APPENDIX A

SEPA DOCUMENTATION

SEPA ENVIRONMENTAL CHECKLIST

UPDATED 2014

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

***Instructions for applicants*:** [help]

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

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

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals: [help]

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. BACKGROUND [help]

1. Name of proposed project, if applicable: [help]

   Cities of Bingen and White Salmon General Sewer/Wastewater Facility Plan

2. Name of applicant: [help]

   City of Bingen, Washington

3. Address and phone number of applicant and contact person: [help]

   Jan Brending, City of Bingen, P.O. Box 607, Bingen, Washington 98605, Phone: (509) 493-2122

4. Date checklist prepared: [help]

   December 2015

5. Agency requesting checklist: [help]

   Washington State Department of Ecology

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

   The General Sewer/Wastewater Facility Plan is currently in draft form. Projects identified are to be completed in the next 6 to 20 years.

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

   The Cities of Bingen and White Salmon will have future sewer and wastewater treatment system replacement projects, which will be reviewed under SEPA documents as they are identified.

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

   A State Environmental Review Process (SERP) Cover Sheet documenting SEPA review, public involvement and financial analysis of alternatives will be prepared for the Department of Ecology. A Cultural Resources Report was prepared by Archaeological Consulting Services for the Oak and Steuben Street Water Main Replacement Project for National Historic Preservation Act Section 106 consultation with the Department of Archaeology and Historic Preservation and the Yakama Nation. This report reviewed all previously completed cultural and archaeological resources reports for the vicinity of the Bingen and White Salmon planning area. Potential impacts to species protected under the authority of the Endangered Species Act will be reviewed in the SERP Cross-Cutter documentation.

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. [help]

   None known.

10. List any government approvals or permits that will be needed for your proposal, if known. [help]

    Washington State Department of Ecology approval of General Sewer/Wastewater Facility Plan as well as any subsequent construction documents that are prepared for the project identified in the Plan.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.) [help]

    The General Sewer/Wastewater Facility Plan (Plan) addresses comprehensive planning and engineering needs for wastewater collection, transmission, treatment, and disposal for the Cities of Bingen and White Salmon (Cities) for the next 20 years. The plan was prepared in accordance with the requirements of the Revised Code of Washington (RCW) Section 90.48, Water Pollution Control, Washington Administrative Code (WAC) Section 173-240-050, General Sewer Plan, WAC 173-240-060, Engineering Report, the United States Code of Federal Regulations (CFR) at 40 CFR 35.917, Facility Planning, and the Washington State Departments of Ecology (Ecology) and Health (DOH) regulations governing such plans. The plan was coordinated with local and regional county planning efforts.

    Elements of the plan include the following sewer collection and treatment facility improvement projects:

    Wastewater Collection System:

    - City of Bingen Depot Street gravity main replacement (Zoned Industrial M2)
    - City of Bingen manhole cover rehabilitation (Commercial and Residential Zones)
    - Disconnect downspouts from the sewer system in both cities' collection systems (multi-zone, city-wide improvements)
    - Install sewer cleanout covers in both cities collection systems (multi-zone, city-wide improvements)

    WWTF Improvements (Zoned City Municipal WWTF):

    - Replace oxidation ditch rotors on older oxidation ditch
    - Replace hydrostatic relief valves on clarifiers
    - Replace RAS/WAS flow meters
    - Aerobic Digester aeration system improvements
    - Install an external bioselector
    - Make safety improvements at the WWTF
    - Replace the heat pump at the Operations Building

    Existing and projected flows and loadings to the Bingen WWTF as identified in the General Sewer and Wastewater Facility Plan are shown in the table below. A hydraulic analysis of the two cities' wastewater collection system was performed using these flows and an evaluation of the City of Bingen wastewater treatment and disposal facilities was performed using these flows and loadings:

Parameter	Existing Design Criteria	Projected 2022	Projected 2032
Total Base Flow	none	0.30 mgd	0.33 mgd
Average Annual Flow	none	0.39 mgd	0.42 mgd
Maximum Month Flow	0.80 mgd	0.55 mgd	0.59 mgd
Peak Day Design Flow	2.0 mgd	1.07 mgd	1.10 mgd
Peak Hour Design Flow	none	2.08 mgd	2.14 mgd
BOD_5 Loading (average annual)	none	859 lb./d	947 lb./d
BOD_5 Loading (maximum month)	1,311 lb./d	1,233 lb./d	1,360 lb./d
TSS Loading (average annual)	none	917 lb./d	1,023 lb./d
TSS Loading (maximum month)	1,311 lb./d	1,394 lb./d	1,554 lb./d
TKN Loading(1) (maximum month)	none	247 lb./d	263 lb./d
Design Population	4,100	not applicable	not applicable
Equivalent Residential Units	none	2,649	2,953

