

CITY OF  
City of Issaquah  
ENVIRONMENTAL CHECKLIST

**PURPOSE OF THIS CHECKLIST**

The State Environmental Policy Act (SEPA) Chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

**USE OF THIS CHECKLIST**

1. Once the completed checklist is submitted, the City may ask you to explain your answers or to provide additional information reasonably related to determining if there may be significant impacts. The City will make the decision of whether an EIS is required within 90 days of receiving the requested information.
2. The City will take no action on your proposal until after the decision is made that an EIS is not required or until after a required final EIS is issued. This means that any hearing on your proposal will not be scheduled until these decisions have been made.

**INSTRUCTIONS FOR APPLICANTS**

1. This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.
2. You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If a question does not apply to your proposal, write "does not apply." *Complete answers to the questions now may avoid unnecessary delays later.*
3. Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.
4. **The checklist questions apply to all parts of your proposal** even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effect.

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CITY OF ISSAQUAH

PLN12-00013

**A. BACKGROUND**

1. Name of Proposed Project, if applicable: Issaquah Creek Integrated Fish Passage Project
  
2. Name of Applicant: City of Issaquah Public Works Engineering Department  
Address: PO Box 1307, Issaquah, WA 98027  
Work Phone: (425) 837-3410 Cell Phone: \_\_\_\_\_  
e-mail: \_\_\_\_\_  
Contact: Kerry Ritland, Surface Water Manager
  
3. Date Checklist Prepared: February 27, 2012
  
4. Agency Requesting Checklist: City of Issaquah
  
5. Proposed timing or schedule (including phasing, if applicable) of your proposal:  
Construction activities will extend over an 11-month period extending from approximately April 1 to February 28. The years in which construction will occur is dependent on funding, but is expected to be 2013. In-water construction will occur between May 15 and September 15, as specified in the Hydraulic Project Approval (HPA) issued by the Washington Department of Fish and Wildlife (WDFW). All work outside this period will occur above the Ordinary High Water Mark (OHWM) of the Issaquah Creek channel. Mobilization and site preparation above will occur from April 1 to May 15. Revegetation and site restoration above the OHWM will occur from September 15 to February 28, with project completion scheduled for February 28.
  
6. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.  
There will be monitoring of restoration success for at least five years, including maintenance of the vegetation, habitat structures, and additional vegetation enhancement if necessary. The City of Issaquah Parks and Recreation Department may install additional enhancements to the new trail in the future.
  
7. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal (soils reports, surveys, flood plain mapping, drainage studies, traffic studies, etc.).  
Baseline Habitat Inventory Study, Alternatives Analysis and Conceptual Design Report, Level 1 Contamination Survey, Dam Modifications Physical Model Study Final Report; JARPA
  
8. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.  
No.
  
9. List any governmental approvals or permits that will be needed for your proposal, if known.  
US Army Corps of Engineers (Corps) Joint Aquatic Resources Permit Application (JARPA) for WDFW Hydraulic Project Approval (HPA), Corps 404 Permit, Washington Department of Ecology (Ecology) 401 Clean Water, and City of Issaquah Shoreline Exemption; City of Issaquah Clearing and Grading, and Flood Hazard; National and Historic Preservation Act (NHPA) Section 106; Programmatic Endangered Species Act Consultation (Restoration); CRP NEPA Checklist

5/15/09

10. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. If your proposal involves more than one use, give the square footage intended for each use. Describe the site in its existing condition (vegetation, any current use of the site, etc.).

