CITY OF DUVALL
WATERSHED PLAN

SEPA Environmental Checklist

July 10, 2015

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ENVIRONMENTAL CHECKLIST

A. BACKGROUND

1. **Name of the proposed project:**

   City of Duvall Watershed Plan

2. **Name of Applicant:**

   City of Duvall

3. **Address and telephone number of applicant and contact person:**

   Lara Thomas, Planning Director
   City of Duvall
   PO Box 1300
   Duvall WA 98019
   (425) 788-2779

4. **Date checklist prepared:**

   July 2015

5. **Agency requesting checklist:**

   City of Duvall

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

   Planning Commission will host a Watershed Plan Public Hearing and make recommendation to City Council on August 19, 2015. The City Council will hold a public hearing on September 1, 2015. It is expected that after the public hearings, the City Council will adopt the Watershed Plan by resolution.

   Following adoption of the Watershed Plan, the City will prepare ordinances revising development regulations consistent with Watershed Plan policies and recommended actions. Development regulations to be revised include standards for zoning, subdivision, tree protection, stormwater management, and sensitive areas protection.

7. **Plans for future additions, expansion, or further activity related to or directly connected with this proposal:**

   Environmental analysis provided in the Watershed Plan is informing the City's 2015 Comprehensive Plan update. The Watershed Plan will be adopted by reference within the updated Comprehensive Plan.

8. **Environmental information that has been prepared, or will be prepared, directly related to this project:**

   The Watershed Plan is based on a detailed characterization of Duvall's subbasins using methods established by the Washington State Department of Ecology Puget Sound Watershed Characterization. Geology, soils, hydrology, precipitation, topography, land

cover and other environmental information was evaluated during the preparation of the Watershed Plan in order to report on the condition of the landscape, develop recommendations, and support decisions regarding future land use, sensitive areas, and stormwater planning management within the City of Duvall.

9. Applications that are pending for governmental approvals or other proposals directly affecting the property covered by the proposal:

The City of Duvall intends to adopt the updated Comprehensive Plan by the end of 2015 which would include the Watershed Plan by reference. Both the Comprehensive Plan and the Watershed Plan will introduce new policies with implications for land uses across Duvall's jurisdiction.

Once adopted, municipal code changes recommended in the Watershed Plan would apply to any new use or development located throughout Duvall. Permit applications for development would be processed according to regulations and procedures in effect at the time the application was determined to be complete.

10. List of governmental approvals or permits that will be needed for the proposal:

The proposed Watershed Plan and revised development regulations will need the following approvals:

- Review and threshold determination under the State Environmental Policy Act for non-project actions;
- Adoption by resolution of the Watershed Plan from the Duvall City Council;
- Ordinances adopted by the Duvall City Council amending Duvall Municipal Code (DMC) Title 14 – Unified Development Regulations so as to implement the policies and actions of the Watershed Plan. Development standards to be amended include DMC Chapters 14.10 through 14.32 (Zoning), 14.34 (Design Guidelines), 14.38 (Landscaping Standards), 14.40 (Tree Protection), 14.42 (Sensitive Areas Regulations), 14.44 (Parking Standards and Design), 14.48 (Accessory Dwelling Units), 14.64 (Additional Development Standards), and 14.66 (Subdivisions, Short Subdivisions, Boundary Line Adjustments and Binding Site Plans).
- Ordinances adopted by the Duvall City Council amending DMC Chapter 9.06 (Storm Drainage Utility) so as to implement the policies and actions of the Watershed Plan.
- Ordinances adopted by the Duvall City Council amending DMC Chapter 10.12 (Clearing and Grading) so as to implement the policies and actions of the Watershed Plan.

11. Brief, complete description of the proposal, including the proposed uses and the size of the project and site:

The proposed Watershed Plan is a non-project action that would affect future development activities throughout the City. The Plan has been prepared to support the goals of promoting economic growth and development without sacrificing the identity and environmental assets of the community, by:

- Informing the 2015 Comprehensive Plan update;

- Focusing future development based on a comprehensive understanding of watershed processes;
- Identifying strategies for maintaining and improving forest cover and open space;
- Providing strategies for enhancing stormwater management and salmon recovery; and
- Strengthening sensitive area regulations to provide enhanced protection for important resources.

This Plan is: (1) a technical document that identifies existing watershed characteristics in and immediately surrounding Duvall; and (2) a policy document that provides a roadmap for protecting watershed processes and focusing future development in appropriate areas within the city and its urban growth area.

The Plan provides new watershed goals and policies, as well as recommended revisions to City development standards for zoning, landscaping and subdivisions, open space preservation, tree protection, sensitive areas management, and stormwater management. The City is drafting development regulations consistent with the policies and actions of the Plan. Environmental implications of development regulation updates consistent with the Watershed Plan are evaluated in this Checklist.

12. Location of the proposal, including street address, if any, and section, township, and range; legal description; site plan; vicinity map; and topographical map, if reasonably available:

The City of Duvall (1,594 acres) is situated in the Snoqualmie River watershed (442,880 acres), located on the east side of the lower Snoqualmie River valley approximately 7 miles northeast of central Redmond and 8.5 miles south of Monroe. Duvall is bordered on the west by the mainstem Snoqualmie River, and State Route 203 (Main Street within Duvall, and the primary corridor into and out of the city) runs from north to south along the eastern edge of the river's floodplain. Duvall lies primarily within Section 13 and Section 24, Township 26N and Range 6E, as well as Section 18 and 19, Township 26N and Range 7E.

