



King County

Water and Land Resources Division

Department of Natural Resources and Parks

King Street Center

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ENVIRONMENTAL CHECKLIST

Purpose of 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.

Instructions for applicants:

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.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

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.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

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For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of the proposal, if applicable:

King County Flood Hazard Management Plan
June 2013

2. Name of proposer:

King County Department of Natural Resources and Parks (DNRP)

3. Address and phone number of proposer and contact person:

River and Floodplain Management Section
Water and Land Resources Division
Department of Natural Resources and Parks
201 S. Jackson St., Suite #600
Seattle, WA 98104
(206) 296-8001

Contact Person:

Katy Vanderpool, Project Manager
(206) 296-8362
WLR-rivers@kingcounty.gov

4. Date checklist prepared:

June 10, 2013

5. Agency requesting checklist:

King County Department of Natural Resources and Parks
Water and Land Resources Division

6. Proposed timing or schedule (including phasing, if applicable):

The King County Flood Hazard Management Plan will be transmitted to the King County Council and the King County Flood Control District Board of Supervisors for consideration and adoption in the third quarter of 2013.

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

The King County Flood Hazard Management Plan is the second update to the King County Flood Hazard Reduction Plan, which was adopted by the King County Council in 1993, and initially updated in 2006. This Plan will likely be updated again in approximately five years. The Plan

outlines a countywide strategy for reducing risks associated with riverine flooding and channel migration along King County's six major river systems, which are the South Fork Skykomish, Snoqualmie, Sammamish, Cedar, Green and White Rivers, and their significant tributaries, the Tolt, Raging, Miller and Greenwater Rivers. The Plan also recognizes that regionally significant flood hazards may exist on smaller streams including but not limited to streams with existing flood protection infrastructure such as Tokul Creek, Kimball Creek, Coal Creek (Snoqualmie), Issaquah Creek, Fifteen Mile Creek, and Holder Creek. The Plan provides an overview of historic flood and channel migration conditions and flood risk reduction practices in King County, identifies existing floodplain management policies and programs, recommends programmatic improvements and site-specific projects to further reduce the impact of flooding and channel migration on County property owners and residents, and describes existing and potential future funding mechanisms for recommendations contained in the Plan.

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

King County Surface Water Management Division. November, 1993. King County Flood Hazard Reduction Plan (including Appendix B). Seattle, WA 463 pages.

King County Surface Water Management Division. 1993. Guidelines for Bank Stabilization Projects in the Riverine Environments of King County Washington. Seattle, WA. 199 pages.

King County Water and Land Resources Division. October 1993. Programmatic Biological Effects Analysis: King County River Management Program. Seattle, WA. 93 pages.

King County Water and Land Resources Division. February 2004. Best Available Science: King County Executive Report for Critical Areas, Stormwater, and Clearing and Grading Proposed Ordinances, Volume I and Volume II. Seattle, WA.

King County. 2006. Flood Hazard Management Plan: King County, Washington. King County Department of Natural Resources and Parks, Water and Land Resources Division, Seattle, Washington.

King County. 2012. King County Programmatic Habitat Assessment for Compliance with the National Flood Insurance Program in the Puget Sound Region. King County Department of Natural Resources and Parks, Water and Land Resources Division, Seattle, Washington.

7. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

There may be other proposals requiring government approvals along the major rivers in King County. But these are not directly related to this non-project action.

8. List any government approvals or permits that will be needed for your proposal, if known.

The King County Council's re-adoption of the 2006 King County Flood Hazard Management Plan with 2013 Flood Plan Update. The King County Flood Control District's adoption of the King County Flood Hazard Management Plan as the District's comprehensive plan The Washington State Department of Ecology's approval of the adopted King County Flood Hazard Management Plan.

Insurance Services Office review under the National Flood Insurance Program, Community Rating System.

- 9. Give brief, complete description of your proposal, including the proposed uses and the size of the affected geographic area. 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.**

The proposed action is an update to the King County Flood Hazard Management Plan adopted in January 2007 to address flooding on the six major river systems in King County: the South Fork Skykomish, Snoqualmie, Sammamish, Cedar, Green and White, and their significant tributaries, as well as smaller streams that have 100-year floodplains. The King County Flood Hazard Management Plan provides an overview of historic flood and channel migration conditions, provides flood risk reduction strategies for the major rivers and tributaries, establishes floodplain management policies, identifies flood hazard management programs, and recommends site-specific projects to further reduce the risk of flooding and channel migration on County property owners and residents. The Plan also describes existing and potential future funding mechanisms to implement the recommendations in the Plan. The King County Flood Hazard Management Plan is a countywide plan and serves as the comprehensive plan for the King County Flood Control District. A Plan Update is required every 5 years.