The project site encompasses approximately 3.9 acres of land bordering and including approximately 1,200 linear feet of Issaquah Creek. Issaquah Dam – a 9-ft-high, 70 ft-wide concrete structure built in 1936 to divert water to the ISH – is located near the upper end of the site. The dam is in poor condition and causes significant delay and mortality among up- and downstream migrating fish. The primary objectives of the project are to (1) demolish the existing dam and replace it with a series of natural weirs and pools that allow salmonids of all life stages to pass up- and downstream through the associated reach, and (2) construct and operate a new water intake/diversion structure capable of supplying water to the Issaquah Salmon Hatchery, located approximately 0.5 mi downstream. Additional objectives include (3) improving instream and riparian habitat in and adjacent to Issaquah Creek and Cabin Creek—a small tributary that enters Issaquah Creek approximately 135 feet upstream of the existing dam; (4) replacing a culvert and removing a sediment trap on Cabin Creek approximately 420 feet upstream from its confluence with Issaquah Creek; and (5) avoiding, minimizing, and mitigating construction-related impacts to soils and vegetation within the project area and on adjacent properties.

No changes in the current uses of the site are planned. The amount of water diverted from Issaquah Creek to the hatchery, currently on the order of 11.5 cfs, is limited by the hydraulic capacity of the pipeline between the dam and hatchery and thus will not increase due to the project (the WDFW water right is 36 cfs). The length of the diversion reach will increase slightly, but this small impact will be mitigated by the very large benefit of removing the dam and eliminating the current passage barrier.

11. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the City, you are not required to duplicate maps or detailed plans submitted with the application related to this checklist.

The project is located on Issaquah Creek in S33SE T24N R06E, longitude 47.52187 and latitude -122.03697, approximately 3.5 miles above the mouth of the stream on Lake Sammamish, and 0.5 miles upstream of the hatchery). See attached Figure 1 for a Vicinity Map and Figure 2 for a Site Plan

**B. ENVIRONMENTAL ELEMENTS**

**1. Earth**

- a. General description of the site (check one)
- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Flat | <input type="checkbox"/> Rolling hilly |
| <input type="checkbox"/> Steep slopes    | <input type="checkbox"/> Mountainous   |
- Other Streambank and adjacent floodplain; some steep banks

- b. What is the steepest slope on the site (Approximate percent slope)?
- The right bank along Issaquah Creek at upstream end of the project site is steeply pitched, reaching a maximum angle of approximately 50% and a height of around 12 feet. The remainder of the site comprises relatively flat lowlying floodplain.

- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, mulch)? If you know the classification of agricultural soils, specify them and note any prime farmland. Soils found on the site are predominantly Briscot silt loam along both banks of Issaquah Creek and to the east of the creek. Kitsap silt loam and Beausite gravelly sandy loam may be present on the edge of the project site to the west of Issaquah Creek. Streambeds consist of fine to course grained fluvially deposited sediments.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. Deposits of coal mine waste material are visible on the right bank of Issaquah Creek adjacent to the dam. The material consists of loose rock and soil mixed with inferior grade coal excavated from historical coal mining operations in the area. The coal mine waste material have stabilized over time, but are susceptible to erosion at high flows.

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill. After the dam has been demolished and removed, the existing bed downstream of the dam will be raised, and the bed upstream of the dam will be lowered to achieve a uniform 2 percent gradient over approximately 520 feet of stream. This will be accomplished by excavating approximately 18,000 cubic yards of bed material. Approximately two-thirds of the excavated material will be exported; the remainder will be reused (recycled) as fill in later stages of the project.

A rock mattress measuring 75 feet wide, by 3 feet thick by 520 feet long will be laid down over the graded surface.

Approximately 6,700 cubic yards of Class IV rock will be imported to construct the rock mattress and 13 weirs, each measuring 5 feet wide at their base, 3 feet high, and 45 feet

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long from toe-to-toe along their crest. The areas between the 13 weirs crests and areas along the streambank will be filled with approximately 2,775 cubic yards of stream bed material to create the desired stream morphology and leaving only the crests of the rock weirs exposed.

