

CITY OF SEQUIM STORM AND SURFACE WATER MASTER PLAN

SEPA ENVIRONMENTAL CHECKLIST

A. Background

1. Name of proposed project, if applicable:

City of Sequim Storm and Surface Water Master Plan (Master Plan)

2. Name of applicant:

City of Sequim

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

Ann Soule

Resource Manager

City of Sequim

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P.O. Box 1097

Sequim, WA 98382

(360) 582-2436

4. Date checklist prepared:

May 28, 2015; updated February 25, 2016

5. Agency requesting checklist:

City of Sequim

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

Approval of the Master Plan is expected in Spring of 2016. The stormwater Capital Improvement Program (CIP) projects and programmatic recommendations outlined in the Storm and Surface Water Master Plan are proposed to occur over the next six years (2016-2021). The exact timing of these projects is uncertain as it depends on future funding availability.

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

Implementation of projects recommended in the Master Plan will occur following approval of the Master Plan. The selection of those projects and the timing of their implementation are unknown at this time.

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

Existing scientific and environmental information, comprising published and unpublished data, analyses, and literature provide a scientific basis for the analysis and development of environmental components of the Master Plan. The Master Plan contains a bibliography that references these documents.

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

The City is in the process of updating its zoning code to reflect land use designations shown on the Future Land Use map adopted with the 2015-2035 Comp Plan Update in October 2015. Approval and adoption of the Zoning Code is anticipated to occur in 2017. No specific properties are associated with the programmatic recommendations in the Master Plan or the programmatic CIP projects.

10. List any government approvals or permits that will be needed for your proposal, if known. The Sequim City Council is expected to approve the Master Plan following Planning Commission review for consistency with existing plans. Programs and projects that result from the Master Plan must comply with applicable federal, state, and local regulations. On a project-by-project basis, Capital Improvement Projects that implement the Master Plan will require certain federal, state and local government approvals or permits, including State Environmental Policy Act (SEPA) review as applicable, before any ground disturbing work is allowed to proceed.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site.

The Storm and Surface Water Master Plan is intended to serve as a comprehensive and strategic guide to managing stormwater and surface water in the City of Sequim. The plan includes:

- Identification of, and proposed solutions to, drainage and water quality issues
- Actions necessary to ensure compliance with applicable federal, state, and local requirements
- Actions recommended for improving and expanding the City’s existing stormwater program
- Staffing and resource needs to implement the plan recommendations
- Discussion of future growth and climate change strategies
- Discussion of opportunities for interdepartmental and interagency collaboration

Potential program elements in the Master Plan are summarized in the following table; Tier A recommendations are proposed for initial implementation:

Potential Program Elements in Storm and Surface Water Master Plan	
Stormwater Program Element	Summary of Recommendations
Capital Facilities	Tier A: Implement Group 1 and 2 CIP Projects as funding becomes available <ul style="list-style-type: none"> • The 6-year CIP project implementation schedule consists of six projects in Group 1 (most urgent), three projects in Group 2 (high priority but not urgent), and five projects in Group 3 (high priority but dependent on prior analyses)
Inspection Program	Tier A: <ul style="list-style-type: none"> • Institute a stormwater facility inspection program • Develop maintenance standards, inspection logs, and Plat language • Coordinate with School Districts • Improve coordination with homeowner associations and commercial landowners
Water Quality Compliance	<ul style="list-style-type: none"> • Develop and implement a pollution control plan for waterbodies currently on the 303(d) list of impaired waters • Develop and implement surface water flow monitoring program • Coordinate with local water quality partners on monitoring activities, especially for City creeks, Washington Harbor, and Sequim Bay • Use GIS to identify UIC wells that need to be registered • Use online form to register UIC wells • Develop and implement a plan to assess drywells classified as UICs

Potential Program Elements in Storm and Surface Water Master Plan	
Stormwater Program Element	Summary of Recommendations
Species and Habitat Protection	<ul style="list-style-type: none"> No Tier A recommendations
Stormwater Design Guidance and Plan Review	<ul style="list-style-type: none"> No Tier A recommendations
Asset Management	<ul style="list-style-type: none"> No Tier A recommendations
Stormwater System O&M	<ul style="list-style-type: none"> Establish maintenance agreements with irrigators and other water management partners Add maintenance and inspection information to the drainage map and database in GIS Consider hiring seasonal workers to work on inspection/maintenance crew Increase staff support for inspecting and cleaning stormwater facilities
Pollution Source Detection and Elimination	<ul style="list-style-type: none"> No Tier A recommendations
Public Education and Involvement	<ul style="list-style-type: none"> No Tier A recommendations