The Goals, Objectives and Guiding Principles of the Plan remain identical to those adopted in 2007. The 2013 Plan Update provides a progress report to the 2006 flood plan, and updates technical information that has emerged since 2006, including updated hazard and risk assessments. This Plan Update does not include any new policies.

- 10. 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 affected geographic area. Provide a map of the affected geographic area, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.**

The geographic scope of the King County Flood Hazard Management Plan includes all unincorporated and incorporated areas of King County where flooding may occur. Specifically, the Plan addresses riverine flood hazards associated with King County's six major river systems, which are the South Fork Skykomish, Snoqualmie, Sammamish, Cedar, Green and White Rivers, and their significant tributaries, the Tolt, Raging, Miller and Greenwater Rivers. The Plan also acknowledges that regionally significant flood hazards may exist on smaller streams including but not limited to streams with existing flood protection infrastructure such as Tokul Creek, Kimball Creek, Coal Creek (Snoqualmie), Issaquah Creek, Fifteen Mile Creek, and Holder Creek. The Plan recognizes that regional technical support and project funding may be warranted when flood risks are multi-jurisdictional and extend beyond the influence of the local government responsible for surface water management in the affected area.

B. ENVIRONMENTAL ELEMENTS

- 1. Earth**

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- a. General description of sites within the affected geographic area (circle one): Flat, rolling, hilly, steep slopes, mountainous, other.

NA; non-project action. The river corridors are varied and include the relatively flat valley floor areas adjacent to rivers and large streams, stretches of rivers and large streams where steep slopes are present, and shoreline areas adjacent to Puget Sound.

- b. What is the steepest slope at sites within the affected geographic area (approximate percent slope)?

NA; non-project action. The steepest slopes tend to be on the river and stream banks themselves, especially at locations with existing levees and revetments; the slopes can be as steep as 1.5V:1H and structurally unstable. Channel migration can also result in undermining river shorelines resulting in erosion, slumping and failure. In addition, hillsides and ravines draining into major rivers and coastal shorelines can be steep and subject to erosion, slumping and failure, especially during the wet season of the year.

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

NA; non-project action. In general, however, the soils within floodplains and that compose river and stream banks and coastal beaches are quite diverse, and include urban and agricultural soils; fine-grained natural alluvial soils; inclusions of peat, muck and clay; and coarse to fine-grained riverine derived gravels, sand and silt.

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

NA; non-project action. In general, however, the soils within oversteepened levees and revetments can be unstable and prone to several modes of slope failure including toe and face erosion, and saturation slumping.

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

NA; non-project action. Some fill might be used when constructing projects identified in this Plan, but environmental review will be conducted to address project-specific impacts.

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

NA; non-project action. The proposal recommends use of best management practices to minimize erosion due to alterations that include grading, clearing and construction activities during flood risk reduction infrastructure repair projects, and revegetation of riparian and floodplain areas, where possible, for example as the result of levee and revetment setback projects, and buyout and removal of repeatedly flood-damaged buildings. The impacts of this work would be evaluated at the time of site-specific project proposal.

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

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NA; non-project action. The impervious surface areas would be determined at the time of site-specific project proposal, but in general, very little new impervious surfaces are created through flood risk reduction actions.

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

NA; non-project action. The movement of water and sediment creates dynamic channel conditions that may lead to localized impacts on flooding and erosion, but this natural geomorphic process also creates diverse instream habitat conditions that are beneficial for a wide range of fish and wildlife. This proposal includes a program to monitor and management erosion and deposition of sediment in river channels, and provides the policy and programmatic basis for limited sediment removal, if specific conditions are met. Erosion control measure would be required at the time of a site-specific project proposal.

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.

NA; non-project action. Some exhaust from machinery used during construction can be expected, but any impacts from emissions to the air will be evaluated during a project-specific proposal.

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

NA; non-project action. Any sources of off-site emissions will be evaluated during a project-specific proposal.

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

NA; non-project action. Proposed measures to reduce or control emission to air will be established during a project-specific proposal.