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. Ground disturbances resulting from clearing and construction activities will increase the risk of soil erosion at the project site. The potential for adverse impacts due to erosion will be minimized by:

- Implementing best management practices (BMPs) to avoid, minimize, and mitigate impacts.
- Preparing and implementing a Temporary Erosion and Sediment Control (TESC) Plan for the project, including an active treatment system to collect and treat stormwater and dewatering fluids prior to release back to Issaquah Creek at NTU level of 5 or lower.
- Stabilizing and replanting streambanks and other disturbed areas following construction to prevent erosion and provide fish and wildlife habitat.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? Approximately 5,880 square feet of new impervious surface will be onsite following project construction; however, 3,700 square feet of gravel and 2,000 square feet of concrete will be converted to natural surfaces during the project, resulting in a net gain of 180 sq ft of new impervious area. The potentially adverse effects of this action will be offset by implementing the various restoration and mitigation actions associated with the project.

**2. Air**

- a. What types of emissions to the air would result from the proposal (i.e. dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities, if known. Temporary emissions will occur from the operation of construction equipment. Equipment will be used to
- construct temporary and permanent access roads;
  - remove and lay sewer and water pipe;
  - demolish and remove the existing dam;
  - regrade and add fill to the streambed;
  - construct the weirs and place fill between them;
  - replace the culvert and remove the sediment trap on Cabin Creek; and

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- install instream habitat structures in both streams, and restore and revegetate the project site.

The completed project will not generate emissions to the air.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. No off-site sources of emissions or odor are expected to impact the proposed project.
- c. Proposed measures to reduce or control emissions or other impacts to the air, if any. All equipment will be equipped with proper emission control devices. Standard construction BMPs will be followed.

**3. Water**

a. Surface:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. The project will occur in Issaquah Creek, a Class 1 stream, and Cabin Creek, a Class 2S stream. Cabin Creek is a small (< 10 feet wide) tributary that flows into Issaquah Creek in the project site. Both are perennial streams that flow year-round. Cabin Creek flows into Issaquah Creek on the left bank about 135 feet upstream of the existing dam.
- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach plans.

The following work will be completed in and adjacent to either Issaquah Creek or Cabin Creek:

1. Mobilization and site preparation
2. Dewatering of work site
3. Fish exclusion from work areas and relocation downstream
4. Demolition and removal of dam
5. Removal of sediment trap and culvert in Cabin Creek
6. Construction of new structures in Issaquah and Cabin Creeks
7. Re-establishment of streamflow and intake operations
8. Trail construction, site restoration and re-vegetation

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9. Long-term monitoring and maintenance

The primary in-channel construction work includes demolition and removal of an existing dam and associated structures, regrading of the streambed, and construction of new water intake, boulder weir, and large wood and boulder habitat structures in Issaquah Creek. A section of buried pipeline will be installed to connect the new water intake structure with the existing weir box controls the flow of water to the hatchery. In Cabin Creek, the existing culvert on Cabin Creek will be replaced with a bottomless arch culvert. The existing sediment trap located just upstream of the culvert will be removed. Instream habitat will be improved in the approximately 450 linear-feet of stream extending up to and through the existing sediment trap by the installation of 26 step-pool structures. The lower 100 feet of Cabin Creek will be rerouted so that it enters Issaquah Creek approximately 35 feet upstream from its present location.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. Approximately 18,000 cubic yards along 630 feet of stream bed will be excavated to regrade the bed to a 2% gradient. Approximately one-third of this excavated material will be used as fill to realign the channel immediately upstream of the dam. A rock mattress of approximately 6,700 cubic yards of rock will be laid over the graded surface after the dam is removed. This fill will come from off-site. Approximately 1.7 cubic yards of crushed surfacing base coarse will be placed in a 46 sf area of Wetland A as part of the proposed permanent access road.
- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities, if known.

All in-channel work in Issaquah and Cabin creeks will be conducted "in the dry." Flow in both streams will be temporarily diverted from their respective channels and around the construction work area while construction is underway. Temporary dams will be used to divert water from upstream areas. Any water that seeps into the work area downstream of the dams will be treated by an active treatment system using Department of Ecology-approved stormwater treatment technology. Water returned to Issaquah Creek will meet State Water Quality Standards (i.e., less than 5 NTU). Natural flow will be restored to the channel after

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construction is completed.