Potential CIP projects resulting from approval and implementation of the Master Plan over the 6-year life of the CIP implementation plan are from Groups 1 and 2 and are listed in the following table:

Potential Stormwater and Surface Water Projects			
Project Name	Type of Problem	Solution	Priority
Middle Reach Bell Creek Corridor Planning	Bell Creek Capacity	Watershed planning with impacts to stormwater irrigation, habitat, water resource management	High
S 3rd Avenue (west ROW south of Bypass) Drainage Improvements	Drainage	Install pipes or roadside ditch to convey runoff	High- Moderate
N 5th Avenue and W Cedar Street Structure Upgrade	Drywell Capacity	Upgrade drywell to restore infiltration rates	Moderate
7th Avenue and Washington Upgrade	Drywell/ Drain Line Capacity	Upgrade facilities to restore infiltration rates	High-Moderate
Centennial Place Inflow and Infiltration Repair	I/I Issue	Redirect stormwater flows from sewer	High-Moderate
Clara Crest Way / Highland Hills Runoff Abatement	Drainage	Continue to work with HOA and local landowners to perform retrofits and/or ditch maintenance/ repair as needed	High-Moderate
River Road Storage Project	Bell Creek Capacity	Planning and design for joint irrigation/ stormwater detention in upper watershed	High
Emerald Highlands Detention Pond Repair/ Maintenance	Maintenance	Remove brush, check valves and outlets, restore capacity as needed (continued from 2015 activities)	Moderate
W Prairie Street Green Street Upgrade	Drainage	Upgrade streetscape by installing bioretention and permeable pavement.	High

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

The proposed Master Plan addresses storm and surface water issues in the City of Sequim, which is located on the north side of the Olympic Peninsula in Clallam County, Washington.

B. ENVIRONMENTAL ELEMENTS

NOTE: THIS INFORMATION IS PRESENTED FOR THE CITY OF SEQUIM STORM AND SURFACE WATER MASTER PLAN (MASTER PLAN). THE MASTER PLAN IS A NON-PROJECT PLANNING DOCUMENT, WHICH AIMS TO MAINTAIN, MANAGE, PLAN, AND CONSTRUCT DRAINAGE AND INFILTRATION SYSTEMS TO SAFEGUARD PUBLIC HEALTH AND PROPERTY AND CONTROL FLOODING WHILE PROTECTING STREAMS, LAKES, GROUNDWATER, AND THE STRAIT OF JUAN DE FUCA. IMPLEMENTATION OF THE MASTER PLAN WILL INVOLVE THE DEVELOPMENT AND IMPLEMENTATION OF A SERIES OF DRAINAGE PROGRAMS AND CAPITAL IMPROVEMENT PROJECTS DESIGNED TO ADDRESS WATER MANAGEMENT NEEDS THROUGHOUT THE CITY. ALTHOUGH NO SPECIFIC PROJECTS OR PROGRAMS WILL BE IMPLEMENTED DIRECTLY AS A RESULT OF ADOPTION OF THE MASTER PLAN, THIS CHECKLIST ATTEMPTS TO ADDRESS THE TYPES OF ANTICIPATED PROJECTS AND PROGRAMS THAT MAY RESULT FROM IMPLEMENTATION OF THE MASTER PLAN. LIKewise, ANY PROJECTS DEVELOPED SUPPORTING ASSOCIATION WITH OF THE MASTER PLAN WILL STILL HAVE TO OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS AND APPROVALS.

1. Earth

a. General description of the site

(circle one): Flat, rolling hilly, steep slopes, mountainous,
other _____

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

Slopes in Sequim range from 0 percent to over 40 percent. The steepest slopes occur primarily on the sides of Bell Hill and Gieren Hill and locally on slopes adjacent to Sequim Bay.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The soils in the City consist of floodplain soils, intermixed zones of glacial till, and wetland bogs. The majority of the City is dominated by Sequim (37 percent), Sequim-Carlsborg (19 percent), and Hoypus (3 percent) soils; these are floodplain soils that formed in coarse textured alluvium or glacial outwash that have high infiltration capacities. These soils are generally most suitable for stormwater infiltration applications. The remainder of the mapped soils in the City include, Yearly (21 percent), Clallam (17 percent), Catla (2 percent), and Beaches (1 percent); these are sandy or silty soils characterized by low permeability and relatively high runoff potential. These are less suitable for stormwater infiltration applications.