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. [help]

    The General Sewer and Wastewater Facility Plan addresses wastewater planning and engineering needs for the cities of Bingen and White Salmon, Washington in Sections 19, 20, 29 and 30 of Township 3 North, Range 11 East; and Sections 23 and 24 of Township 3 North, Range 10 east.

B. ENVIRONMENTAL ELEMENTS [help]

1. Earth

a. General description of the site [help]
(circle one): Flat, rolling, hilly, steep slopes, mountainous, other _____

The City of White Salmon occupies a plateau above the City of Bingen, which slopes south toward the Columbia River.

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

The slope along the hillside between Bingen and White Salmon approaches 8 to 10 percent. Slopes of 30 to 65 percent occur in the planning area.

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. [help]

Soils present in Bingen and White Salmon include: Cauley silt loam 5 to 10 percent slopes and Leidl-Oreke complex 30 to 65 percent slope, Chemawa ashy loam 8 to 15 percent and 15 to 30 percent slopes, Hood loam 3 to 8 percent slopes, Hood loam 30 to 65 percent slopes, Underwood ashy loam 15 to 30 percent and 30 to 50 percent slopes, gravel pits, rock outcrop rubble.

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

None known.

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. [help]

Approximate quantities of filling and grading associated with the projects identified in the General Sewer/Wastewater Facility Plan will be determined on a project-specific basis. Any imported fill will come from a local source approved by the Project Engineer and the City of Bingen.

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

No clearing or grading is associated with the General Sewer/Wastewater Facility Plan. Minor amounts of erosion could occur during trench excavation and filling once the proposed infrastructure improvements identified in the Plan are installed. Work will occur during the dry summer months and construction BMPs for the control of sedimentation and erosion will be implemented during construction, as required.

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

No new impervious surfaces will be created associated with preparation of the General Sewer & Wastewater Facility Plan. Sewer improvements will be installed in the existing road rights-of-way and improvements to the WWTF will occur within previously disturbed and/or paved areas inside the facility. Any disturbed areas associated with construction of projects identified in the Plan will be repaved or re-graveled in-kind, so no new impervious surfaces will be created.

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

None associated with preparation of the General Sewer and Wastewater Plan. Work on projects identified in the Plan will occur during the dry summer months and construction BMPs for the control of sedimentation and erosion will be implemented during construction.

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. [help]

No significant emissions will be associated with preparation of the General Sewer and Wastewater Facility Plan. Minor amounts of exhaust from construction vehicles and diesel and gas-powered equipment will be generated during construction of projects identified in the Plan. Breezes along the Columbia River will quickly dissipate these emissions.

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

None associated with preparation of the Plan. Emissions associated with the SDS Lumber Company in Bingen likely impact air quality in the planning area on occasion.

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

None required for preparation of the General Sewer and Wastewater Facility Plan. Construction vehicles and equipment used to implement projects identified in the Plan will be properly operated and maintained. They will be shut down during periods of inactivity. Particularly dusty areas will be watered to minimize release of fugitive dust.

3. Water

a. Surface Water: [help]

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. [help]

The planning area is bounded on the south by the Columbia River, on the west by the White Salmon River and Jewett Creek and Dry Creek flow south through both communities to the Columbia River.

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. [help]

Completion of the proposed General Sewer and Wastewater Facility Plan will not require any work within 200 feet of the White Salmon River or the Columbia River. It is likely that sewer improvement projects identified in the plan will be constructed within 200 feet of Jewett Creek and Dry Creek.

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. [help]

No fill or dredge material will be required for completion of the General Sewer and Wastewater Facility Plan for the cities of Bingen and White Salmon. Excavation and filling may be required for installation of sewer and wastewater projects identified in the Plan. Quantities of excavation and filling will be determined on a project-specific basis.

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

No, the projects identified in the General Sewer & Wastewater Facility Plan will not require surface water withdrawals or diversion. However, portions of some of the proposed wastewater collection system and treatment facility improvements identified in the Plan may require trench de-watering. Work will occur during the drier summer to early fall months when rainfall is less frequent in the communities of Bingen and White Salmon.