The State of Washington holds a water right that allows the removal of up to 36 cfs of instantaneous flow from Issaquah Creek. The current rate of withdrawal is approximately 11.5 cfs and will not change due to this project.

- 5) Does the proposal lie within a 100-year flood plain? If so, note location on the site plan. The project is within the 100 year floodplain of Issaquah Creek and Cabin Creek. See Figure 2 for the location on the Site Plan. No increases in 100-year flood elevations will result from the project.
  - 6) Does the proposal involve any discharges of waste materials to the surface waters? If so, describe the type of waste and anticipated volume of discharge. No waste material will be discharged to surface waters as a result of the proposed project.
- b. Ground
- 1) Will ground water be withdrawn, or will water be discharged to ground water: Give general description, purpose, and approximate quantities, if known. The proposed project will not result in the withdrawal of ground water or the discharge of water to ground water. Temporary dewatering for construction will occur, however, if high groundwater is encountered.
  - 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: domestic sewage, industrial, containing the following chemicals; agricultural, etc.). Describe the systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. No discharges of waste material into the ground will occur.
- c. Water Runoff (including storm water):
- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. Surface runoff into Cabin and Issaquah Creeks may occur during the construction period if a large quantity of rain falls over a short period of time. However, since large storm events are unlikely during the May 15 – September 15 work window, minimal overland runoff is expected. A Temporary Erosion and Sediment Control (TESC) plan,



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shown in the attached design drawings, will be implemented during construction. The plan describes several construction BMPs (e.g., silt fences, stormwater collection and treatment, etc.) that will be employed to minimize the amount of surface water that flows from disturbed areas directly into the streams.

- 2) Could waste materials enter ground or surface waters? If so, generally describe. A Stormwater Pollution Prevention Plan (part of the TESC Plan) will be prepared to describe pollution prevention measures to be implemented during construction. It is highly unlikely that waste materials will enter surface waters during construction. There is a small chance that materials associated with the operation and maintenance of vehicles and machinery, including fuel products and lubricants, would be spilled; however, the amount of material spilled, should a spill occur, will be small, and measures will be in place to clean up the waste and prevent it from entering surface or ground waters. Other waste materials generated by the proposed action, such as pulverized concrete that results from the demolition of the existing dam, will be collected and hauled offsite for disposal or re-use. All stockpiled material will be subject to TESC requirements for collection and treatment of construction runoff. Therefore, there is very little chance that waste will enter ground or surface waters at the site.
- 3) Proposed measures to reduce or control surface, ground, and runoff water impacts, if any.

In addition to the measures described above, the following steps will be taken to prevent and minimize waste-related impacts from the proposed action:

1. Instream work will occur during the WDFW-approved May 15-September 15 work window, thereby reducing the potential for adversely affecting resident salmonids in Issaquah and Cabin creeks.
2. Streamflows will be diverted around the sections of both streams in which construction is to occur; any water that seeps into the dewatered sections will be collected and treated to State Water Quality Standards.
3. Standard construction BMPs will be implemented and followed.
4. Erosion control material will be placed over bank excavation immediately after construction; and
5. Streambanks will be replanted with native plant material following construction.

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**4. Plants**

- a. Check types of vegetation found on the site:
- deciduous tree: alder, maple, aspen, other
  - evergreen tree: fir, cedar, pine, other
  - shrubs
  - grass
  - pasture
  - crop or grain
  - wet soil plants: cattail, buttercup, bullrush, skunk cabbage
  - water plants: water lily, eelgrass, milfoil
  - other - some invasive plants, including Himalayan blackberry and Japanese knotweed.
- b. What kind and amount of vegetation will be removed or altered? Small quantities of native and non-native vegetation will be removed during the construction of temporary and permanent access roads, the laying of new water pipe, and the construction of boulder weirs and a new water intake structure. Although the orientation and overall dimensions of the Issaquah Creek channel will not change, plans call for realigning (straightening) the channel immediately upstream of the dam by building out the eroded left bank and excavating the existing right bank bar deposit. Vegetation on the right bank will therefore be affected.