The study area evaluated within the Watershed Plan includes: (1) Cherry Creek basin, extending north of the city; (2) Duvall tributaries basin, draining directly to the Snoqualmie River and making up the majority of the city; and (3) the Weiss Creek basin extending to the south of the city.

Please reference Figure 1.1 within Chapter 1 of the Watershed Plan.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site:

The geology of western King County, including the lowland areas of the Snoqualmie River, consists of bedrock underneath layers of sediments

deposited by glaciers, as well as sand and gravel (alluvium) deposited recently by modern rivers (Vaccaro et al., 1998).

b. What is the steepest slope on the site (approximate percent slope)?

Slopes within the watershed vary dramatically, and the steepest slopes are 40 percent or more, located primarily along the north-facing hillsides along the northern edge of Duvall, as well as along the ravine associated with Coe-Clemmons Creek.

c. What general types of soils are found on the site (for example clay, sand, gravel, peat, muck)? Specify the classification of agricultural soils and note any prime farmland.

The principal soil type across Duvall is relatively impermeable glacial till (Alderwood gravely sandy loam), which is found in 91 percent of the land area of the city (1,837 acres). The remainder of the City's soils consists of glacial outwash soils (48 acres; 2 percent) and alluvial soils (138 acres; 7 percent). The outwash soils include Alderwood and Kitsap soils found on very steep slopes (25 to 70 percent slope), which have rapid runoff, a severe to very severe erosion hazard rating, and a severe potential for slope failure. Outwash soil is found primarily along the northeastern city limits, roughly corresponding to the landslide hazard areas. Alluvial soils occur primarily within the Snoqualmie River floodplain, and are fine grained, have slow to moderate permeability, slow runoff, and a slight erosion hazard. Some alluvial soils, mapped as Puget silty clay loam, are present within the City's floodplain and shoreline areas and are classified as hydric soils. These soils typically develop in low-energy and saturated conditions, and may be a wetland indicator. To the east of the Snoqualmie River floodplain, soils are composed primarily of Tokul gravelly loam.

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

Geologically hazardous areas within the City include steep slope hazards, landslide and erosion hazards, and seismic hazards (liquefaction prone areas). Erosion hazard areas within the project area include areas with soils identified by U.S. Department of Agriculture as susceptible to erosion with loss of vegetative cover, grading and land use changes. Erosion hazard areas are present within the city, urban growth areas, and surrounding areas, with the largest concentration occurring on steeper slopes along the northern edge of the city. Potential landslide hazard areas within and around Duvall have been mapped by King County. As with erosion hazard areas, they occur predominantly along the northern edge of the city. Additional areas with known landslide and/or severe erosion hazards are located in Taylor Park, where stream incision and stream bank erosion along Coe-Clemmons Creek have resulted in recent failures on ravine slopes. Potential landslide areas within Duvall include those areas that are naturally unstable or have become unstable

due to structural changes from adjacent disturbance (land development and changes in surface water flows within adjacent areas). Beyond the northern and northeastern steep slope areas and the areas of recent failure along Coe-Clemmons Creek, there are no other areas within the city or UGAs that have been designated as potential landslide hazard areas.

The City of Duvall designates and defines seismic hazard areas. These include areas that are susceptible to a severe risk of earthquake damage as a result of seismically induced ground shaking, differential settlement, slope failure, settlement, lateral spreading, mass wasting, surface faulting or soil liquefaction. Mapped seismic hazard areas exist within Duvall and across surrounding areas. Seismic hazards are mapped as occurring across the valley bottoms of the Snoqualmie River and Cherry Creek, and at the western and northern edges of the city. These are areas generally made up of alluvial soils, which are fine grained with relatively high groundwater tables. Liquefaction in these areas during seismic events is considered potentially likely, although the presence of liquefiable materials can only be determined through site specific analysis. Existing uses within seismic hazard areas are primarily limited to parks and open space, including McCormick Park to the west of the Snoqualmie Valley Trail, Depot Park, Taylor's Landing and Dougherty Farmstead (partially within the Cherry Valley floodplain).

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

No filling or grading is proposed. The proposal recommends minimization of mass clearing and grading associated with new developments that result in large amounts of tree loss or major changes in topography. This would occur through tougher limits on clearing mature and native vegetation and limitations on extensive grading and retaining walls for large subdivisions.

f. Could erosion occur as a result of clearing, construction, or use?

Implementation of the Watershed Plan would not cause new clearing, construction, or uses that would cause erosion. Instead, implementation of the Watershed Plan aims to reduce erosion through updates to development regulations within DMC Title 14, the City's clearing and grading code, and surface water design requirements.

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

The non-project action does not propose new impervious surface. However, the proposed Plan suggests lowering the allowable amount of impervious surface coverage for new developments within some zoning designations (lower density residential zones including R4, R4.5, and R6) and encourages the use of low impact development techniques to reduce stormwater runoff and encourage infiltration.

h. Describe the proposed measures to reduce or control erosion, or other impacts to the earth, if any.

The proposed Watershed Plan encourages development in areas least likely to cause soil destabilization, excessive erosion, and disproportionate impacts to earth resources. The Plan encourages limiting clearing to appropriate areas, retaining existing native riparian and upland vegetation where feasible, and effectively managing stormwater, erosion, and sediment to arrest degradation of surface and groundwater quality. The Plan further discourages extensive grading and clearing for new subdivisions. Project-specific clearing and grading proposals would be evaluated on a project-by-project basis.