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

According to Flood Insurance Rate Map (FIRM) Panel No. 530130 0005B, September 24, 1984, portions of the Bingen/White Salmon service area are located within the 100-year floodplains of Jewett Creek, Dry Creek, the White Salmon River and the Columbia. Wastewater collection improvement projects identified in the Plan will generally be installed underground, so they will not impact the 100-year floodplain. Wastewater treatment facility improvements will be primarily above ground and outside of the 100 year floodplain.

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. [help]

The Bingen WWTF discharges secondary effluent from both communities to the Columbia River. The General Sewer and Wastewater Facility Plan identifies proposed improvements to the sewer system and the Wastewater Treatment Facility for the next 20 years. The proposed improvements to the WWTF will provide treatment capacity for both existing flows and future loadings, which are projected to grow modestly over the course of the planning period, but the volume of the effluent from the wastewater treatment facility will not increase above the current rated plant capacity and effluent quality will be within the same levels as the current discharge permit requires.

b. Groundwater:

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. [help]

Groundwater withdrawals are not associated with projects identified in the General Sewer and Wastewater Facility Plan. Projects identified in the plan will conduct excavation activities during the dry summer months to minimize potential for encountering ground water during excavation.

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.

Not applicable to the General Sewer/Wastewater Facility Plan. The Bingen WWTF discharges effluent to surface water and biosolids from the WWTF are land applied on permitted agricultural fields.

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. [help]

No ground disturbing activities will occur associated with the sewer and wastewater Facility Planning process. Ground disturbing activities associated with capital improvement projects identified in the Plan will occur during the dry summer months to limit the potential for runoff from sites excavated for the proposed projects.

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

Not applicable to the General Sewer & Wastewater Facility Plan. Discharge of waste materials to ground or surface waters is not anticipated associated with system improvement projects identified in the Plan.

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

Projects identified in the General Sewer and Wastewater Facility Plan will not impact drainage patterns in Bingen or White Salmon. Proposed improvements at the Bingen WWTF identified in the Plan will be installed largely within existing structures and drainage patterns within the WWTF boundaries will not be altered significantly. Replacement of the Depot Street sewer main, rehabilitation of manholes, disconnecting downspouts from the sewer system and installing sewer cleanout covers will reduce inflow and infiltration of stormwater into the two cities' wastewater collection systems and will not alter overall drainage patterns throughout Bingen and White Salmon.

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

Ground disturbing activities associated with projects identified in the General Sewer and Wastewater Facility Plan will occur during the dry summer months to limit the potential for runoff from sites excavated for the proposed sewer main replacement project. Rehabilitation of manholes, disconnecting downspouts from the sewer system and installing cleanout covers will reduce flows to the WWTF and increase flows to the existing stormwater conveyance system.

4. Plants [help]

a. Check the types of vegetation found on the site: [help]

__X__deciduous tree: alder, maple, aspen, oak
__X_evergreen tree: fir, cedar, pine, other
__X__shrubs
__X__grass
__X__pasture
__X__crop or grain
__X__ 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

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

None associated with the General Sewer & Wastewater Facility Plan. Minimal amounts of grass and low weeds in the street rights-of-way will be disturbed during trenching to install new sewer mains and other improvements identified in the Plan.

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

The northern wormwood, a rare plant species related to sage brush, has been recorded in Klickitat County on exposed basalt rock terraces near the Columbia River waterline. It is unlikely that this species would be present within the Bingen/White Salmon planning area remote from the Columbia River.

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

None associated with projects identified in the General Sewer & Wastewater Facility Plan. Any areas disturbed during construction of improvements identified in the Plan will be repaved, re-graveled or re-planted in-kind.

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

None known

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: [help]

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. [help]

Marbled murrelets, northern spotted owls, bull trout, grizzly bear and gray wolf were identified as potentially present in Klickitat County by the USFWS IPAC Database. It is unlikely that any of these species would be present along the busy city and state rights-of-way where the proposed sewer lines would be installed, manholes will be rehabilitated, downspouts will be redirected to the stormwater system and cleanout covers will be installed. Further, it is unlikely that improvements to the Bingen WWTF identified in the Plan will significantly impact habitat for ESA-listed species.