A small amount of vegetation will be removed or altered along Cabin Creek as a result of construction, primarily in the vicinity of the culvert, sediment trap, and mouth of the stream.

Invasive species such as Japanese knotweed will be removed from the project site before construction to ensure that they are not inadvertently propagated during construction. Following construction, disturbed areas along both streams will be planted with native vegetation, as called for in the planting plan. The types and growth of existing vegetation in these areas will change over time as the new vegetation becomes established.

- c. List threatened or endangered species known to be on or near the site. No listed threatened or endangered plant species are known to be on or near the site.



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- d. Proposed measures to preserve or enhance wildlife, if any. The project is specifically designed to benefit migratory species of salmonids in Issaquah Creek. It will result in the replacement of the existing dam, which currently blocks the upstream movements of fish, with a series of rock weirs and a new water intake structure. Following completion of the project, fish will be able to pass unimpeded in both directions. Adult salmon will be able to access over 10 miles of high-quality spawning habitat upstream of the dam.

**6. Energy and Natural Resources**

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. The water diverted from Issaquah Creek will flow via gravity from the weir box to the hatchery through an existing 24-inch diameter pipe, and will not require energy for its conveyance. A small amount of electricity will be required to periodically run a compressor to charge the air burst screen cleaning system in the water intake structure. The completed project will have no other energy needs.
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. The project would not affect the potential use of solar energy by adjacent properties.
- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any. None.

**7. Environmental Health**

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.  
None.

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- 1) Describe special emergency services that might be required.  
The proposed project will not require special emergency services.
  
- 2) Proposed measures to reduce or control environmental health hazards, if any.  
None.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?  
None.
  
- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.  
Low levels of noise will result from the operation of construction machinery between 7 AM and 6 PM on weekdays
  
- 3) Proposed measures to reduce or control noise impacts, if any.  
Construction activity involving noise generating equipment will be limited to 7 AM - 6 PM on weekdays, as allowed by the City.

**8. Land and Shoreline Use**

- a. What is the current use of the site and adjacent properties?  
The site includes Issaquah Creek, Cabin Creek, and adjoining undeveloped land. A 75-year-old concrete dam on the site diverts a portion of the flow (approximately 11.5 cfs) to the Issaquah Salmon Hatchery downstream. The Washington State Department of Fish and Wildlife owns the dam and a short section of Issaquah Creek beneath it. The City and private parties own the remaining land at the site. Uses of these properties include open space (City land), and

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commercial and residential developments, including single family homes, Wildwood Apartments, Our Savior Lutheran Church, and Issaquah Nursing and Rehabilitation Center. The project will not affect these latter uses.

The only current use of project site is Issaquah Dam and the associated access road, sewer line, and water line that parallels the left bank of Issaquah Creek.

- b. Has the site been used for agriculture? If so, describe.  
The site has not been used for agriculture.
  
- c. Describe any structures on the site.  
Issaquah Dam and the associated access road, sewer line, weir box, outfall, and water line have been described above.
  
- d. Will any structures be demolished? If so, what?  
The existing intake dam and associated structures will be demolished and removed.
  
- e. What is the current zoning classification of the site?  
The project site is zoned Multifamily-Medium, Multifamily-High, Single Family Suburban, and Single Family Small Lot by the City of Issaquah.
  
- f. What is the current comprehensive plan designation of the site?  
The site is designated Community Facilities, Low Density Residential, and Multifamily Residential.
  
- g. If applicable, what is the current shoreline master program designation of the site?  
The project site is designated Conservancy Riparian, Urban Low Density Development, Urban Residential, and Urban Riparian according to the City of Issaquah Shoreline Master Program.