2. Air

a. What types of emissions to the air would result from the proposal (e.g. dust, automobile, odors, industrial, wood smoke) during construction and when the project is completed?

No emissions to the air would result from the proposal.

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

No off-site sources of emissions or odors would affect the Watershed Plan.

c. Describe proposed measures to reduce or control emissions or other impacts to air, if any.

No emissions or impacts to the air are anticipated and no mitigation measures are proposed.

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, and wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The mainstem Snoqualmie River flows through the western portion of Duvall. The River extends south and east through unincorporated King County and several small cities. There are three primary basins located within or partially within the city or UGA boundary that are tributaries to the Snoqualmie River: Cherry Creek basin, Duvall Tributaries basin, and Weiss Creek basin. Cherry Creek is the lowest major tributary of the Snoqualmie River and the only significant tributary that drains areas of the city. Cherry Creek does not pass into the city or UGA; however, tributaries to Cherry Creek drain the northeastern portion of the city. Within the City, there are several small streams that eventually converge with the Snoqualmie River, all located within the Duvall

Tributaries basin; these streams include Coe-Clemmons Creek, Thayer Creek, and an unnamed stream that flows through Loutsis Pond. Numerous wetlands are also present, including depressional wetlands and wetlands associated with the tributary streams.

Lake Rasmussen is the only lake in Duvall. It is relatively small (5.5 acres) and is situated in the upper portion of Cherry Creek Tributary A subbasin. Cherry Creek Tributary A drains from the lake to the north within a narrow riparian corridor. Loutsis Dam Pond is located to the south of the city and is approximately 19 acres. An unnamed tributary stream flowing into the northeast corner of the lake is the primary source of hydrology; the stream flows out of the northwest corner of the lake. The outlet appears to be modified by a berm that runs along the northwestern shoreline.

Wetlands within Duvall's Snoqualmie River floodplain are limited to areas that receive surface and shallow subsurface flow from the tributary channels. Several small wetlands located on the slope above the Snoqualmie valley, immediately west of Main Street, receive shallow groundwater from hillside seeps. Some areas around North McCormick/Depot Park areas and South McCormick Park area appear to have relatively fine surface soils, which result in perched water tables supporting several large depressional wetlands. Depressional wetlands are mapped within the Snoqualmie River floodplain in and around Dougherty Farmstead at the north end of the city. Additionally, large depressional wetland areas occur just outside of the city. The wetlands are predominantly forested and occur on rural residential and vacant properties, serving as headwaters to Cherry Creek Tributary D and Weiss Creek. Other smaller depressional wetlands occur within the city in the upper reaches of Coe-Clemmons, Thayer, and Cherry tributary streams.

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.**

The adoption of the proposed Watershed Plan would not require any in- or over-water work. Any new development within areas evaluated in the Watershed Plan would be subject to the provisions of the codes and policies in place at the time of complete development application, which would include specific prohibitions and standards for over-water structures.

3. **Estimate the amount of fill and dredge material that could 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 materials.**

   Not applicable, since no filling or dredging is proposed. Once implemented, the Watershed Plan will strengthen protections for surface waters and wetlands located in more important areas of the City for watershed functions. For example, wetlands within areas identified as being most important for storage of surface waters – most commonly occurring at the headwaters of Duvall's tributary streams, as well as within the Snoqualmie River and Cherry Creek floodplains – will be protected so as to maintain the important surface water runoff attenuation functions provided by these areas. The Watershed Plan also targets areas that are integral to watershed functions, but degraded due to fill and other activities, as highest priorities for restoration to ameliorate water flow, water quality, and fish and wildlife habitat functions.

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

   No surface water withdrawals are proposed.

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

   Yes, a portion of the City lies within the 100-year floodplain. The floodplain for Duvall is mapped on King County Federal Emergency Management Agency (FEMA) flood insurance rate maps (FIRM). Floodplain and floodway areas are shown on Figure ES3 of the City's Draft Comprehensive Plan Environment and Sustainability Element (figure attached), and occur within the Snoqualmie River valley and the Cherry Creek valley to the north of the city. Both of these areas are prioritized for protection and restoration by the Watershed Plan.

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

   No discharges of waste materials to surface waters are proposed. The City of Duvall maintains a storm drainage system consisting of pipes, ponds, ditches, bioswales, and streams. The entire system eventually discharges to the Snoqualmie River via streams or one of several direct stormwater discharges. Once implemented, the Watershed Plan will result in improved surface water conditions as future new development occurs.

b. Ground

1. Will ground water be withdrawn, or will water be discharged to ground water?

No groundwater withdrawals or discharges are proposed.

2. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any. 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) is expected to serve.

No material will be discharged into the ground as a result of the non-project action.

c. Water Runoff (including storm water)

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

No new sources of surface water runoff will be created as a result of Watershed Plan implementation. The Plan recommends reducing Duvall's impervious surface thresholds and incorporating low impact development features, including dispersion tranches, amended soils, rain gardens, bioretention swales, and green roofs; retention of existing tree canopy above current requirements; enhancement and widening of wetland and stream buffers beyond current requirements; and other strategies to reduce the influx of clean stormwater into natural and manmade conveyance systems.