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

Unstable soils occur primarily in two contexts. The first context is steep slope areas where a combination of shallow groundwater and glacial sediments deposited in layers exhibiting contrasting permeability result in a high risk of landsliding. The second context is areas of artificial fill or alluvial soils where unengineered fill material or fine-grained and/or organic soils coupled with a shallow water table may lead to the potential for soil liquefaction during earthquakes. The latter context is extremely limited in Sequim.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Because this is a non-project action, no specific grading or filling activities are known at this time. Grading and filling would occur in association with recommended future drainage projects and programs including: installation of new drainage facilities below ground, and installation of instream and shoreline habitat features. In general, the amounts of grading or filling that would be required for the individual projects proposed to meet the needs identified in the Master Plan are modest (typically several hundred cubic yards or less). The source of fill would be identified during final design, permitting, and construction contracting of individual projects.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. Implementation of many of the projects proposed to meet the needs identified in the Master Plan would involve grading activities. These activities would expose soils, and subsequent erosion could occur. As described in Section h below, Title 13 of the Sequim Municipal Code contains requirements for best management practices (BMPs) that must be implemented to control erosion from construction sites. In addition, many of the potential projects under consideration in the Master Plan would mitigate existing erosion problems.

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

No specific projects are included in this proposal, and the Master Plan covers the entire City of Sequim, which is an urbanized area. The amount of new impervious surface resulting from implementation of the Master Plan's recommended projects is uncertain, but is likely to be very limited.

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

All work resulting from the Master Plan would be subject to the requirements of Sequim's stormwater regulations and Washington State Department of Ecology (Ecology) stormwater and surface water regulations since the City has adopted the Ecology Stormwater Management Manual for Western Washington. The City's and Ecology's regulations include guidelines and BMPs designed to manage stormwater and control runoff impacts during and after construction, thereby controlling and reducing erosion of soils.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Implementation of CIP projects proposed to meet the needs identified in the Master Plan could involve temporary emissions during construction. These would include typical amounts of dust from grading activities and exhaust (carbon monoxide, sulfur, and particulates) from construction equipment. Each individual project would be subject to applicable emission control requirements.

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

There are no known off-site sources of emissions or odor that would affect this proposal.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:
 During construction of any projects associated with the Master Plan recommendations, impacts to air quality would be reduced and controlled through implementation of standard federal, state, and local emission control criteria. These could include: spraying areas of exposed soil with water for dust control, regular street cleaning, and reducing exhaust emissions by minimizing vehicle and equipment idling.

3. Water

a. Surface Water:

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.

Major streams that flow through or near the area addressed by the Master Plan include:

- Johnson Creek – flows easterly into Sequim Bay within City limits
- Bell Creek – flows easterly into Sequim Bay outside City limits
- Gierin Creek – flows northeasterly into the Strait of Juan de Fuca outside City limits
- Cassalery Creek – flows northerly into the Strait of Juan de Fuca outside City limits
- Dungeness River – flows northerly west of the City limits into the Strait of Juan de Fuca

Drainage Basin Size and Land Cover for Basins Located Within the City of Sequim.					
	Bell Creek	Johnson Creek	Gierin Creek	Cassalery Creek	Dungeness River
Total Basin Area (square miles)	7.4	6.3	5.3	3.5	48.9
% of Basin Area Within City Limits	40%	14%	35%	4%	0.37%
% of City Area Within Basin ^a	46%	15%	29%	2.4%	2.9%

^a The remaining 5.3% of the city drains to two unnamed basins and West Happy Valley subbasin.

Marine waters are located north (the Strait of Juan de Fuca) and east (Sequim Bay) of the City.

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.

Implementation of the Master Plan will result in programs and projects to maintain or improve stormwater conveyance and aquatic habitat within the City of Sequim. Lists of the types of programs and projects that could result from the proposal are presented in section A11 of this checklist. Some of this work will occur over, in, or adjacent to (within 200 feet) the described surface waters bodies, all of which perform drainage functions within the project area.

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.

The non-project Master Plan itself will not result in any filling or dredging. The amount of fill or dredge material that would be placed in or removed from surface water or wetlands as a result of projects recommended in the Master Plan would vary considerably depending on the specific project under consideration. For projects considered as a direct implementation of the Master Plan, fill or dredge amounts are unlikely to exceed several hundred cubic yards. All individual projects would be subject to additional environmental permitting.

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

The Master Plan itself will not result in any surface water withdrawals. Expected withdrawals or diversions of surface water associated with individual projects associated with this Master Plan would be limited to temporary diversions of surface water during construction of instream aquatic resource protection or stormwater control projects.

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

There are no formally designated 100-year floodplains within the City. However, major streams and Sequim Bay have the potential for flooding, and some of the actions resulting from the Master Plan, for example aquatic resource protection and stormwater control projects and programs, will occur in or near these waterbodies.

- 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.

