

CHAPTER 2

REGULATORY REQUIREMENTS

INTRODUCTION

Federal and state regulatory requirements were used in developing the design criteria for improvements to the Cities of Bingen and White Salmon’s wastewater collection, treatment, and disposal facilities. The purpose of this Chapter is to identify and summarize the regulations that affect the planning, design, and approval of improvements discussed in this report.

This chapter does not describe each regulation in detail; rather, it addresses important facets of the regulations that affect the planning and design process. Subsequent sections of this report address technical requirements of the regulations at a level of detail appropriate for the evaluation provided by that section. For instance, Chapters 5, 6 and 7 contain more detailed information regarding wastewater collection and treatment system and biosolids management regulations.

FEDERAL AND STATE STATUTES, REGULATIONS AND PERMITS

This section discusses some of the various federal and state laws that may affect wastewater system construction and operations, as well as other relevant permits, programs, and regulations.

FEDERAL CLEAN WATER ACT

The Federal Water Pollution Control Act is the principal law regulating the water quality of the nation’s waterways. Originally enacted in 1948, it was significantly revised in 1972 and 1977, when it was given the common title of the “Clean Water Act” (CWA). The CWA has been amended several times since 1977. The 1987 amendments replaced the Construction Grants program with the Water Pollution Control State Revolving Fund (SRF) that provides low-cost financing for a range of water quality infrastructure projects.

The National Pollutant Discharge Elimination System (NPDES) program was established by Section 402 of the CWA and its subsequent amendments. The Department of Ecology administers NPDES permits for the U.S. Environmental Protection Agency (EPA). Most NPDES permits have a 5-year term and place limits on the quantity and quality of pollutants that may be discharged. There are ten current NPDES permits issued as shown on Table 2-1. The NPDES program covers wastewater, industrial discharge, and stormwater permits.

TABLE 2-1

NPDES Permits Issued

Facility	Permit Number	Permit Type
Bingen POTW	WA0022373	Municipal NPDES IP
Dickey Farms, Inc.	WA0050407	Industrial NPDES IP
Mid Columbia Asphalt Co Bingen	WAG505032	Sand and Gravel GP
Rapid Ready Mix Bingen Plant	WAG505008	Sand and Gravel GP
SDS LUMBER CO	WA0051152	Industrial NPDES IP
SDS LUMBER CO	WAR001206	Industrial SW GP
SDS Lumber Co Barnedt Pit	WAG505064	Sand and Gravel GP
SDS Lumber Co Bingen Pit	WAG505062	Sand and Gravel GP
Underwood Fruit & Warehouse	WAG435043	Fruit Packer GP
Wilcox & Flegel Bingen Plant	WAR010298	Industrial SW GP

The City of Bingen’s current individual publicly owned treatment works (POTW) NPDES permit, No. WA-002237-3, is attached as Appendix B. The Underwood Fruit NPDES permit is provided in Appendix C. The City’s current permit effluent limits are shown in Table 4-3 in Chapter 4 and the Fact Sheet in Appendix B. Condition S.1 of the City’s permit requires the treatment plant effluent to meet limits for 5-day biochemical oxygen demand (BOD₅), total suspended solids (TSS), fecal coliform bacteria, pH, temperature, and total ammonia.

Condition S.2 lists monitoring requirements including flow, BOD₅, and TSS for the influent. Monitoring requirements for the effluent include BOD₅, TSS, pH, dissolved oxygen (DO), temperature, total ammonia, fecal coliform, nitrates, oil and grease, phosphorus, alkalinity and total hardness. Condition S.3 lists reporting and recording requirements.

Condition S.4.A specifies the WWTF design capacity for maximum month BOD₅ loading is 1,311 lbs/day and 1,311 lbs/day for TSS. The maximum peak and average daily flow capacities for the WWTF are 2.0 and 0.8 million gallons per day (mgd), respectively. Condition S.4.B requires the City to prepare a plan to maintain adequate capacity when flows and loadings to the WWTF exceed 85 percent of design capacity for 3-consecutive months or the projected increase would reach design capacity within five years, whichever occurs first. There are other conditions of the permit that can be found in Appendix B.