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

Under current conditions within Duvall, runoff from impervious surfaces, residential use activities, erosion along waterways, and other ongoing phenomenon introduce waste materials to ground and surface waters. The Watershed Plan recommends strategies for reducing the introduction of pollutants, including reductions to allowable impervious surface, strategies to reduce overall impervious surfaces at a citywide scale (including increased residential densities, subdivision designs that encourage clustering, and changes to parking standards in areas prioritized for development), and improvements to implementation of existing soil and tree protection measures.

3. **Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**

   The Plan recommends actions to reduce surface water runoff, encourage on-site infiltration, and improve hydrologic processes and functions necessary to maintain and improve water flow patterns within the city.

4. **Describe proposed measures to reduce or control surface, ground, and runoff water impacts, if any.**

   The Watershed Plan includes strategies for maintaining and improving water flow processes and functions associated with surface, ground, and runoff waters. Strategies include reducing impervious surface and improving on-site infiltration, increasing protections for wetlands that store surface water, limiting clearing and grading impacts, and maintaining tree canopy across the city.

4. Plants

a. **Types of vegetation found on-site:**

Deciduous trees: Red alder, big leaf maple, cottonwood, and various willow species.

Evergreen trees: Douglas fir, western red cedar, and Sitka spruce.

Shrubs: Oregon grape, red elderberry, oceanspray, salmonberry, red osier dogwood, vine maple, trailing blackberry, Himalayan blackberry, Japanese knotweed, and numerous other species.

Grass: Reed canarygrass, ornamental grasses.

Pasture: Fescue, clover, and other livestock pasture.

Crop or grain: Not applicable within the City, outside of residential gardens and the educational gardens at Dougherty Farmstead.

Orchards, vineyards or other permanent crops: Fruit trees and berries.

Wet soil plants: Various sedges and rushes, skunk cabbage, common cattail, velvet-grass, bentgrass, willow species, and numerous other species.

Other types of vegetation: Ornamental trees, shrubs, and grasses.

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

None as a result of the non-project action. The proposed Watershed Plan encourages retention of existing vegetation and installation of native trees and landscaping to support watershed functions.

c. **List threatened or endangered species or critical habitat known to be on or near the site.**

None known.

d. Describe proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on-site.

The Watershed Plan encourages the protection and restoration of native vegetation and control of non-native invasive plant species.

e. List all noxious weeds and invasive species known to be on or near the site.

Reed canarygrass, Himalayan blackberry, Japanese knotweed, morning glory, tansy ragwort, Robert's geranium, bittersweet nightshade, evergreen blackberry, English ivy, and English holly.

5. Animals

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

Birds: Bald eagle, waterfowl, great blue heron, and pileated woodpecker, as well as numerous other common bird species.

Mammals: Black-tailed deer, coyote, raccoon, Virginia opossum, eastern gray squirrel, beaver, mountain beaver, rabbit, skunk, and occasional use by black bear, as well as numerous other common small mammal species.

Fish: Steelhead, bull trout, Chinook, chum, coho, pink, sockeye, sucker species, dace species, Redside shiner, stickleback, and sculpin species.

Amphibians: None specifically identified; common species such as red-legged frog, Northwestern salamander, and Pacific treefrog likely present.

Reptiles: None specifically identified; common species such as northwestern garter snake likely present.

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

The Snoqualmie River is primarily used as a migratory corridor by Chinook salmon, bull trout, and steelhead (federally listed species).

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

The Snoqualmie River provides a migratory route for many species of salmon. Duvall is located within the Pacific Flyway, which is a flight corridor for migrating waterfowl and other birds.

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

Implementation of the Watershed Plan is expected to improve shoreline, riparian, and wetland habitat conditions through conservation, protection, and enhancement. Open spaces and riparian areas are expected to provide improved habitat for a variety of plant and animal species, including through implementation of new protections provided for habitat corridors through the Watershed Plan.

e. List any invasive animal species known to be on or near the site.

American bullfrog.

6. Energy and Natural Resources

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

Not applicable; adoption of the Watershed Plan will not require energy consumption.

b. Would the project affect the potential use of solar energy by adjacent properties? If so, explain.

The use of solar energy for properties within the city would not be impacted by the Plan.

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 specifically; however, it is anticipated that Plan adoption will result in a more efficient use of energy infrastructure by diverting runoff out of stormwater systems and economizing energy use by focusing higher density residential development in subbasins targeted for development (through clustering and other approaches).

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spills, or hazardous waste that could occur as a result of this proposal? If so, describe.

No.

1. Describe any known or possible contamination at the site from present or past uses.

Across Duvall, there are two sites that are included on Ecology's Hazardous Sites List (Ecology's Hazardous Sites List from February 19, 2015; available: https://fortress.wa.gov/ecy/publications/documents/1509042a.pdf).

2. Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

No hazardous chemicals or conditions would affect the proposed Watershed Plan.

3. **Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development of construction or at any time during the operating life of the project.**

   No toxic or hazardous chemicals might be stored, used, or produced as a result of the Plan.

4. **Describe special emergency services that might be required.**

   None.

5. **Proposed measures to reduce or control environmental health hazards, if any.**

   No environmental health hazards would be produced, nor control measures proposed, as a result of the Plan.

b. Noise

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

   Noise associated with traffic, construction, and other commonplace activities are present within Duvall, but noise would not affect or be affected by the Watershed Plan.

