than the interest of those in the community that surround the park. A major draw for our community is the peace, quiet and darkness during the evening. That is a current characteristic that Big Finn Hill Park provides. Contrary to statements that Jon Regala made in his memo to you, the park currently is not used heavily after 8pm even during the summer months. We do get noise during the day time and very early evenings over spring and early summer seasons with baseball. This is also mostly limited to weekends. And I will add that I enjoy hearing the sounds of organized sports in the background during these timeframes. This will all change because the priority will be to schedule as many paying clubs as possible to using the fields well into the night. Why should this park be singled out to be open any later than other Kirkland parks.

Also mentioned is that our house (13433 78th PL NE) will not be impacted with light due to the high tech lighting and the tree cover. The tree cover is mostly deciduous and as I write this note, my 11 and 14 year olds will be able to see the 70 foot high lighting towers from their beds on the second floor. So for six months out of the year, I will be able to see the lighted towers. What is the mitigation plan? I know this sounds trite, but I find darkness and the sounds of the pacific tree frogs comforting. I have spent lots of my free time with my children taking care of the park by pulling ivy and maintaining trails and now the park will be more oriented as a sports park well into the night which will change our disposition. I also am not looking forward to the noise that we will be hearing each and every night during bedtime hours. This will be a major change to our current situation.

In your review it was stated that the existing field becomes too wet to properly maintain or play on for most of the year. This is far from true. The field is playable for at least 9 months out of the year. Over the past 10 years, I would estimate that there are maybe 30 days a year where the field is not in a condition to play on. I know. My children play on it and have had soccer practice and have played lacrosse on it over the past 7 years. It is nearing January, and the field is currently still playable. How playable will a synthetic turf field be in driving rain and snow? Are there any studies that analyze injury rates and playing recommendations on turf fields that are very wet and slippery during winter months?

What is the funding source for ongoing operational costs? Who ends up paying for the lighting and policing and the eventual replacement of the turf field in 8 to 10 years?

Synthetic fields replace natural turf fields which are living ecosystems, capable of sequestering carbon in their biomass, recharging and filtering rainwater and pollutants, and cooling ambient temperatures. Since the current field is not fertilized, it provides an important function. That function will be eliminated and have potential to increase flooding of our property and also increase the risk to health of the wildlife that are already stressed enough.

I would also like to know what the market is like when it comes time to “recycle” the turf field after 8-10 years? How is buying this used product?

In closing, we would also like to know the name of the engineering company in the event that legal action is considered due to increased flooding risk to our property because of the man made changes to the water table. Since Big Finn Hill Park has been developed, Denny Creek and the wetland behind our house have flooded four times. Our concern is that yet another cumulative change will increase the flooding potential. Can you ensure that this will not occur more frequently?

Respectfully yours,

Rainer Kirschner
13433 78th PL NE
Kirkland, WA 98034

Cc: Jon Regala, Senior Planner, City of Kirkland
Environmental Review Section, Dept. of Ecology
Department of Fish and Wildlife, North Lake Washington Tributaries Area Habitat Biologist
Environmental Reviewer, Muckleshoot Indian Tribe Fisheries Division
Jan McGruder, Executive Director, East Lake Washington Audubon Society
TJ Davis, King County Parks