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.

NA; non-project action. However, the proposal focuses on large rivers, their major tributaries and other large streams in unincorporated King County, and Puget Sound shorelines in King County and cities in which these waterbodies and their floodplains are located. The specific water bodies included in the King County Flood Hazard Management Plan are the South Fork Skykomish, Snoqualmie, Sammamish, Cedar, Green and White Rivers, and their significant tributaries, the Tolt, Raging, Miller and Greenwater Rivers. The Plan also addresses flooding on smaller streams including but not limited to streams with existing flood protection infrastructure such as Tokul Creek, Kimball Creek, Coal Creek (Snoqualmie), Issaquah Creek, Fifteen Mile Creek, and

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Holder Creek.

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

NA; non-project action. However, the proposal recommends projects that may occur in and near rivers, large streams, the shorelines of Puget Sound and the floodplains of these waterbodies.

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.

NA; non-project action. The proposal recommends projects that may result in the removal of fill from the banks of large rivers and streams, and adjacent floodplain areas in order to decrease flood hazards. The proposal also establishes policies for the requirement to evaluate the impacts of fill placed in floodplains through any development proposal. In addition, the proposal establishes a sediment management program that outlines the process and develops the policy direction for sediment management, including gravel removal projects within rivers and streams.

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

NA; non-project action. The proposal does not affect water withdrawals or diversions.

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

NA; non-project action. The proposal recommends projects that will primarily be located within or otherwise affect 100-year floodplains.

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

NA; non-project action. The proposal will not generate any discharges of waste materials to surface waters.

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.

NA; non-project action. The proposal will not result in any type of groundwater withdrawals or discharges to groundwater.

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

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NA; non-project action. The proposal will not result in any discharges from septic tanks or other waste material systems.

c. Water runoff (including stormwater):

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

NA; non-project action. The proposal will not generate stormwater runoff.

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

NA; non-project action. The proposal will not cause waste materials to enter ground or surface waters.

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

NA; non-project action. The proposal will not cause waste materials to enter ground or surface waters.

4. **Plants**

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

deciduous tree: alder, maple, aspen, other

evergreen tree: fir, cedar, pine, other

shrubs

grass

pasture

crop or grain

wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

water plants: water lily, eelgrass, milfoil, other

other types of vegetation may also be present along rivers and streams

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

NA; non-project action. Almost all of these vegetation types could be near the banks of rivers, large streams, the shorelines of Puget Sound and within the floodplains of waterbodies that may be affected by recommendations contained in this proposal. The proposal recommends actions to limit vegetation removal and restore riparian and floodplain plantings. There will likely be a net increase in riparian vegetation over time due to projects recommended in this proposal that will be required to vegetate levee and revetment setbacks projects and open space created through buyouts of repeatedly flood-damaged properties.

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

NA; non-project action. There are no know threatened or endangered plant species that might be

impacted by projects implemented through this plan. If any threatened or endangered plant species are identified through implementation of a project, appropriate measures will be taken to reduce or eliminate the impact.

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

NA; non-project action. The proposal recommends the preservation or revegetation of river and stream banks, and floodplain areas with native riparian species, where possible.

5. Animals

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

birds: hawk, heron, eagle, songbirds, other:

mammals: deer, bear, elk, beaver, rodents, coyotes, other:

fish: bass, salmon, trout, herring, shellfish (freshwater mussels), other:

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

NA; non-project action. However, the proposal pertains primarily to aquatic, riparian and floodplain habitats that are actually or potentially inhabited by the following federal Endangered Species Act and Magnuson-Stevens Act-listed species: Evolutionarily Significant Unit of Chinook salmon (*Oncorhynchus tshawytscha*); the Puget Sound steelhead trout (*Oncorhynchus mykiss*); the West Coast/Puget Sound Distinct Population Unit of bull trout (*Salvelinus confluentus*), and the Southern Resident population of killer whales (*Orcinus orca*).

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

NA; non-project action. However, many of the riverine floodplain habitats that could be affected by this proposal are migration routes for salmonids. Some of the riparian and floodplains areas that may be affected by this proposal are within the Pacific Flyway used by waterfowl and other migratory bird species.

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

NA; non-project action. The proposal includes project recommendations that will improve habitat through project-specific implementation for all fish and wildlife species that inhabit rivers, large streams, marine shorelines, riparian areas and floodplains.