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- h. Has any part of the site been classified as an “environmentally sensitive” area? If so, specify.  
The proposed project will occur in Issaquah Creek and Cabin Creek, both classified as “environmentally sensitive” areas.
  
- i. Approximately how many people would the completed project displace?  
None.
  
- j. Proposed measures to avoid or reduce displacement impacts, if any.  
None.
  
- k. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.  
The project will not alter existing land use at the site. The project is consistent with the designations for Community Facilities and Conservancy and Urban Riparian, and will not impact the area’s compatibility for single and multifamily residential use.

**9. Housing**

- a. Approximately how many units would be provided, if any?  
Indicate whether high, middle, or low-income housing.  
None.
  
- b. Approximately how many units, if any, would be eliminated?  
Indicate whether high, middle, or low-income housing.  
None.
  
- c. Proposed measures to reduce or control housing impacts, if any.  
None.

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**10. Aesthetics**

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? With the exception of the control building, all project structures will be constructed at or below ground level. The prefabricated control building will be a small enclosure on the left bank that will contain dam operation sensors and equipment; the building will be less than 8 feet tall.
- b. What views in the immediate vicinity would be altered or obstructed?  
None.
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any.  
None.

**11. Light and Glare**

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?  
None
- b. Could light or glare from the finished project be a safety hazard or interfere with views?  
None.
- c. What existing off-site sources of light or glare may affect your proposal?  
None.



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- d. Proposed measures to reduce or control light and glare impacts, if any.  
None

**12. Recreation**

- a. What designated and informal recreational opportunities are in the immediate vicinity?  
Passive recreation use of Issaquah Creek and Cabin Creek, including viewing salmon migration and spawning in Issaquah Creek from an adjacent public trail and the City-owned Ingi Johnson Park.
- b. Would the proposed project displace any existing recreational uses? If so, describe.  
The proposed project will not displace any existing recreational uses of Issaquah or Cabin Creek.
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any.  
An existing public trail that passes through the project site will be retained and upgraded to current standards. A new trail will be constructed to access the stream from the east (Front Street), within the City-owned Ingi Johnson Park. The proposed project will also increase opportunities for passive recreation in the Issaquah Creek basin. Improving fish passage and restoring habitat in Issaquah Creek will increase the abundance of salmon populations in the stream, resulting in more opportunities to view salmon. Animals that feed on salmon carcasses, eggs, and juveniles can also be expected to increase in abundance, and therefore would be more visible to the public.

**13. Historic and Cultural Preservation**

- a. Are there any places or objects listed on, or proposed for, national, state or local preservation registers known to be on or next to the site? If so, generally describe. The Issaquah Creek Diversion Dam and the former Issaquah and Superior Coal Company Railroad Grade are both eligible for listing in the National Register of Historic Places within the project site. Both structures are described below.
- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site. Issaquah Dam was constructed in 1937-1940 to supply water downstream through a long pipe to the Issaquah Salmon Hatchery. It will be demolished and

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replaced as part of the project undertaking.

The Issaquah and the Superior Coal Company Railroad Grade was constructed circa 1910. The section of grade that will be impacted by the project was previously altered during construction of the original diversion dam. A water supply pipe was placed within the grade, and an access road to the dam was constructed on top of the grade.

- c. Proposed measures to reduce or control impacts, if any. The project will cause adverse impacts to Issaquah Dam (i.e., its destruction). No mitigation is planned other than the restoration actions described previously.

The Superior Coal Company Railroad Grade, as it currently exists, will be impacted by the project. A Memorandum of Agreement (MOA) has been implemented for this project by the U.S. Corps of Engineers and the Washington State Department of Archaeology and Historic preservation, in consultation with the Washington Department of Fish and Wildlife, the City of Issaquah, and the Muckleshoot Indian Tribe. The MOA stipulated measures to be carried out to reduce or control impacts to the Superior Coal Company Railroad Grade.