The Master Plan will promote projects to reduce flooding where drainage infrastructure is insufficient. In some instances, this could result in the creation of new outfalls to improve conveyance of ponded stormwater. In these instances, this would involve a new discharge of potentially polluted stormwater to a surface water during construction and operation of the new outfall. However, protective measures would be taken to reduce or eliminate the sources of pollutants associated with this type of project.

In general, the proposal will reduce the discharge of waste materials to surface waters through projects and programs aimed at protecting water resources. The Master Plan involves the management of surface water runoff in an urban area, which includes the discharge of surface water runoff to surface waters. Given the urban character of Sequim, these discharges often contain pollutants typical of runoff from urban areas. For example, oils and greases from roadway areas, fertilizer from landscaped areas and residences, heavy metals from various urban sources, etc. Overall, the Master Plan is designed to reduce and mitigate for these types of ongoing discharges.

b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

Some of the projects recommended in the Master Plan will require below-ground work and could result in the need for temporary dewatering to maintain dry construction conditions. In addition, some stormwater management projects will focus on utilizing infiltration of stormwater, but only in situations where soils and slope are conducive to infiltration. All projects will require their own environmental permitting and approval.

- 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.

There are no known sources of waste material discharged into the ground associated with this proposal. Like stormwater, Class A reclaimed water from the City's Water Reclamation Facility is an important resource that is integral to achieving the City's comprehensive water management goals. Some projects indicated in this Master Plan may be implemented with both resources in mind.

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.

The existing infrastructure identified to date that conveys stormwater within the City of Sequim is summarized in the following tables:

Summary of the City of Sequim Stormwater System.			
Item	Quantity	Units	Notes
Catch basin or inlet	1,018	each	
Drywell	153	each	Class V UIC
Oil-water separator	NA	each	113 installed for sewer system
Filter	2	Each	Private facilities
City stormwater perforated pipe drain field	169	sites	
City stormwater culvert ditch or stream	66	miles	
Pervious pavement	5	sites	
Biofiltration swale	18	each	
Detention/Retention Pond	43	each	
Flow Control	11	each	Usually overflow from a pond
Roadside ditch	~50	miles	
Stormwater curb and gutter	~80	miles	

Source: Sequim. 2014. City of Sequim Stormwater Management Needs Assessment. Prepared by Ann Soule, City of Sequim Public Works. May 2014.

Summary of the Irrigation System in the City of Sequim.		
Item	Quantity	Units
Irrigation ditch (open, mostly unlined)	18.1	miles
Irrigation pipe	17.4	miles
Total	35.5	miles

Source: GIS data from City and Conservation District.

Implementation of the Master Plan will result in projects and programs designed to maintain or improve stormwater conveyance and aquatic habitat within the City of Sequim. The proposal will permanently affect existing stormwater runoff conditions throughout the city. The proposal also recommends individual projects that will temporarily result in stormwater runoff from construction sites that may drain to any of the surface water bodies described previously. In addition, some flood control projects may result in increases in stormwater conveyance to a given downstream receiving water.

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

Typical residential waste materials that enter drainage systems or the ground, such as soap from car washing, motor oil leaks, exhaust residue, etc., will not be increased by this proposal. The proposal aims to reduce sources of waste materials entering waterways.

Waste resulting from construction activities for projects proposed as part of the Master Plan would not be increased or decreased compared to existing construction activities.

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

Implementation of the Master Plan will not significantly alter, but will result in improvements to drainage patterns within the City. Projects will reduce flooding, improve drainage flow, and increase infiltration into soils, but basic drainage patterns and basin boundaries will be unaffected.

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

The Master Plan is primarily a planning document, which as a whole aims to maintain, manage, plan, and construct drainage and water management systems to safeguard public health and property and control flooding while protecting streams and the Strait of Juan de Fuca. In general, water quality projects under this proposal will be designed to minimize the impact of pollutants on receiving waters. Projects that control runoff through the use of surface swales will be carefully designed to prevent any possible impacts to groundwater. In addition to proposals to reduce flooding (and therefore potentially increase conveyance to surface waters), the Master Plan includes plans and approaches for managing stormwater in Sequim's urban environment to avoid or reduce the impacts of increased stormwater discharges to surface waters. Measures to reduce impacts associated with increased flows caused by correction of flooding efforts will be determined on a case-by-case basis. The City is dedicated to protecting sensitive receiving waterbodies and does not plan to route stormwater runoff from flood-prone areas to sensitive systems without adequate mitigation and protective measures. Any projects recommended in the Master Plan will also be subject to the conditions outlined in Sections A10 and B1.h.