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

Pacific salmon migrate past the City of Bingen from the Pacific Ocean to inland spawning and rearing areas in the Columbia River. Lower Columbia River steelhead, Lower Columbia River Chinook salmon, Columbia River chum and bull trout are present in the Columbia River and the White Salmon River. Columbia River coho and steelhead are present in the lower reaches of Jewett Creek and Dry Creek.

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

Implementation of projects identified in the General Sewer & Wastewater Facility Plan will ensure that the Bingen WWTF meets the requirements of its NPDES Permit for the next 20 years, which should preserve water quality and fish habitat in the Columbia River. Construction BMPs for the control of sedimentation and erosion will be implemented during construction of projects identified in the Plan, which should preserve riparian and aquatic habitat in Dry Creek, Jewett Creek, the White Salmon River and the Columbia River.

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

None known.

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. [help]

None associated with the proposed improvements identified in the General Sewer & Wastewater Facility Plan. During implementation of projects identified in the Plan, construction equipment will be powered by gas and diesel powered engines.

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

No.

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: [help]

The wastewater collection system improvements identified in the Plan will be for gravity flow components of the collection system. The wastewater treatment facility improvements will use high efficiency blowers and diffusers for the aerobic digester.

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. [help]

None associated with projects identified in the General Sewer & Wastewater Facility Plan. The presence of fuels, lubricants and coolants will be the only hazardous materials associated with the proposed WWTF and sewer system improvement projects.

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

None associated with projects identified in the General Sewer & Wastewater Facility Plan. The WWTF utilizes UV disinfection, so only minimal amounts of chlorine and other noxious chemicals used for cleaning would be present. This should not impact implementation of improvements identified in the General Sewer and Wastewater Facility Plan for the Bingen WWTF. Replacement of the Depot Street sewer main, rehabilitating manholes, disconnecting downspouts from the sewer system, and installing sewer cleanout covers throughout Bingen and White Salmon are activities that are unlikely to affect, or to be affected by any past contamination at project sites.

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.

As the Bingen WWTF utilizes UV disinfection, interactions with hazardous chemicals on the WWTF Site are unlikely. The National Pipeline Mapping System indicates that the only

major pipelines serving the project area are natural gas lines that serve White Salmon from sources to the east with spurs running south to serve Bingen. No gasoline or other hazardous materials pipelines are noted in the planning area on the NPMS website.

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.

The Bingen WWTF utilizes UV disinfection, rather than chlorine, so the potential for interactions with hazardous chemicals in the project areas is significantly reduced. Replacement of the Depot Street sewer main, rehabilitation of manholes, disconnecting downspouts from the sewer system and installing sewer cleanout covers are activities unlikely to require use or storage of hazardous materials.

4) Describe special emergency services that might be required.

None associated with the Sewer & Wastewater Facility Plan.

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

During implementation of the improvements identified in the Plan, construction equipment will be properly operated and maintained. Fueling and maintenance of construction vehicles and equipment will occur remote from Dry Creek, Jewett Creek, the White Salmon River, the Columbia River and other sensitive areas in the planning area.

b. **Noise**

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

Probably the loudest noises in Bingen/White Salmon are generated by railroad locomotives on the tracks along the Columbia River. Other sources of noise include truck traffic and passenger vehicle noise, and noises associated with operation of farm, commercial forestry and industrial equipment.

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. [help]

None associated with preparation of the Sewer & Wastewater Facility Plan. Noise levels associated with construction of projects identified in the plan will be similar to the levels generated by traffic along the Bingen and White Salmon city streets.

3) Proposed measures to reduce or control noise impacts, if any: [help]

None associated with preparation of the Sewer & Wastewater Facility Plan. During construction of projects identified in the Plan, noise reduction technologies on construction equipment and vehicles will be properly operated and maintained. Noise associated with construction activities will be restricted to normal business work hours (7:00 am to 6:00 pm) during week days.

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. [help]

Land use designation in the project area is City-owned Property" for treatment facility and city and city and state rights-of-way and for collection system improvements to be completed by the Cities.

No impact to adjacent land uses are anticipated with this project.

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? [help]

No.

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:

No.

c. Describe any structures on the site. [help]

Residential, commercial, industrial, agricultural and recreational development typical of small Washington cities along the Columbia River.

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

None associated with preparation of the Sewer & Wastewater Facility Plan. During construction of improvements identified in the plan, roadway pavement may need to be broken up in places to excavate trenches for installation of the new sewer and wastewater infrastructure.

e. What is the current zoning classification of the site? [help]

Zoning in Bingen includes various Residential designations, Light Industrial, Industrial, Commercial, Aggregate Resource and Municipal. Zoning in White Salmon includes various Residential designations, Mobile Home, General Commercial, River Front Planned District and Public.