Chapter 7 of this Plan includes an evaluation of the WWTF operating conditions and provides recommendations for improving and maintaining adequate treatment capacity to ensure long-term NPDES permit compliance.

The EPA requires stormwater discharge permits for certain types of industrial activities. The EPA uses two methods to determine if the activity requires a permit. The first method is the Standard Industrial Classification (SIC) code. The second method is called a narrative description. This distinction is important because an SIC code activity may or may not require a NPDES Permit. However, narrative description activities require a permit for any described activity.

Even if there is an applicable SIC code for the type of activity taking place, businesses may not always need a discharge permit. Under current EPA regulations, these types of industrial activities may be conducted without obtaining a stormwater discharge permit, if no material handling equipment or activities, raw materials, intermediate products, final products, waste materials, byproducts, or industrial machinery is exposed to stormwater [40 CFR 122.26(b)(14)].

PROPOSED CAPACITY, MANAGEMENT, OPERATION AND MAINTENANCE REGULATIONS

EPA has proposed a new round of regulations titled Capacity, Management Operation and Maintenance (CMOM). Though the regulations are yet to be formally adopted by EPA, some municipalities are anticipating the adoption and have moved forward with implementation. CMOM focuses on the failure of collection systems and requires a program for long-term financing and repair. Under its authority granted by the federal Clean Water Act, EPA seeks to address sanitary sewer overflows (SSO) under the CMOM program. It is expected that elements of CMOM could be incorporated into NPDES permits.

In general the CMOM requirements can be summarized in the following elements:

1. General performance standards including collection system maps, information management, and odor control.
2. Program documentation including the goals, organizational and legal authority of the organization operating the collection system.
3. An overflow response plan that requires response in less than 1 hour and is demonstrated to have sufficient and adequate personnel and equipment, etc. Estimated volumes and duration of overflows must be accurately measured and reported to the regulatory agency.
4. System evaluation requires that the entire system be cleaned on a scheduled basis (for example, once every 5 years), be regularly TV inspected, and that a program for short and long term rehabilitation replacement be generated. EPA has proposed, as a rule of thumb, a 1.5 to 2 percent system replacement rate which implies that an entire collection system is replaced somewhere in the range of a 50- to 70-year time period.

5. A capacity assurance plan that will use flow meters to model I&I, ensure lift stations are properly operated and maintained, and that source control is maintained.
6. A self-audit program to evaluate and adjust performance.
7. A communication program to communicate problems, costs, and improvements to the public and decision-makers.

EPA is considering some changes in design standards for collection systems including requiring that sanitary sewer overflows not occur except in extreme storms. They have also decided that they will not predefine the type of storm, leaving that decision to the design engineer.

FEDERAL ENDANGERED SPECIES ACT

On March 16, 1999, the National Marine Fisheries Service (NMFS) listed the Puget Sound Chinook as “threatened” under the Endangered Species Act (ESA). In 1999, the United States Fish and Wildlife Service (USFWS) listed the Bull Trout as “threatened.” ESA listings impact activities that affect salmon and trout habitat, such as water use, land use, construction activities, and wastewater disposal. Impacts to the greater Bingen and White Salmon area may include longer timelines for permit applications, and more stringent regulation of construction impacts and activities in riparian corridors.

In response to existing and proposed ESA listings of salmon, steelhead, and trout species throughout Washington State, Governor Locke established the Office of Salmon Recovery in 1997 to direct the State’s salmon recovery efforts. Rather than attempting to avert additional ESA listings, the Statewide Strategy provides local input into, and maintains some local control over, the salmon recovery regulatory processes that affects the majority of Washington State. The governor’s Salmon Recovery Funding Board is managed by the State Recreation and Conservation offices.