2. **What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)?**

   No noise is anticipated as a result of the non-project action.

3. **Describe proposed measures to reduce or control noise impacts, if any.**

   No noise reduction measures are necessary, since the non-project activity will not produce noise.

8. Land and Shoreline Use

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

The Watershed Plan study area consists of the following land uses located across the city and associated UGA: residential, commercial, office, institutional, recreational, open space, and industrial.

b. Has the site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

Much of the eastern Snoqualmie River floodplain was used for agricultural activities through at least the first half of the 1900s; outside of Duvall, these

uses continue today. Within Duvall and associated UGAs, no areas have been used as working farmlands or forest lands for twenty or more years. No existing working farmlands or forest lands would be converted to other uses as a result of the Plan.

1. **Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling and harvesting? If so, how?**

   The proposal will not affect or be affected by surrounding working farm or forest land operations.

c. Describe any structures on the site.

Structures throughout the city range in size and type depending on the zoning designation and bulk requirements. Structures are typical of a rural/suburban setting and include low-story residential, recreational, institutional, and commercial structures.

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

No structures will be demolished as a result of the Watershed Plan.

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

Duvall zoning classifications include: Commercial, Mixed Use Institutional, Light Industrial, Mixed Use 12, Old Town Mixed Use, Midtown, Riverside Village, Uptown – 1st Avenue, Residential – 4 units per acre, Residential – 4.5 Units per acre, Residential – 6 Units per acre, Residential – 8 units per acre, Residential – 12 units per acre, and Public Facilities. Lower density residential classifications (Residential – 4, 4.5, and 6 units per acre) are the most common type of zoning mapped across Duvall. For UGAs currently within King County jurisdiction, zoning designations include rural zones (1 dwelling unit per 10 acres, 1 dwelling unit per 35 acres, and 1 dwelling unit per 5 acres). Updates to zoning districts are currently being considered by the 2015 Comprehensive Plan update process. The key findings and recommendations of the Watershed Plan are informing the Comprehensive Plan update and could result in potential changes in the city.

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

The Comprehensive Plan designations include: Mixed Use, Residential (designations for 4 – 4.5, 6, 8, and 12 units per acre), Commercial, Light Industrial, Public Facilities, and Urban Growth Area Reserve. Updates to Comprehensive Plan designations are currently being considered by the 2015 Comprehensive Plan update process. The key findings and recommendations of the Watershed Plan are informing the Comprehensive Plan update and could result in potential changes in the city and UGA. The City has pre-designated the North UGA as R-4/4.5. The UGA-Reserves have not been pre-designated by the City. King County's Comprehensive Plan designations in the UGA-Reserves include rural city UGA, rural (2.5-10 dwelling units per acre), and open space.

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

The current designation for most of Duvall's shoreline area is Conservancy, with the Riverside Village zoning area (existing Depot Village development) designated Urban.

h. Has any part of the site been classified as a critical / sensitive area by the City or County? If so, specify.

Environmentally sensitive or critical areas regulated by the City of Duvall include geologically hazardous areas (landslide hazards, erosion hazards, and seismic hazards), wetlands, fish and wildlife habitat areas (primarily streams within the City, as well as Lake Rasmussen), and critical aquifer recharge areas. These sensitive areas are present throughout the city and UGA. See figures included in the Draft Comprehensive Plan Environmental and Sustainability Element (attached) for the locations of inventoried sensitive areas.

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

Adoption of the Watershed Plan will not affect residential or employment populations; however implementation of Plan actions will affect how future development occurs. Once implemented, Plan actions will focus higher density residential and commercial uses into areas prioritized for urban development, whereas areas prioritized for conservation and/or restoration would have less development intensity and maintain more natural open space.

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

None.

k. Describe proposed measures to avoid or reduce displacement impacts, if any.

Not applicable, since populations will not be displaced.

l. Describe proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.

The Watershed Plan has been developed consistent with the Comprehensive Plan and potential changes to the Plan as part of the 2015 Update. Watershed policies will be incorporated into the revised Comprehensive Plan, and key findings and recommendations have informed the potential changes to Comprehensive Plan land use designations and zoning districts. Changes to development standards for zoning, open space, tree protection, sensitive areas, and stormwater regulations are consistent with the City's land uses and planning documents. When implemented, Plan actions will complement existing and planned land use patterns.

9. Housing

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

None. The Plan would not provide new housing units or modify existing housing stock. Future residential development would be required to be consistent with Plan policies and implemented actions; however these actions are not anticipated to have an effect on the quantity of future housing. Implementation of the Plan may result in a larger variety of housing types, including cottage housing units and attached housing units (e.g., townhouse, corner-attached, and courtyard).

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

None. The Plan would not eliminate or modify housing stock.

c. Describe proposed measures to reduce or control housing impacts, if any.

The Watershed Plan will not impact housing supply or demand; however, implementation of the Plan would assist the City in identifying areas best-suited to accommodate new housing and population growth, and could result in more mixed housing unit types as future development occurs.

10. Aesthetics

a. What is the tallest height of any of the proposed structure(s), not including antennas? What is the principal exterior building material(s) proposed?

No structures are proposed. As currently, Unified Development Regulations within DMC Title 14 would regulate the height of structures across the city.

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

None.

c. Describe proposed measures to reduce or control aesthetic impacts, if any.