4. Plants

a. Check the types of vegetation found on the site:

- deciduous tree: alder, maple, aspen, oak, other
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- Orchards, vineyards or other permanent crops.
- wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation: native prickly pear cactus

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

Master Plan projects may involve removal or alteration of vegetation. Master Plan related construction projects that disturb vegetation would restore vegetation with native species following construction activity, according to City of Sequim standard construction practices.

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

There are no federally listed endangered or threatened plant species on or in the immediate vicinity of the City of Sequim. The following plant species are Washington state listed endangered or threatened that have been found in Clallam County and may occur in the City of Sequim:

Washington State Listed Threatened and Endangered Plant Species that may Occur in the City of Sequim.

Scientific Name	Common Name	Status
Abronia umbellata var. acutalata	pink sand-verbena	endangered
Astragalus australis var. cottonii	Cotton's milk-vetch	threatened
Claytonia multiscapa ssp. pacifica	Pacific lanceleaved springbeauty	threatened
Coptis trifolia	threeleaf goldthread	threatened
Draba juvenilis	long-stalked draba	threatened
Erythronium quinaultense	Quinault fawn-lily	threatened
Iwatsukiella leucotricha	Iwatsukiella moss	endangered
Lobelia dortmanna	water lobelia	threatened
Oxalis suksdorfii	western yellow oxalis	threatened
Polemonium carneum	great polemonium	threatened
Potentilla breweri	Brewer's cinquefoil	threatened
Sanguisorba menziesii	Menzies' burnet	threatened
Sparganium fluctuans	water bur-reed	threatened
Synthyris pinnatifida var. lanuginosa	cut-leaf synthyris	threatened

Bolded species have not been recorded in the County since prior to 1977.

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

See Section b.

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

The following Class A and B state-listed noxious weeds have been found in Clallam County and may occur in the City of Sequim:

Noxious Weeds and Invasive Species that may Occur in the City of Sequim.		
Common Name	Scientific Name	Class
Spanish broom	Spartium junceum	A
common cordgrass	Spartina anglica	A
smooth cordgrass	Spartina alterniflora	A
giant hogweed	Heracleum mantegazzianum	A
bighead knapweed	Centaurea macrocephala	A
garlic mustard	Alliaria petiolata	A
clary sage	Salvia sclarea	A
milk thistle	Silybum marianum	A
hoary alyssum	Berteroa incana	B
yellow archangel	Lamium galeobdolon	B
blueweed	Echium vulgare	B
sulfur cinquefoil	Potentilla recta	B
Brazilian elodea	Egeria densa	B
common fennel	Foeniculum vulgare	B

Noxious Weeds and Invasive Species that may Occur in the City of Sequim.

Common Name	Scientific Name	Class
gorse	Ulex europaeus	B
orange hawkweed	Hieracium aurantiacum	B
policeman's helmet	Impatiens glandulifera	B
brown knapweed	Centaurea jacea	B
diffuse knapweed	Centaurea diffusa	B
meadow knapweed	Centaurea moncktonii	B
Russian knapweed	Acroptilon repens	B
spotted knapweed	Centaurea stoebe	B
Himalayan knapweed	Polygonum polystachyum	B
purple loosestrife	Lythrum salicaria	B
wand loosestrife	Lythrum virgatum	B
parrotfeather	Myriophyllum aquaticum	B
poison hemlock	Conium maculatum	B
saltcedar	Tamarix ramosissima	B
Scotch thistle	Onopordum acanthium	B
Dalmatian toadflax	Linaria dalmatica ssp dalmatica	B
Eurasian watermilfoil	Myriophyllum spicatum	B
hairy willow-herb	Epilobium hirsutum	B

5. Animals

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

birds: hawk, heron, eagle, songbirds, other:
 mammals: deer, bear, elk, beaver, other:
 fish: bass, salmon, trout, herring, shellfish, other _____

b. List any threatened and endangered species known to be on or near the site. The following federal listed endangered and threatened species have been identified as occurring in Clallam County and may occur in the City of Sequim or in the area surrounding the city:

Federal Listed Threatened and Endangered Animal Species that may Occur in the City of Sequim.

Scientific Name	Common Name	Status
Coccyzus americanus	yellow-billed cuckoo	federal threatened
Brachyramphus marmoratus	marbled murrelet	federal threatened
Strix occidentalis caurina	northern spotted owl	federal threatened
Euphydryas editha taylori	Taylor's checkerspot	federal endangered
Oncorhynchus tshawytscha	Chinook salmon	federal threatened
Oncorhynchus keta	chum salmon	federal threatened
Oncorhynchus nerka	sockeye salmon	federal threatened
Salvelinus confluentus	bull trout	federal threatened
Salvelinus malma	Dolly varden	federal threatened

No state endangered or threatened animal species are known or thought to occur in Clallam County or the City of Sequim.