6. Energy and natural resources

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

NA; non-project action. The proposal will not have any energy needs.

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

NA; non-project action. The proposal will not affect the potential use of solar energy.

- 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:

NA; non-project action. The proposal does not require energy conservation features.

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.

1. Describe special emergency services that might be required.

NA; non-project action. There is the potential for hazardous waste impacts from equipment used during construction to repair or maintain flood risk reduction infrastructure. Emergency services that could be required might be hazardous waste management teams in case there is a spill from gasoline or other fuels used in the equipment.

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

NA; non-project action. All construction work will be required to have emergency response measures in place as a requirement of project implementation and permit issuance.

- b. Noise

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

NA; non-project action. It is not known at this time what kind of existing noise might exist on sites where projects identified in the plan might be implemented.

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.

NA; non-project action. Some equipment noise will be generated during construction of projects identified in this plan, but the noise would be short-term. There will be occasional noise created during mowing of project sites, but there will be no long-term noise created by this proposal.

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

NA; non-project action. During project implementation, construction equipment will contain appropriate noise reduction systems and will be limited, by law, to construction times and noise levels that must be met.

8. Land and shoreline use

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

NA; non-project action. However, land uses in the areas affected by this proposal are extremely diverse, ranging from undeveloped, forested land to densely developed urban land uses.

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

NA; non-project action. Agricultural Production Districts have been established under the King County Comprehensive Plan for compliance with the Washington State Growth Management Act. The Agricultural Production Districts are found at certain locations along some of the rivers and large streams and in floodplains affected by this proposal. In addition, some of these floodplain lands are enrolled in the Farmland Preservation Program, where King County has made a public investment by purchasing development rights to preserve agricultural soils. Approximately 52% of King County’s floodplains are located on agricultural lands.

c. Describe any structures on the site.

NA; non-project action. A diverse array of structures, ranging from residences, farm buildings to offices and major shopping malls are present in the areas affected by this proposal.

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

NA; non-project action. However, the proposal recommends the acquisition of repeatedly-flood damaged properties from willing sellers, and the relocation or demolition of structures on these properties with the site preserved as permanent open space.

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

NA; non-project action. King County’s floodplains contain the following zoning designations:

Zoning Designations	Density Allowed	Acres in Floodplain	% of total King County Floodplain
A-10 or A-35 - Agricultural	10 acres per lot or 35 acres per lot	17,323.84	51.41%
F - Forest	80 acres per lot	2,120.53	6.29%
M - Mining	residential not allowed	21.15	0.06%
RA-2.5 - Rural Area	5 acres per lot (NOT 2.5)	1,189.94	3.53%
RA-5 - Rural Area	5 acres per lot	4,039.86	11.99%
RA-10 - Rural Area	10 acres per lot	4,815.76	14.29%
RA-20 - Rural Area	20 acres per lot	0.00	0.00%
UR - Urban Reserve	5 acres per lot	915.09	2.72%
R-1 Residential	1 acre per dwelling unit	482.63	1.43%
R-4 Residential	4 dwelling unit per acre	368.94	1.09%

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R-6 Residential	6 dwelling units per acre	68.35	0.20%
R-8 Residential	8 dwelling units per acre	1.16	0.00%
R-12 Residential	12 dwelling units per acre	0.21	0.00%
R-18 Residential	18 dwelling units per acre	0.00	0.00%
R-24 Residential	24 dwelling units per acre	0.00	0.00%
R-48 Residential	48 dwelling units per acre	0.00	0.00%
NB - Neighborhood Business	8 dwelling units per acre (only through incentives or targeted drainage review (TDR))	4.48	0.01%
CB - Community Business	18 dwelling units per acre (only through incentives or TDR)	6.52	0.02%
RB - Regional Business	36 dwelling units per acre (only through incentives or TDR)	0.01	0.00%
O - Office	36 dwelling units per acre (only through incentives or TDR)	0.34	0.00%
I - Industrial	residential not allowed	288.84	0.86%
No designation	generally non-buildable	2,048.24	6.08%
Total		33,695.89	100.00%

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

NA; non-project action. King County floodplains contain the following comprehensive plan designations:

Comprehensive Plan Land Uses	Zoning
Unincorporated Activity Center : White Center	R-12, R-18, R-24, R-48, NB, CB, O, I
Community Business Center	NB, CB, O
Neighborhood Business Center	NB, O
Commercial Outside of Centers	NB, CB, RB, O, I - this is the range of existing zoning in place when the comprehensive plan was adopted
Urban Planned Development	R-1, R-4, R-6, R-8, R-12, R-18, R-24, R-48, NB, CB, RB, O, I
Urban Residential, High	R-18, R-24, R-48
Urban Residential, Medium	R-4, R-6, R-8, R-12
Urban Residential, Low	R-1
Rural City Urban Growth Area	UR The following two zones were in place in the North Bend UGA when the comprehensive plan was adopted in 1994: I, RB
Rural Town	R-1, R-4, R-6, R-8, R-12, R-18, R-24, R-48, NB, CB, RB, O, I

Rural Neighborhood Commercial Center	NB, RA-5
Rural Area	RA-2.5, RA-5, RA-10, RA-20
Industrial	I
Forestry	F, M
Agriculture	A
Mining	M
Greenbelt/Urban Separator	R-1
King County Open Space System	All zones
Other Parks/Wilderness	All zones

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

NA; non-project action. The following shoreline environments may be established along rivers and large streams within the geographic scope of this Plan:

High Intensity Shoreline Environment: Applied to areas that provide high-intensity water-oriented commercial, transportation, and industrial uses.

Residential Shoreline Environment: Applied to accommodate residential uses at urban densities, while allowing for non-residential uses that are consistent with the protection of the shoreline jurisdiction.

Rural Shoreline Environment: Applied to accommodate rural residential shoreline development, while allowing for rural non-residential uses that are consistent with the protection of the shoreline.

Conservancy Shoreline Environment: Applied to protect and conserve the shoreline for ecological, public safety, and recreation, purposes. Includes areas with important shoreline ecological processes and functions, valuable historic and cultural features, flood and geological hazards and recreational opportunities. Residential areas can also be designated as conservancy shorelines.

Resource Shoreline Environment: Applied to allow for mining and agriculture land uses, except for shorelines that are relatively intact or that have minimally degraded shoreline processes and functions.

Forestry Shoreline Environment: Applied in areas to allow for forest production and protect municipal water supplies.

Natural Shoreline Environment: Applied to shorelines that are relatively intact or have minimally degraded shoreline processes and functions that are intolerant of human use.

Aquatic Shoreline Environment: Applied to the areas waterward of the ordinary high water mark.

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

NA; non-project action. However, the proposal applies to aquatic areas (mostly rivers and large streams), their buffers, and floodplain areas in unincorporated King County and cities in which these waterbodies are located. Wetlands are also often associated with floodplains. All of these areas would be classified as “environmentally sensitive” under King County’s critical areas regulations.

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

NA; non-project action. No one would reside or work along the flood protection infrastructure, such as levees and revetments that would be repaired and maintained under this plan.

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

NA; non-project action. Some people could be displaced during site-specific implementation of this Plan through the voluntary sale of their property to King County to eliminate repeated flood damages. King County has used its power of condemnation very sparingly to acquire property for flood risk reduction projects.

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

NA; non-project action. When property is purchased for a flood risk reduction project, the owner is paid a fair market value. If the property contains tenants, they are covered by the federal relocation act that provides relocation assistance which requires that they are relocated to buildings that are equal to or better than the ones they are leaving.

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

NA; non-project action. When the flood risk reduction projects are implemented, they will be evaluated to assure they recognize the existing and projected land uses, such as compatibility with adjacent agricultural lands, residential housing or warehousing districts.

9. Housing

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

NA; non-project action. This Plan does not propose any housing units.

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

The National Flood Insurance Program currently identifies 100 unmitigated repetitive loss properties in King County floodplains. These properties are generally medium and low-income properties. Future mitigation actions to address these at-risk homes could involve acquisition and demolition of these homes, or *in-situ* home elevations. It is possible, but highly unlikely that all of these at-risk, repetitive loss properties could be removed from the floodplain.

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

NA; non-project action. If housing units are purchased, the owner receives fair market value. If there are tenants, they are relocated to housing that is equal to or better than the housing they are vacating. King County does not provide relocation services to people that move back into a floodplain.

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?

NA; non-project action. No antenna or buildings are proposed in this flood hazard management plan.

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

NA; non-project action. It is not anticipated that any views would be altered or obstructed through implementation of projects identified in this proposal.