The Plan encourages investment in parks and open spaces, which is expected to have a positive impact on aesthetics.

11. Light and Glare

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

The proposal will not produce any light or glare.

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

Not applicable, since the non-project action will not produce light or glare.

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

None.

d. Describe the proposed measures to reduce or control light and glare impacts, if any.

Light and glare will not be produced as a result of the non-project proposal.

12. Recreation

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

Duvall's parks and open spaces provide recreational opportunities to the public for active uses (shoreline access along the Snoqualmie River), horse/equestrian uses (along the Snoqualmie Valley Trail), picnics and gatherings, playgrounds, sports fields, and boating) and passive uses (walking/dog walking, wildlife observation, meditation). The King County-owned and managed Snoqualmie Valley Trail extends along the western edge of the city, linking several City parks and open spaces together, as well as additional facilities to the south of Duvall.

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

The non-project action will not displace any existing recreational uses. Implementations of the proposal may increase opportunities for recreational uses within Duvall. For example, implementation of the Plan could result in the preservation of more open space and connection of wildlife habitat corridors, which would provide more recreational opportunities for passive activities, such as bird watching and native wildlife identification.

c. Describe proposed measures to reduce or control impacts on recreation, including recreational opportunities to be provided by the project or applicant.

The Watershed Plan includes policies to identify and prioritize park and open space improvements that achieve multiple benefits, including the creation of wildlife habitat corridors, restoration of natural spaces and functions, and protection of open spaces.

13. Historic and Cultural Preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.

Yes. While Duvall doesn't have its own local registry for identifying historic buildings, in 1997 a Cultural Resources Survey and Inventory was prepared (Sivinski and Drager, 1997) that identifies one hundred buildings constructed in Duvall before 1956. Of those one hundred buildings, fifty were deemed to be historically or architecturally significant. Included in Duvall's documented historic structures is the Duvall Train Depot, located east of the Snoqualmie River. Additionally, the Dougherty Farmstead is also documented as a historic property, with the Duvall Historical Society providing guided public tours. The

Cherry Valley/Duvall Cemetery (circa 1885) is a recorded historic cemetery located about 200 feet from the southwest corner of Dougherty Farmstead, at 26524 NE Cherry Valley Rd.

b. **Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.**

According to the Department of Archeology & Historic Preservation's (DAHP) online Washington Information System for Architectural and Archeological Records Data (WISAARD), area around the city ranges from low to very high risk for encountering cultural resources. Cultural resources surveys conducted to date within the city and UGA boundaries have not resulted in the discovery of underground cultural resources.

c. **Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Example include consultation with tribes and the department of archeology and historic preservation, archeological surveys, historic maps, GIS data, etc.**

No impacts to cultural or historic resources are anticipated as a result of the Watershed Plan.

d. **Describe proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.**

The non-project action will not result in any disturbance to the ground, so has no potential impacts to historic or cultural resources. Development activities that occur as a result of implementation of the Watershed Plan would be required to follow existing state standards. In accordance with Washington State law, if ground-disturbing activities result in the discovery of human archeological artifacts, then all activity that may cause further disturbance to the artifacts would cease, and the City of Duvall, affected Indian Tribes, and the State DAHP would be notified. If the find contained human remains, then the area of the find would be secured, protected from further disturbance, and reported to the King County medical examiner and local law enforcement. The DAHP would coordinate all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains. Permits issued in areas known or highly suspected to contain archeological artifacts and data require a site inspection and evaluation by an archeologist in coordination with DAHP and affected Indian Tribes prior disturbance, and for monitoring of potentially disruptive activities.

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on-site plans, if any.

Main Street/SR-203 connects the City of Monroe and US-2 in Snohomish County, through the City of Duvall, to its terminus at the junction with SR-202 at Fall City. Within the City limits of Duvall, Main Street functions as the primary north-south corridor for both local and regional traffic. Woodinville-Duvall Road connects the cities of Woodinville and Duvall. This road carries high traffic volumes from Main Street westbound through King County to the Woodinville area. NE Virginia Street connects to Main Street at the intersection of Woodinville-Duvall Road, and Main Street and is slightly offset from Woodinville-Duvall Road.

Cherry Valley Road is a collector arterial primarily under King County jurisdiction. Cherry Valley Road terminates at Main Street in Duvall at a skewed, stop-controlled intersection. A number of collector streets within Duvall serve local transportation needs: Stephens Street provides the primary east-west connection between the east side and west sides of Duvall; 275th Avenue NE has developed as the central/eastern north-south arterial spine in Duvall, serving many of the new housing developments in the City; Batten Road (284th Ave NE) serves as the primary eastern connection between NE 150th Street and Big Rock Road (the road is primarily under King County jurisdiction within the UGA); First Avenue NE is a collector arterial that terminates at NE Valley Street and NE Kennedy Drive and does not connect through Taylor Park. Additionally, Third Avenue (268th Ave NE) is an important north-south connection between Cherry Valley Road and NE 143rd Place,; NE 150th Street is part of the Stephens Street/Bruett Road corridor that connects Main Street to residential development on the east side of the City and to Cedarcrest High School; and Bruett Road (NE 152nd Street) is the primary east-west connection between Historic Duvall and the eastern side of the City. A number of residential access streets in Duvall serve local needs.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Yes. King County Metro serves Duvall, providing bus service from central Duvall to the Cottage Lake Park and Ride and Redmond, Washington (Routes 224 and 232). In addition, the nonprofit Snoqualmie Valley Transportation provides

service (The Valley Shuttle, which makes approximately nine trips per day) between Duvall and Carnation, Fall City, Snoqualmie, and North Bend.