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

White Salmon Comprehensive Plan Designations include: Single Family Residential, Medium Density Residential, Multi-Family Residential, Mobile Home Residential, Local Commercial (C-1), General Commercial (C-2), and Riverfront Planned District (RPD) Light Industrial (M-1) Heavy Industrial (M-2). Natural Hazard Areas are identified as those areas within the 100-year floodplain and areas of slopes greater than 15 percent.

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

Shoreline designations in the planning area include Residential, Mixed-Use, General Commercial, Industrial, River Frontage and Public.

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

Floodplains and steep slopes in Bingen and White Salmon have been identified as "environmentally sensitive."

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

The total population of the Bingen-White Salmon service area is approximately 3,035.

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

None.

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

None required.

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

The wastewater collection and treatment system improvement projects identified in the Plan will support existing and projected land uses in Bingen and White Salmon through 2032.

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

None necessary, as sewer system improvements identified in the Plan will involve minor, short-term construction impacts to traffic associated with sewer main replacements, manhole rehabilitation, disconnecting downspouts from the sewer system and installing sewer cleanout covers will not adversely impact nearby agricultural or forest lands of long-term commercial significance, provided these activities are properly flagged and detoured as necessary.

9. Housing

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

None.

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

None.

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

None required.

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? [help]

Not applicable to the preparation of the General Sewer and Wastewater Facility Plan.

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

Not applicable to the preparation of the General Sewer and Wastewater Facility Plan. Impacts to views associated with projects identified in the Plan are unlikely, as these facility improvements will either be installed below ground or on the site of the Bingen WWTF.

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

None associated with the General Sewer & Wastewater Facility Plan. During implementation of projects identified in the Plan, disturbed areas will be repaved or re-planted in-kind.

11. Light and Glare

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

None associated with preparation of the General Sewer and Wastewater Facility Plan. During implementation of projects identified in the Plan, minor amounts of glare could reflect off construction machinery during water main installation during the mid-day.

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

No.

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

None known.

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

None required.

12. Recreation

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

While wind surfing, boating and fishing occur on the Columbia River, recreational activities associated with the proposed project areas are limited to passage of recreational vehicle traffic through Bingen and White Salmon on SR 14 and SR 141.

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

No. However, implementation of improvements to wastewater treatment and conveyance infrastructure reviewed in the General Sewer & Wastewater Facility Plan should help to improve water quality in the Columbia River near the outfall, which would protect the public participating in recreational activities in the area.

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

Construction activities associated with projects identified in the Plan will be properly flagged and detoured as necessary to minimize traffic disruption. Implementation of wastewater treatment and conveyance infrastructure improvements identified in the plan will improve and protect water quality and recreational safety in the Columbia River.

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. [help]

The Department of Archaeology and Historic Preservation Washington Information System for Architectural and Archaeological Records Data (WISAARD) searchable database was consulted regarding potential historic properties in the communities of Bingen and White Salmon. Several buildings and properties in these communities were potentially eligible for state or federal historic registers, including:

- Green House, 466 Hwy 14, Bingen
- SDS Lumber Company Buildings, Bingen

A number of additional potentially significant properties were identified in White Salmon; however, none of them has been recommended for inclusion in the federal or state historic registers.

It is unlikely that any of these historic structures will be adversely impacted by proposed improvements to the sewer system in the project area, or the Bingen WWTF improvements identified in the General Sewer and Wastewater Facility Plan.

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. [help]

Rob Freed of Archaeological Consulting Services surveyed areas in Bingen associated with water main replacements and reviewed existing literature regarding cultural resources in Bingen and White Salmon in November of 2013 and determined that no archaeological materials were present in the project area. The WISAARD Database identified a number of potentially historic properties in the project area. Potentially historic structures and landmarks identified by WISAARD will be investigated further, once project priorities and work schedules for implementation of the sewer and wastewater system improvements are developed.