**14. Transportation**

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any. N/A
  
- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop? N/A
  
- c. How many parking spaces would the completed project have? How many would the project eliminate? N/A

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- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private). N/A
  
- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. N/A
  
- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur. N/A
  
- g. Proposed measures to reduce or control transportation impacts, if any. N/A

**15. Public Services**

- a. Would the project result in an increased need for public services (e.g.: fire protection, police protection, health care, schools, other)? If so, generally describe. No.
  
- b. Proposed measure to reduce or control direct impacts on public services, if any. None.

**16. Utilities**

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

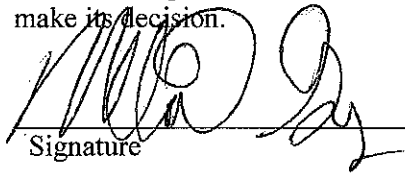
**Evaluation  
For City Use Only**

**B. ENVIRONMENTAL ELEMENTS**

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. None.

**SIGNATURE**

I certify under penalty of perjury under the laws of the State of Washington that the above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

  
Signature

2/28/2012  
Date Submitted

ESA Listed Salmonids Checklist

TO BE COMPLETED BY APPLICANT

Applicant Information

Name: Kerry Ritland, P.E.
City of Issaquah Public Works
Engineering Department
Phone: (425) 837-3410

Project Information

Name: Issaquah Creek Integrated Fish Passage Project
Location: Issaquah Creek in City of Issaquah; S33SE T24N R06E; longitude 47.52187 and latitude -122.03697
Description: Fish passage and habitat restoration project involving the removal of Issaquah Dam.

This worksheet was designed to help project proponents and government agencies identify if project needs further analysis regarding adverse effects on ESA (Endangered Species Act) listed salmonids. Salmonids are salmon trout and chars, e.g. bull trout. For our purposes, "ESA listed salmonids" is defined as fish species listed as endangered, threatened or being considered for listing.

If ESA listed species are present or ever were present in the watershed where your project will be located, your project has the potential for affecting them, and you need to comply with the ESA. The questions in this section will help determine if the ESA listings will impact your project. The Fish Program Manager at the appropriate Department of Fish and Wildlife (DFW regional office can provide information for the following two questions. See attached list of Department of Fish and Wildlife regional offices.

- 1. Are the ESA listed salmonids currently present in the watershed in which your project will be? [X] Yes [ ] No Please describe. Puget Sound Chinook Salmon ESU
2. Has there ever been an ESA listed salmonid stock present in this watershed? [X] Yes [ ] No [ ] Uncertain Please describe. Puget Sound Steelhead DPS no longer extant in Issaquah Creek

If you answered "yes" to either of the above questions, you should complete the remainder of this checklist.

PROJECT SPECIFIC: The questions in this section are specific to the project and vicinity.

- 1. Name of watershed Issaquah Creek
2. Name of nearest water body Lake Sammamish
3. What is the distance from this project to the nearest body of water? 0 ft (work in channel) Often a buffer between the project and a stream can reduce the chance of a negative impact to fish.
4. What is the current land use between the project and the potentially affected waterbody (parking lots, farmland, etc)? Open space
5. Is the project above a:
• Natural permanent barrier (waterfall) [ ] Yes [X] No

- Natural temporary barrier (beaver pond)     Yes     No
- Man-made barrier (culvert, dam)             Yes     No
- Other (explain)

6. If yes, are there any resident salmonid populations above the blockage?  
 Yes     No     Don't Know

7. What percentage of the project will be impervious surface (including pavement and roof area)?  
 < 5%. The project will result in an additional 180 square feet of semi-impervious (gravel) surface in the project area.