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

NA; non-project action. The proposal contains recommendations that encourage the retention of or revegetation with native riparian vegetation along the banks of large rivers and streams, and in riparian and floodplain areas, thereby contributing to avoidance and minimization of aesthetic impacts from development in these areas. The extent of reduction of these impacts will be site specific.

11. Light and glare

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

NA; non-project action. Flood protection infrastructure would not include any lighting.

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

NA; non-project action.

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

NA; non-project action. Any existing off-site light or glare would not have any impact on flood protection facilities.

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

NA; non-project action. Indirectly, the requirements to leave the banks of large rivers and streams, and riparian and floodplain areas undeveloped and vegetated with native vegetation will

contribute to the reduction and control of light and glare impacts from associated development. The extent of such control will be site specific.

12. Recreation

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

NA; non-project action. Some formal and informal recreational areas exist in and adjacent to some of the rivers, large streams, riparian areas and floodplains affected by this proposal. These uses will be documented and considered on a case-by-case basis during the development of any actions recommended by this plan. This plan proposes efforts which would result in a better understanding of existing recreational uses of some river systems.

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

NA; non-project action. Projects recommended by this plan are conducted within or adjacent to the County's river environments and as such may affect some recreational uses or users. Future project designs may involve structural changes to the channel, placing material on the bank or in-river. Depending on the scope, goals, design and materials used in any one project, some or all users may be affected temporarily or permanently. Proposed projects will be evaluated on a case-by-case basis for their impacts to recreational uses.

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

NA; non-project action. Any project recommended by this plan will consider recreational use in its planning, design, implementation and long term maintenance phases. Each project will, as it evolves, evaluate recreational use and include both recreational stakeholders and recreational safety experts in project planning and design. In some cases, future projects proposed by this plan, as well as those previously implemented under this program, may support or improve passive recreational uses, possibly including access, by creating new public open space adjacent to rivers through property acquisition. Habitat restoration supported by river projects may also improve recreational opportunities in and around the river environment for some users.

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.

NA; non-project action. In some cases, homes that might be elevated in the floodplain to reduce the risk from flooding might have some historic or architectural significance. An assessment of any historic significance will be done on a case by case basis.

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

NA; non-project action. This is a non-project action, but there is potential to unearth artifacts of historic or cultural significance during construction or repair of flood protection infrastructure. Project level environmental review will be conducted for projects proposed in this Plan. Projects

recommended in this Plan will comply with all local, state and federal requirements for historic and cultural preservation.

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

NA; non-project action. Project-specific mitigation measures would be developed on a case-by-case basis depending on the nature of the impacts and the appropriate measures to reduce or eliminate the impacts.

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.

NA; non-project action. Access to flood protection infrastructure will vary from site to site.

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

NA; non-project action. People are not likely to visit this flood protection infrastructure via public transportation.

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

NA; non-project action. The public will not be driving to these sites. During construction, maintenance or repair of the flood protection infrastructure, workers can generally park within the access easements established for the flood structure.

- 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).

NA; non-project action. No new roads or streets will be needed.

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

NA; non-project action. During construction, repair or maintenance of any flood protection infrastructure implemented under this plan there may be times when in-water vessels would be used temporarily to assist with the work. In addition, boats or rafts are used to monitor the effectiveness of the flood protection infrastructure from the water side of the structure.

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

NA; non-project action. No vehicular trips would be generated by any flood protection infrastructure constructed, repaired or maintained under this plan.

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

NA; non-project action. There would be no known transportation impacts.

15. Public services

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

NA; non-project action. The proposal recommends continuation of King County's existing flood warning and emergency response services.

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

NA; non-project action. The proposal could result in a long term net reduction of the need for flood emergency response services.

16. Utilities

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

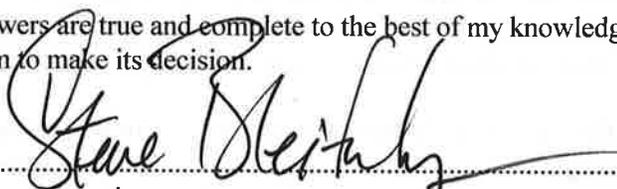
NA; non-project action. A wide range of utilities might be available to sites where flood protection infrastructure is located.

3. 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.

NA; non-project action. There are no known needs for utilities at these sites.