c. **How many additional parking spaces would the completed project or non-project proposal project have? How many would the proposal eliminate?**

Adoption and implementation of the Watershed Plan could result in a fewer number of parking spaces than have been historically provided for commercial and residential land uses as future development occurs. The Plan recommends that the City revisit the minimum parking standards for each land use and zoning district and adjust requirements for new and redeveloping properties so that the land use, location, and intensity of development of each zoning district are taken into account along with Duvall's demographic characteristics and existing on-street parking supply. Also, the Plan recommends development of design guidelines for off-street parking standards that address multi-family/cluster development. Design guidelines will recommend providing convenient and centralized parking spaces as an alternative to individual garages, with incorporation of parking design approaches that reduce the overall impervious surface.

d. **Will the proposal require any new improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe.**

No. The Plan does not require new transportation infrastructure improvements.

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

No. The non-project action would not use, nor occur within the vicinity of, these alternate forms of transportation.

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

No vehicular trips would be generated as a result of the non-project action.

g. **Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe proposed measures to reduce or control transportation impacts, if any.**

The proposal would not affect or be affected by the movement of agricultural and forest products.

h. **Describe proposed measures to reduce or control transportation impacts, if any.**

Adoption and implementation of the Watershed Plan would not affect transportation, so no measures to reduce impacts are proposed.

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 explain.

No.

b. Describe proposed measures to reduce or control direct impacts on public services.

No impacts, nor mitigation measures, are anticipated as a result of the Watershed Plan implementation.

16. Utilities

a. List utilities currently available at the site:

Electricity, natural gas, water, refuse service, telephone, sanitary sewer, and cable are available throughout the watershed study area.

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.

No new utilities are proposed, and utility provision would not be impacted by implementation of the non-project action. For stormwater systems, the implemented Plan will encourage and/or require use of low impact development/green stormwater infrastructure approaches that would reduce reliance on traditional stormwater ponds, detention ponds, and piped conveyance systems. Low impact development stormwater systems would include bioretention, biofiltration, and bioinfiltration facilities integrated within subdivisions, roadways, parks, and open space areas; the facilities would be designed to meet all City stormwater design standards while more closely maintaining more natural surface water mechanisms.

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:

Name (print): LARA THOMAS

Title: Planning Director

Date Submitted: 7/15/15

D. SUPPLEMENTAL SHEET FOR NONPROJECT 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?**

   The proposal would not directly increase discharges to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise. All development and redevelopment across Duvall would be subject to applicable local, state, and federal regulatory requirements including building code, fire code, and surface water design standards. Changes to Unified Development Code (DMC Title 14) standards and stormwater regulations (DMC Chapter 9.06) that would result through implementation of the Watershed Plan would generally increase protections for surface and groundwater resources.

   Proposed measures to avoid or reduce such increase are:

   The Watershed Plan includes policies and actions that, when implemented, would focus development in areas where such higher intensity uses would have less impact on water, vegetation, and wildlife resources, and would prioritize conservation and restoration in areas most important to these resources. Plan policies and actions are generally more restrictive of activities that would result in adverse impacts to natural resources

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

   Through implementation of goals, policies, and actions, the Watershed Plan would provide additional protection and enhancement of fish and wildlife habitat, natural vegetation, and management of sensitive areas (streams, wetlands, and erosion hazard areas). These elements are discussed above in Section B. of this checklist, as well as below.

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

   Implementation of the Watershed Plan will result in updates to existing sensitive areas regulations that would: protect habitat corridors, reduce potential for stream and wetland buffer reduction and modification, increase protections for wetlands and streams located in higher priority areas for watershed processes, and strengthen City standards for protection of tree canopy adjacent to habitat areas. It also provides for additional protections of native vegetation as part of open space and tree protection standards for new developments.

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

   The Watershed Plan would not result in depletion of energy or natural resources. Policies and actions within the Plan would increase protections for natural resources within Duvall.

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

See responses to questions 1, 2, and 3 above; no other specific measures are proposed.

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?**

   The Watershed Plan establishes policies that direct the City to increase protection and conservation of sensitive areas and public open space areas, especially where these areas occur within subbasins prioritized for protection and restoration of watershed processes. Once implemented, the actions provided in the Plan will result in updates to the City's Sensitive Areas Ordinance (adopted as DMC Chapter 14.42) that increase protections for wetlands, streams, habitat corridors, and geologically hazardous areas.

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

   The majority of policies and actions within the Watershed Plan are measures to protect sensitive areas and maintain watershed functions as future development occurs.

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?**

   Adoption of the Watershed Plan will not affect residential or employment populations; however implementation of Plan policies and actions, as integrated into the Comprehensive Plan and development regulations, will affect how future development occurs. Once implemented, Plan actions will focus higher density residential and commercial uses into areas prioritized for urban development, whereas areas prioritized for conservation and/or restoration would be developed in a way that maintains more natural open space (see management groups, as depicted in Figure ES7, attached). The City's development regulations could provide more opportunity for residential development that clusters housing units within a smaller portion of the overall development site, through incentivizing cottage style single-family developments and attached (townhouse, corner attached, and courtyard) residential developments.