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. [help]

Rob Freed of Archaeological Consulting Services surveyed areas in Bingen associated with water main replacements and reviewed existing literature regarding cultural resources in Bingen and White Salmon in November of 2013. He determined that no archaeological materials were present in the immediate project area, and that the potential for disturbance or discovery of materials of cultural, historic or archaeological significance in the vicinity was unlikely. The Department of Archaeology and Historic Preservation Washington Information System for Architectural and Archaeological Records Data (WISAARD) searchable database was consulted regarding potential historic properties in the communities of Bingen and White Salmon. Several buildings and properties in these communities were potentially eligible for state or federal historic registers. Areas identified in the Plan where sewer system improvements are proposed will be investigated in more detail using historic maps, GIS data and consulting with DAHP and concerned tribes as project priorities and work schedules are developed to implement sewer and wastewater system improvements.

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.

In the event that construction crews encounter materials of potential cultural, historic, or archaeological importance, all work on that portion of the site will be stopped and the funding agency Project Manager, Project Engineer, Department of Archaeology and Historic Preservation and the Yakama Nation, Umatilla, Nez Perce and Warm Springs Tribes will be consulted regarding recordation and final curation and storage of these materials.

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. [help]

SR 14 and SR 141 provide access to Bingen and White Salmon.

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? [help]

The Mount Adams Transportation Service (MATS) provides transportation throughout Klickitat County by reservation. There is a designated bus stop at Oak & Humboldt in Bingen.

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

Not applicable to the Sewer and Wastewater Facility Plan.

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). [help]

No. However, proposed sewer and wastewater improvements identified in the plan may disturb the road rights-of-way throughout these communities. While disturbed areas will be restored in-kind once the new sewer infrastructure is installed, no new roadways are proposed.

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

Railroad tracks serve Bingen and run east and west along the Columbia River, which is a major marine transportation corridor.

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? [help]

This project will not generate additional vehicular traffic. No transportation models were used in the development of this 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.

No.

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

None associated with preparation of the General Sewer & Wastewater Facility Plan. Projects identified in the Plan will be properly flagged and detoured if required.

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. [help]

No. The proposed project will improve wastewater conveyance and treatment for the communities of Bingen and White Salmon, Washington.

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

Construction and operation of the sewer system and WWTF improvements identified in the Plan will improve wastewater conveyance and treatment and improve reliability system in the project area for the next 20 years.

16. Utilities

a. Circle utilities currently available at the site: [help]
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. [help]

The City of Bingen WWTF provides wastewater treatment for the cities of Bingen and White Salmon. The Sewer and Wastewater Facility Plan will identify system improvements to provide service to the service area for the next 20 years.

C. SIGNATURE [HELP]

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: Jim Dougherty

Name of signee: Jim Dougherty

Position and Agency/Organization: Planner/Biologist, Gray & Osborne, Inc.

Date Submitted: 12-7-2015

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS [help]

(**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 Bingen and White Salmon General Sewer/Wastewater Facility Plan identifies and analyses sewer and wastewater system improvements to provide adequate wastewater treatment and conveyance capacity for the service area to meet the requirements of its National Pollutant Discharge Elimination System (NPDES) Permit through 2032. Effluent discharges to the Columbia River will increase as the population increases over the next 20 years and the Plan identifies wastewater conveyance and treatment options to maintain or improve the quality of wastewater effluent discharged through the planning period.

   Proposed measures to avoid or reduce such increases are:

   Proposed Collection System Improvements:

   - Depot Street gravity sewer main replacement
   - Bingen manhole cover rehabilitation
   - Disconnect downspouts from the sewer system
   - Install sewer clean-out covers.

   Proposed WWTF Improvements:

   - The proposed improvements will allow both old and new oxidation ditches to operate simultaneously to provide adequate capacity for both current and projected flows and loadings
   - Replace two cage rotors on older oxidation ditch with new rotors
   - Replace four hydrostatic relief valves on the three clarifiers

- Install external biological selectors
- Install two new 30 hp 5505 cfm blowers with variable frequency drives to replace existing blowers that have reached the end of their useful life and are not able to serve the projected BOD and TSS loadings to the WWTF
- Replace aerobic digester diffuser system
- Replace DO probes in the aerobic digester

Other Proposed WWTF Improvements:

- Arc flash protection on electrical equipment
- Automatic Transfer Switch (ATS) for Auxiliary Power Generator
- Replace Heat Pump for Operations Building
- RAS/WAS magnetic flow meter replacement
- Weir Gate modifications on the older oxidation ditch to allow both ditches to operate simultaneously.