C. SIGNATURE

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

Signature: 

Date Submitted: 6-12-2013

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

(do not use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

NA; non-project action. Flood risk reduction projects implemented under this plan are not anticipated to result in any discharge to water or release of toxic or hazardous substances. Short-term emissions to air and increased noise levels are anticipated by construction equipment during maintenance, repairs and reconstruction of levees and revetments. However these would be minimal and short-term.

Proposed measures to avoid or reduce such increases are:

NA; non-project action. Construction equipment would be required to operate at or below established noise levels and the project would be required to meet any adopted construction hours standards. Emissions from the equipment would also need to meet standards established under the Clean Air Act.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

NA; non-project action. Flood risk reduction projects implemented under this plan would result in some removal of vegetation along rivers and streams through levee maintenance, repair and reconstruction projects. There would be some short-term impact on fish during the in-water work that could result in disturbance of river and stream beds and turbidity in the water. Vegetation would be planted on the slopes and upland areas along construction sites. Following construction some lingering impacts to fish would exist until such time as replacement vegetation becomes mature enough to provide shade and help filter runoff.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

NA; non-project action. Flood risk reduction projects implemented under this plan would be required to use best management practices to reduce water turbidity and river bed disturbance. Levees and revetments are designed using bioengineering that includes vegetation and large wood to strengthen the flood infrastructure and provide habitat elements. In general, maintenance, repair and reconstruction projects will result in an improvement of riparian plant communities, and fish and wildlife habitat. Acquisition of floodplain properties will provide opportunities for floodplain restoration. That will conserve and replace riparian vegetation, and provide habitat for animals and fish.

3. How would the proposal be likely to deplete energy or natural resources?

NA; non-project action. Flood risk reduction projects implemented under this plan are not anticipated to have any impacts on energy or natural resources.

Proposed measures to protect or conserve energy and natural resources are:

NA; non-project action. No anticipated impacts.

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

NA; non-project action. Flood risk reduction projects implemented under this plan are not likely to increase the existing impacts to environmentally sensitive areas because the projects are primarily repair, maintenance or reconstruction of existing levees and revetments that were built years ago. The projects are likely to either maintain the existing impacts, or in most cases, reduce the impacts and increase protection of environmentally sensitive areas by improving the design or reducing or relocating the footprint of the existing infrastructure. There could be some impacts on parks and farmland when levees and revetments are set back further from the shoreline, which could result in some loss of park or farm land. Elevation of historic buildings in floodplains could impact the architectural integrity of the building. It is unlikely that the Plan will affect existing or proposed wilderness areas or wild and scenic rivers, because the geographic areas affected by this proposal are generally downslope and downstream from areas that are typically eligible for wilderness and wild and scenic river designations.

Proposed measures to protect such resources or to avoid or reduce impacts are:

The Plan requires that river and flood hazard management programs and projects result in multiple environmental benefits including flood risk reduction; avoidance of new flood, channel migration, or other risks that cannot be mitigated; protection and, where possible, enhancement of agricultural productivity; and protection and, where possible, enhancement of aquatic and riparian habitat in a manner consistent with adopted ecosystem restoration, salmon habitat recovery, or equivalent plans in cooperation with other agencies and stakeholders.

King County Code (K.C.C. 21A.24.125) requires that if a project is proposing impacts or alterations to environmentally sensitive areas or their buffers then the project must be designed to avoid the impact to the extent possible by applying mitigation sequencing. There are seven mitigation measures that are listed in order of priority.

1. Avoiding the impact or hazard by not taking a certain action;
2. Minimizing the impact or hazard by:
 - a. limiting the degree or magnitude of the action with appropriate technology; or
 - b. taking affirmative steps, such as project redesign, relocation or timing;
3. Rectifying the impact to critical areas by repairing, rehabilitating or restoring the affected critical area or its buffer;
4. Minimizing or eliminating the hazard by restoring or stabilizing the hazard area through engineered or other methods;
5. Reducing or eliminating the impact or hazard over time by preservation or maintenance operations during the life of the development proposal or alteration;
6. Compensating for the adverse impact by enhancing critical areas and their buffers or creating substitute critical areas and their buffers; and

7. Monitoring the impact, hazard or success of required mitigation and taking remedial action.

The applicant is required to document in a critical area report that the appropriate mitigation measure was applied.