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

The Strait of Juan de Fuca, north of the City of Sequim, is an important migration corridor for birds, fish, and marine mammals.

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

The Master Plan will involve programs and projects that will preserve and enhance aquatic resources within the City of Sequim. These programs and projects will have beneficial impacts on fish and wildlife in the City and in the surrounding area. Through project design and during construction, fish and wildlife will be preserved and protected by conformance with applicable environmental reviews, approvals and permits. Operation of drainage facilities will be conducted in compliance with applicable regulatory agency guidelines and standards for the protection of fish and wildlife.

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

Invasive weeds that may occur in the City of Sequim are listed in Section 4.e. A variety of invasive animals may occur in the City, although which specific species occur is uncertain.

6. Energy and natural resources

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

Implementation of the Master Plan will not result in the need for supplementary energy to meet completed project needs.

b. Would your project affect the potential use of solar energy by adjacent properties?

If so, generally describe.

Implementation of the Master Plan does not involve building structures or planting vegetation that would block access to sunlight used for solar energy on adjacent properties.

c. What kinds of energy conservation features are included in the plans of this proposal?

List other proposed measures to reduce or control energy impacts, if any:

Not applicable (see Item a above)

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.

Small amounts of materials likely to be present during construction of a given project include gasoline and diesel fuels, hydraulic fluids, oils, lubricants, solvents, paints and other chemical products. A spill of one of these chemicals could occur during construction as a result of either equipment failure or worker error. Contaminated soils, sediments or groundwater could also be exposed during excavation. If disturbed, contaminated substances could expose construction workers and potentially other individuals in the vicinity through blowing dust, stormwater runoff, or vapors.

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

No contamination is known at the sites of the projects recommended in the Master Plan.

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.

There are no known existing hazardous chemicals/conditions that might affect the development or design of projects recommended in the Master Plan.

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

During construction, small amounts of gasoline and diesel fuels, hydraulic fluids, oils, lubricants, solvents, paints and other chemical products may be stored and used. After construction is complete, similar substances may be stored and used in conjunction with maintenance activities.

- 4) Describe special emergency services that might be required.

Possible fire or medic services could be required during construction of projects recommended in the Master Plan, as well as possibly during maintenance of those completed projects.

- 5) Proposed measures to reduce or control environmental health hazards, if any:

A Health and Safety Plan will be submitted by the contractor before construction work commences on any of the capital projects recommended in the Master Plan. Construction workers will have had 40-hour OSHA Health and Safety Training for working in potentially contaminated areas.

A standard spill control plan will be developed to control spills on construction sites. If any contaminated soils are encountered during construction of recommended projects, the material will be excavated and disposed of in a manner consistent with the level of contamination, in accordance with federal, state and local regulatory requirements, by a qualified contractor(s) and/or City staff.

b. Noise

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

Noises that exist in the area will not affect the proposal.

- 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.

Noise levels in the vicinity of construction of recommended projects would temporarily increase during construction activities. Short-term noise from construction equipment will be limited to the allowable maximum levels in state and local ordinances as may be amended by Sequim Ordinance 2104-004. Noise from construction equipment would generally be limited to daytime hours on weekdays.

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

On projects arising from implementation of the Master Plan, construction equipment will be muffled in accordance with the applicable laws.

8. Land and shoreline use

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The Master Plan includes projects within the City of Sequim. Sequim's land area of 6.5 square miles is developed with a mixture of residential, commercial, and office uses. Sequim's population in 2010 was 6,606, with a population density of 1,016 people per square mile. Sequim is bordered by unincorporated Clallam County, which supports primarily rural residential land uses. The City extends east to the shore of Sequim Bay.

b. Has the project 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?

The City contains an approximately 30-acre area located in the north portion of the City that is zoned Agricultural Conservancy. Implementation of the Master Plan will not result in the conversion of any agricultural or forest land of commercial significance.

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 Master Plan and its implementation will not affect or be affected by working farm or forest land normal business operations.

c. Describe any structures on the site.

Sequim is developed with a wide range of structures, from single-family residences to larger multi-family and commercial/office structures.

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

Individual projects recommended under the Master Plan are unlikely to require demolition of structures, although this has not been determined at this time and remains uncertain.

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

Currently, zoning in the City of Sequim is a primarily mix of single-family and multi-family residential, commercial, office, and public facility.

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

Comprehensive plan land use designations in the City of Sequim include primarily residential, commercial, open space, and economic opportunity designations.