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

   Construction impacts to plants, animals, fish and aquatic life associated with installation of the sewer and WWTF improvements identified in the General Sewer/Wastewater Facility Plan would have minimal potential for adverse impacts, as most of these improvement would occur in previously disturbed areas in the collection system and at the WWTF. Once construction of proposed improvements is complete, they would generally improve and protect water quality and habitat for animals, fish and aquatic life.

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

   See 1 above. Construction BMPs for the Control of Sedimentation and Erosion will be implemented during construction to minimize potential for release of turbid runoff to streams within the project service area. BMPs would include use of silt fences, straw bales and sedimentation ponds to control and clarify runoff leaving construction sites to protect water quality and aquatic habitat. Vegetation disturbed during construction will be replaced in-kind per City of Bingen or White Salmon Landscaping Guidelines.

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

   Construction equipment used to install proposed sewer system and WWTF improvements will utilize minimal amount of fossil fuels and electrical energy.

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

   Once proposed wastewater conveyance and treatment infrastructure improvements (which include modern, energy-efficient pumps, blowers and variable frequency drives) are installed, energy utilized by these systems will be reduced and natural resources will be conserved.

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 sewer system and WWTF improvements identified in the General Sewer and Wastewater Facility Plan would protect habitat for threatened and endangered salmonid species

present in the Columbia River, White Salmon River, Jewett Creek and Dry Creek. Parks, wilderness areas: nearby Wild and Scenic reaches of the White Salmon and Klickitat Rivers would be unlikely to be impacted; however, protection of water quality is consistent with efforts to protect habitat for threatened and endangered fish and wildlife present in the Columbia River near the Bingen WWTF outfall. Impacts to floodplains, farmlands, cultural sites and wetlands are expected to be minimal.

Restricting proposed sewer system improvements to the following projects will minimize potential for adverse impacts to environmentally sensitive areas and areas designated for government protection in the vicinity of Bingen:

- Depot Street gravity sewer main replacement
- Bingen manhole cover rehabilitation
- Disconnection of downspouts from the sewer system
- Installation of sewer clean-out covers.

Similarly, the proposed WWTF improvements have little potential for adverse impacts to these resources as they will occur within the footprint of the existing WWTF and will largely replace or update existing infrastructure that is in need of replacement or has reached the end of its useful life. Once the proposed WWTF improvements are implemented, sensitive areas and areas designated for government protection near Bingen will be protected and potentially improved.

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 sewer system and WWTF improvements identified in the Bingen and White Salmon General Sewer and Wastewater Facility Plan will protect water quality and shoreline habitat in the Columbia River and allow the Bingen WWTF to meet the discharge limits identified in its National Pollutant Discharge Elimination System (NPDES) Permit through the planning period (2032).

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

   Projects identified in the General Sewer & Wastewater Facility Plan will be implemented as permitting and funding allow over the course of the next 20 years. Sewer system improvements will involve replacement of an aging and undersized section of sewer main on Depot Street in the City of Bingen, rehabilitation of sewer manholes in the City of Bingen, disconnection of sewer downspouts from the sewer system in both cities and installation of sewer cleanout covers in both cities to reduce flow to the WWTF. Proposed improvements at the Bingen WWTF will improve the function and efficacy of treatment at this facility and allow a modest increase in BOD and TSS loading capacity to accommodate growth over the next 20 years. Improved wastewater treatment will protect important fish and wildlife aquatic habitat in the Columbia River downstream of Bingen.

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

   Implementation of the proposed sewer and WWTF improvements identified in the General Sewer and Wastewater Facility Plan will provide adequate wastewater collection, treatment and disposal for the communities of Bingen and White Salmon through 2032. Construction of projects identified in the plan may temporarily disrupt traffic along roadways where sewer mains will be replaced (Depot Street), where manholes will be rehabilitated and cleanout covers will be installed.

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

Construction projects identified in the Plan will be properly detoured and/or flagged to redirect traffic to facilitate flow through the area until projects are completed. See D.1 above for a list of project activities identified in the Plan.

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

   Projects identified in the Bingen and White Salmon General Sewer and Wastewater Facility Plan will allow the Bingen WWTF to continue to meet the discharge limits in its NPDES Permit for the next 20 years. Sewer system improvements identified in the plan will reduce Infiltration and Inflow (I/I) to the WWTF and improve the efficacy of wastewater treatment. All projects identified in the plan will undergo appropriate environmental reviews and permitting prior to construction to ensure that they are compatible with local, state and federal laws for the protection of the environment.