The Plan contains policies and requirements for consultation with affected Native American Tribes, the Washington State Office of Archaeology and Historic Preservation, and the King County Historic Preservation Program staff during the design of flood hazard management projects to ensure that archaeological, cultural and historical resources are properly identified, evaluated and protected during construction of projects recommended in the Plan.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

NA; non-project action. Policies in the Plan and the implementing regulations allow new bank stabilization only under very limited cases. Consequently this Plan is not encouraging new development in the floodplain. The existence of flood risk reduction infrastructure does not change the zoning or allowed land or shoreline uses.

Proposed measures to avoid or reduce shoreline and land use impacts are:

No impacts anticipated.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

NA; non-project action. Flood risk reduction projects implemented under this plan are not anticipated to increase the demands on transportation or public services and utilities.

Proposed measures to reduce or respond to such demand(s) are:

No impacts anticipated.

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

The proposal has been carefully designed to ensure that it will not conflict with any local, state, or federal laws or requirements for the protection of the environment.



King County

Water and Land Resources Division

Department of Natural Resources and Parks

King Street Center

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Determination of Non-Significance

Name of Proposal: King County Flood Hazard Management Plan

Description of Proposal: The proposed action is an update to the King County Flood Hazard Management Plan adopted in January 2007 to address flooding on the six major river systems in King County: the South Fork Skykomish, Snoqualmie, Sammamish, Cedar, Green and White, and their significant tributaries, as well as smaller streams that have 100-year floodplains. The King County Flood Hazard Management Plan provides an overview of historic flood and channel migration conditions, provides flood risk reduction strategies for the major rivers and tributaries, establishes floodplain management policies, identifies flood hazard management programs, and recommends site-specific projects to further reduce the risk of flooding and channel migration on County property owners and residents. The Plan also describes existing and potential future funding mechanisms to implement the recommendations in the Plan. The King County Flood Hazard Management Plan is a countywide plan and serves as the comprehensive plan for the King County Flood Control District. A Plan Update is required every 5 years.

The Goals, Objectives and Guiding Principles of the Plan remain identical to those adopted in 2007. The 2013 Plan Update provides a progress report to the 2006 flood plan, and updates technical information that has emerged since 2006, including updated hazard and risk assessments. This Plan Update does not include any new policies.

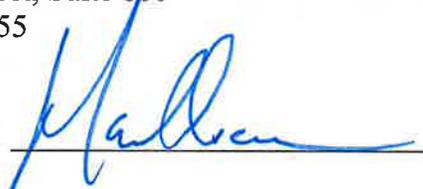
Location of Proposal: The geographic scope of the King County Flood Hazard Management Plan includes all unincorporated and incorporated areas of King County where flooding may occur. Specifically, the Plan addresses riverine flood hazards associated with King County's six major river systems, which are the South Fork Skykomish, Snoqualmie, Sammamish, Cedar, Green and White Rivers, and their significant tributaries, the Tolt, Raging, Miller and Greenwater Rivers. The Plan also acknowledges that regionally significant flood hazards may exist on smaller streams including but not limited to streams with existing flood protection infrastructure such as Tokul Creek, Kimball Creek, Coal Creek

(Snoqualmie), Issaquah Creek, Fifteen Mile Creek, and Holder Creek. The Plan recognizes that regional technical support and project funding may be warranted when flood risks are multi-jurisdictional and extend beyond the influence of the local government responsible for surface water management in the affected area.

Responsible Official: Mark Isaacson
Position/Title: Division Director, Water and Land Resources Division

Address: 201 South Jackson Street, Suite 600
Seattle, WA 98104-3855

DATE: June 12, 2013

SIGNATURE: 

Proponent and Lead Agency: King County Department of Natural Resources and Parks
Water and Land Resources Division

Contact Person(s): Katy Vanderpool, Project Manager, 206-296-8362

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An Environmental Impact Statement (EIS) is not required under Revised Code of Washington (RCW) 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. THIS INFORMATION IS AVAILABLE TO THE PUBLIC ON REQUEST (for a nominal photocopying fee).

THIS DETERMINATION OF NON-SIGNIFICANCE (DNS) is issued under Washington Administrative Code (WAC) 197-11-340(2); the lead agency will not act on this proposal until after **July 12, 2013**. Comments must be submitted or postmarked by that date.

For additional information, please contact:

Katy Vanderpool, Project Manager
King County Water and Land Resources Division
201 South Jackson Street, Suite 600
Seattle, WA 98104-3855