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

Shorelines that fall under the jurisdiction of the state Shoreline management Act include the City's shoreline along Sequim bay and the tidally influenced portion of Johnson Creek. The City's shoreline master program designates this shoreline area as a mix of Urban Conservancy, Natural, and Research District in the north portion of the area, and Shoreline Residential, Urban, and Urban Conservancy in the south portion of the area.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Portions of the City have been classified as critical areas including wetlands, streams, flood hazards, geologic hazards (erosion, landslide, seismic), steep slopes, fish and wildlife habitat areas, locally unique features (ravines, marine bluffs, beaches) and protective buffers, and critical aquifer recharge areas.

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

Implementation of the Master Plan does not include any residential or commercial development; therefore, no people will reside or work in the completed project.

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

It is not anticipated that any residential structures would be displaced as a result of implementation of the Master Plan.

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

No displacement impacts are expected, therefore no measures are proposed to avoid or reduce displacement impacts.

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

All programs and projects resulting from implementation of the Master Plan will comply with federal, state, and local requirements.

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

No impacts to agricultural or forest lands are expected; therefore, no measures are proposed to ensure compatibility with these land types.

9. Housing

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

Implementation of the Master Plan will not involve the construction of any housing units.

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

Implementation of the Master Plan is not anticipated to require elimination of any housing units.

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

Housing impacts are not anticipated to result from implementation of the Master Plan, therefore, no measures are proposed to address housing impacts.

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?

Structures resulting from construction associated with implementation of Master Plan recommended projects could include retaining walls, drainage pipes, inlets, manholes, catch basins, surface and subsurface stormwater control facilities (such as ponds, vaults, filters, swales, and subsurface drains), ditches, and culverts. Building materials could include concrete, and steel, as well as natural materials such as earth, rock, and wood. Boulders, large wood debris (logs) or engineered logjams could be placed in some streams. Drainage structures are generally located at or below grade. All facilities will be subject to height restrictions of the Sequim zoning code.

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

Below grade installations would not alter or obstruct views. Drainage facilities installed at surface level might be visible, but of a height that would not obstruct existing territorial views. Native shrubs and trees may be planted in areas disturbed by construction, and this vegetation may, over a long period, grow to appreciable height.

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

In the near term, implementation of projects recommended in the Master Plan would result in minimal aesthetics impacts. If the maturing of landscaping planted as part of those projects becomes a substantial obstruction to views, the vegetation can be trimmed or maintained to limit those impacts.

11. Light and glare

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

Implementation of the Master Plan is unlikely to produce substantial light or glare. Some light and glare could be produced during construction of recommended projects if construction takes place during winter months when the duration of daylight is limited. However, these impacts would be temporary and limited in extent.

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

Finished projects implemented under the Master Plan would not generate light and glare that would interfere with views.

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

While there are numerous existing sources of light and glare in the area of projects recommended in the Master Plan, these existing sources of light and glare would not affect this proposal.

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

Light and glare impacts will be minimal, therefore no measures are proposed to control light and glare impacts.

12. Recreation

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

The City of Sequim operates and maintains several City parks and various pedestrian and bicycle paths/lanes. In addition, there are quasi-public and private facilities in the City that provide active and passive recreational opportunities to the public.

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

Implementation of the Master Plan is not anticipated to result in displacement of any 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:

Impacts to recreational facilities and activities are expected to be limited and, in addition, restricted to construction of projects and therefore also temporary. Therefore, no measures to address recreation impacts are proposed.

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.

The Sequim Opera House (119 N Sequim Avenue) is listed on the National Register; and the Sequim Town Hall –1914 (located at 152 West Cedar Street) is listed on the Washington State Heritage Register.

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.

The location and extent of construction associated with implementation of the Master Plan is uncertain, and therefore, no professional studies have been conducted to identify material evidence, artifacts, or areas of cultural importance within the area addressed in the Master Plan. However, research and surveys in the general area of Sequim indicate the presence of important archaeological resources.

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

At this programmatic stage, the potential existence of historic and cultural resources in the area addressed by the Master Plan was assessed by accessing readily available information on the department of archaeology and historic preservation website as well as City historic and cultural information.

d. 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.

Because of the likely occurrence of archaeological resources in the general area addressed by the Master Plan, construction of any project recommended in the Master Plan should not begin until a project-specific assessment of the project site and surroundings for historic and cultural resources is completed and the Washington State Department of Archaeology and Historic Preservation is contacted. In addition, no project should commence in the absence of an inadvertent discovery plan to address actions to be taken in the event that an unknown resource is encountered during construction.

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.

Sequim has an urban grid of streets that connect to roadways in the County and SR 101, a regional highway serving the Olympic Peninsula.

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?

Clallam Transit and Jefferson Transit provide regional bus routes that connect to Sequim. Sequim Transit Center at N 2nd Avenue and W Cedar Street (currently under re-construction) provides the main transit stop in Sequim.