   The Watershed Plan has been developed within the context of the existing Comprehensive Plan and the update process that is underway, as well as with consideration of existing standards for zoning, open space, tree protection, sensitive areas, and stormwater. When implemented, Plan actions will complement existing land use patterns and will be consistent with and help achieve Comprehensive Plan land use policies.

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

   Once adopted and implemented, the Watershed Plan will increase protections for natural resources within the City. In order to ensure that development opportunity is still provided within the City consistent with the Growth Management Act and Duvall's Comprehensive Plan land use policies and designations, the Watershed Plan also includes actions that would establish new incentives for development in areas prioritized for more development (Urban Development and Lowest Conservation management groups – see Figure ES7, attached).

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

The Watershed Plan does not establish new patterns of land use or increased density of existing land use patterns; as such, the Plan would not increase demands on transportation, public services or utilities.

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

Since increased demands are not anticipated, no specific measures are proposed.

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

The Watershed Plan is meant to be consistent with and work in conjunction with several local, State and federal programs to protect the functions and values of natural resources and protect the health and safety of Duvall residents. In addition to the Comprehensive Plan, which will integrate the Watershed Plan by reference, these programs include, but are not limited to, the following:

City Programs

- DMC Title 14 – Unified Development Regulations:
    - **Chapter 14.10 Zoning** – Establishes zoning districts and regulates land use in the City of Duvall; implementation of the Watershed Plan would revise zoning regulations for impervious surface limits, allowed housing types, parking requirements (DMC Chapter 14.44), and landscape standards (DMC Chapter 14.38).
    - **Chapter 14.40 Tree Protection** – Establishes regulations and standards aimed at preserving, maintaining, and protecting the visual appearance and natural wooded character of the City of Duvall through protection of existing trees; implementation of the Watershed Plan would integrate tree protection with sensitive areas and open space protection provisions, and would reduce allowances for impacts to significant trees.
    - **Chapter 14.42 Sensitive Areas Regulations** – Establishes policies, regulations, and land use controls to protect sensitive areas, including wetlands, fish and wildlife habitat (including streams), geologic hazards, aquifer recharge, and wellhead protection areas; implementation of the Watershed Plan would introduce new protections for habitat corridors, reduce potential for stream and wetland buffer reduction and modification, and increase protections for wetlands and streams located in higher priority areas for watershed processes.
    - **Chapter 14.60 SEPA** – Establishes procedures and policies to implement the State Environmental Policy Act (SEPA). All non-exempt City actions require environmental review under SEPA.
    - **Chapter 14.66 Subdivisions, Short Subdivisions, Boundary Line Adjustments and Binding Site Plans** – Establishes standards for creation of new lots within Duvall, including standards to ensure that subdivisions are consistent with City Comprehensive Plan policies and other land development standards; implementation of the Watershed Plan would update Chapter 14.66 to allow for new clustering and attached housing

development types, as well as revise open space and clearing and grading standards for wall heights.

- **DMC Title 9, Chapter 9.06 Storm Drainage Utility** – Establishes policies and regulations for the comprehensive management of surface and stormwater for land use proposals and development projects that could have impacts related to water quality, erosion, clearing and grading activities, flood hazard zones, or sensitive areas; implementation of the Watershed Plan would require additional use of low impact development/green infrastructure approaches for treating stormwater, as well as considerations for expanded flow control exemption for areas draining directly to the Snoqualmie River floodplain.

State and Federal Regulations

A number of state and federal agencies may also have jurisdiction over land or natural elements that are addressed through the Watershed Plan. Local development proposals commonly trigger requirements for state or federal permits when they impact wetlands or streams; potentially affect fish and wildlife listed under the federal Endangered Species Act (ESA); result in over one acre of clearing and grading; or affect the floodplain or floodway. As with local requirements, state and federal regulations apply throughout the city. Relevant state and federal regulations include, but are not limited to:

- Endangered Species Act: The federal ESA addresses the protection and recovery of federally listed species and critical habitat. The ESA is jointly administered by the National Oceanic and Atmospheric Administration (NOAA) Fisheries (formerly referred to as the National Marine Fisheries Service), and the United States Fish and Wildlife Service (USFWS).
- Clean Water Act (CWA): The federal CWA requires states to set standards for the protection of water quality for various parameters, and it regulates excavation and dredging in waters of the U.S., including wetlands. Certain activities affecting wetlands or streams may require a permit from the U.S. Army Corps of Engineers and/or Washington State Department of Ecology under Section 404 and Section 401 of the CWA, respectively.
- Nation Pollution Discharge Elimination System (NPDES): The federal NPDES program is administered by the Environmental Protection Agency (EPA), with responsibility passed to the Washington State Department of Ecology, under the authority of the CWA. The NPDES program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Duvall's municipal stormwater system is permitted under the Phase II Western Washington Municipal Stormwater Permit, and requires that the City maintain minimum technical requirements for new development and redevelopment, provide annual stormwater system reports, and meet other requirements.
- Hydraulic Project Approval (HPA): The Washington Department of Fish and Wildlife (WDFW) regulates activities that use, divert, obstruct, or change the natural flow of the beds or banks of waters of the state and may affect fish habitat. Projects requiring construction below the ordinary high water mark of any stream could require an HPA from WDFW. Projects creating new impervious surface that could substantially increase stormwater runoff to waters of the state may also require approval.