**Fish Migration: The following questions will help determine if this project could interfere with migration of adult and juvenile fish. Both increases and decreases in water flows can affect fish migration.**

1. Does the project require the withdrawal of  
 i. Surface water?             Yes     No  
     Amount No change proposed from current operations  
     Name of surface water body Issaquah Creek

ii. Ground water?             Yes     No  
     Amount  
     From where  
     Depth of well

2. Will any water be rerouted?             Yes     No  
 If yes, will this require a channel change? Yes, lower Cabin Creek

3. Will there be retention ponds?         Yes     No  
 If yes, will this be an infiltration pond or a surface discharge to either a municipal storm water system or a surface water body?

If to a surface water discharge, please give name of waterbody.

4. Will this project require the building of new roads? *Increased road mileage may affect the timing of water reaching a stream and may, thus, impact fish habitat.*  
 Yes     No

5. Are culverts proposed as part of this project?  
 Yes     No

6. Will topography changes affect the duration/direction of runoff flows?  
 Yes     No

If yes, describe the changes.

7. Will the project involve any reduction of the floodway or floodplain by filling or other partial blockage of flows?

Yes  No

If yes, how will the loss of flood storage be mitigated by your project?

**Water Quality: The following questions will help determine if this project could adversely impact water quality. Such impacts can cause problems for listed species. Water quality can be made worse by runoff from impervious surfaces, altering water temperature, discharging contaminants, etc.**

1. Do you know of any problems with water quality in any of the streams within this watershed?

Yes  No

If yes, please describe. Fecal coliform, water temperature

2. Will your project either reduce or increase shade along or over a waterbody?

Yes  No

*Removal of shading vegetation or the building of structures such as docks or floats often result in a change in shade.*

3. Will the project increase nutrient loading or have the potential to increase nutrient loading or contaminants (fertilizers, other waste discharges, or runoff) to the waterbody?

Yes  No

4. Will turbidity be increased because of construction of the project or during operation of the project?

*In-water or near water work will often increase turbidity.*

No

5. Will your project require long term maintenance, i.e. bridge cleaning, highway salting, chemical sprays for vegetation management, clearing of parking lots? Yes \_\_\_ No \_\_\_

Yes  No

If yes, please describe. Routine maintenance of fish passage and water intake structures; vegetation monitoring and management.

**Vegetation: The following questions are designed to determine if the project will affect riparian vegetation, thereby, adversely impacting salmon.**

1. Will the project involve the removal of any vegetation from the stream banks?

Yes  No

If yes, please describe the existing conditions, and the amount and the type of vegetation to be removed. **Native and non-native vegetation currently grows along the banks of Issaquah and Cabin Creeks. A small amount of both types of vegetation, mainly shrubs and grasses, will be removed to facilitate construction of temporary and permanent access roads, the laying of new water pipe, and the construction of boulder weirs and a new water intake structure.**

2. If any vegetation is removed, do you plan to re-plant?

Yes       No

If yes, what types of plants will you use? **Species to be planted include willows, Douglas-fir, western hemlock, western red cedar, oregon ash, red osier dogwood, beaked hazelnut, vine maple, oceanspray, Indian plum, bald-hip rose, Nootka rose, and snowberry.**

## RESOURCES

**Washington Department of Fish and Wildlife Website:** [www.wa.gov.wdfw/](http://www.wa.gov.wdfw/)

This site has much useful information on fish habitat. Attached is a copy of the Fish Passage Technical Assistance page from WDFW's site.

**Washington Department of Ecology Website:** [www.wa.gov/ecology/](http://www.wa.gov/ecology/)

Click on the Water Quality button on the left side of this page. To give you an idea of the types of information available, copies of the TMDL and the Water Quality Standards and Monitoring pages are attached.

**National Marine Fisheries Services Website:**

Evolutionarily Significant Unit (ESU) maps can be found at [www.nwr.noaa.gov](http://www.nwr.noaa.gov). Go to this site and then click on the ESA Salmon button.

**Note: Most applicants should have the information necessary to answer most of the questions in this checklist. Additional information will need to be obtained by local and state agencies if it appears that the project is likely to affect ESA listed species.**