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

Implementation of the Master Plan is not expected to alter the number of parking spaces in the Sequim area.

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

Implementation of the Master Plan is not expected to result in or create a need for new roads or streets. However, some of the projects resulting from implementation are intended to reduce flooding/improve flood control, and as such, these improvements will have beneficial effects on use of public rights-of-way.

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

No, the projects recommended in the Master Plan will not use or occur in the immediate vicinity of water, rail, or air 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 and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

The number of vehicular trips and peak volumes are not expected to change as a result of implementation of the Master Plan.

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.

Implementation of the Master Plan will not interfere with, affect, or be affected by the movement of agricultural and forest products on area roads or streets.

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

Implementation of the Master Plan is expected to result in limited and temporary transportation impacts that would be restricted to project construction periods. Provision of standard signing and other measures would minimize any construction-period disruption to vehicular and non-vehicular traffic.

15. Public services

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

Implementation of the Master Plan could result in a slight increase in the need for emergency services during construction of recommended projects, and an increase in stormwater program and maintenance staff to implement the recommended activities.

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

Implementation of the programmatic recommendations in the Master Plan is expected to improve public services related to stormwater.

16. Utilities

a. Circle utilities currently available at the site:

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system.

other _____

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 utilities are currently proposed in conjunction with implementation of the Master Plan; however, the formation of a stormwater utility will be evaluated as one of the potential funding options for the stormwater CIP projects and programmatic recommendations included in the Master Plan.

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 of signee _____

Position and Agency/Organization _____

Date Submitted: _____

D. Supplemental Sheet for Non-project Actions

(IT IS NOT NECESSARY to 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?

The Master Plan is primarily a planning document, which as a whole aims to maintain, manage, plan, and construct water management systems to safeguard public health and property and control flooding while protecting streams, lakes, and the Strait of Juan de Fuca. The proposal as a whole will not result in increased impacts to the environment but rather will result in a net improvement in environmental conditions. Benefits to the environment would occur at a slower rate if the Master Plan were not implemented.

No significant increase in emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise are expected to occur under the proposal.

Proposed measures to avoid or reduce such increases are:

The Master Plan as a whole aims to maintain, manage, plan, and construct drainage systems to safeguard public health and property and control flooding while protecting streams, lakes, and the Strait of Juan de Fuca. The projects associated with the Master Plan implementation are not expected to result in significant increased discharges to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise. Therefore, no measures to reduce these increases are proposed.

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

The Master Plan aims to protect and improve aquatic conditions in local streams and the Strait of Juan de Fuca. Implementation of the Master Plan will not result in increased impacts to the environment but rather will result in a net improvement in environmental conditions. Minimal benefits are expected for plants, with the exception of some riparian area improvements that could include invasive vegetation removal and planting of native riparian vegetation.

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

Minimal impacts to plants, animals, fish, or marine life are expected to result from implementation of the Master Plan, therefore no protective measures are proposed. Individual projects will comply with applicable environmental permits and regulations.

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

Implementation of the Master Plan will consume a minimal amount of energy and natural resources.

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

Implementation of the Master Plan will not have a negative impact on energy or natural resources therefore no protective 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?

Implementation of the Master Plan would improve drainage and water management systems to safeguard public health and property and control flooding while protecting streams and the Strait of Juan de Fuca. Projects constructed during implementation of the Master Plan could result in temporary impacts to wetlands and streams, however, these projects would comply with the City's critical area regulations as well as state and federal regulations applicable to aquatic resources, so significant impacts are unlikely to occur. Impacts to cultural and historic sites could occur during implementation of projects recommended by the Master Plan. Parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, and prime farmlands are not expected to be impacted by implementation of the Master Plan.

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

Compliance with City critical area regulations as well as state and federal natural resource protection regulations would minimize the potential for significant impacts to wetlands, streams, and other natural resources. Potential impacts on cultural and historic sites would be minimized by pre-project assessments coupled with implementation of project-specific inadvertent discovery plans.

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?

Implementation of the Master Plan is unlikely to adversely affect land and shoreline use. Some existing land and shoreline uses would benefit from improved drainage conditions as a result of Master Plan implementation.

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

No adverse land and shoreline use impacts are expected from Master Plan implementation, therefore no measures to address land and shoreline impacts are proposed.

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

The proposal would minimally increase demands on transportation and public services, primarily during construction of projects recommended in the Master Plan. No increase in demands on utilities would occur.

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

The increase in demands on transportation and public services would be minimal and temporary, therefore no measures to address such demands are proposed.

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

Implementation of the Master Plan is not expected to conflict with local, state, or federal laws or requirements for the protection of the environment.