In order to minimize liability under the ESA, local governments need to demonstrate that their land use regulations will not result in a prohibited “take” of a listed species, including adverse modification of critical habitat.

Per the *City of Bingen Water System Plan (2008)*, the Columbia River provides habitat for Lower Columbia Coho salmon (threatened), Mid-Columbia River steelhead (threatened), Upper Columbia River summer steelhead (threatened), Columbia River Bull Trout (threatened), Upper Columbia River spring Chinook salmon (endangered), Snake River spring/summer Chinook salmon (threatened), and Snake River sockeye salmon (endangered). Jewett Creek in Bingen is designated as a salmon habitat for Coho and steelhead. As these species are listed as threatened or endangered by the USFWS or

NMFS, then the presence of these species could potentially impact future WWTF and outfall modifications.

RECLAIMED WATER STANDARDS

The *Water Reclamation and Reuse Standards* define the water quality standards for reclaimed water. The City of Bingen WWTF does not generate reclaimed water; however, an evaluation of the feasibility of reuse, either generated at the existing WWTF (after appropriate modifications) or a possible new satellite WWTF, is provided in Chapter 7.

The standards for the use of reclaimed water are outlined in RCW 90.46 and in a separate document published by the Washington State Department of Health and Ecology entitled “Water Reclamation and Reuse Standards.” Reclaimed water is the effluent derived from a wastewater treatment system that has been adequately and reliably treated, such that it is no longer considered wastewater and is suitable for a beneficial use or a controlled use that would not otherwise occur. The legislature has declared that “the utilization of reclaimed water by local communities for domestic, agricultural, industrial, recreational, and fish and wildlife habitat creation and enhancement purposes (including wetland enhancement) will contribute to the peace, health, safety, and welfare of the people of the State of Washington.”

The generation of Class “A” reclaimed water has four minimum requirements that are described below:

Continuously Oxidized - Wastewater that at all times has been stabilized such that the monthly average BOD₅ and TSS are less than 30 mg/L, is non-putrescable and contains dissolved oxygen.

Continuously Coagulated - Oxidized wastewater that at all times has been treated by a chemical or equally effective method to destabilize and agglomerate colloidal and finely suspended matter prior to filtration.

Continuously Filtered - Oxidized and coagulated wastewater that at all times has been passed through a filtering media so that the turbidity of the filtered effluent does not exceed an average of 2 nephelometric turbidity units (NTU), determined monthly, and does not exceed 5 NTU at any time.

Continuously Disinfected - Oxidized, coagulated and filtered wastewater that at all times has been disinfected to destroy or inactivate pathogenic organisms. A group of indicator microorganisms, coliform bacteria, are used to measure the effectiveness of the disinfection process. The Class “A” reclaimed water standard is a total coliform density of 2.2 per 100 milliliters (ml) for the median of the last 7 days of samples, with no sample having a density greater than 23 per 100 ml.

Reclaimed water may be used to recharge groundwater by surface percolation or through direct injection as long as the quality of the reclaimed water meets groundwater recharge criteria which are defined in the Reuse Standards. Groundwater recharge projects must also be in compliance with the state's groundwater regulations listed in WAC 173-200. This regulation contains groundwater quality criteria that are to be met in the saturated zone. Recharge of groundwater with reclaimed water would require a State Waste Discharge Permit issued by Ecology. Ecology may also require the development of a groundwater monitoring program to ensure degradation does not occur.

Discharge of reclaimed water for the purpose of streamflow augmentation, fish and wildlife habitat, irrigation supply, or water right replenishment or transfer must comply with WAC Chapter 173-201a. A beneficial use of the reclaimed water must be established for the project to be accepted as a streamflow augmentation project. Short-term storage or an alternative disposal system (e.g., an outfall) must be provided for situations where the reclaimed water cannot be used due to bad weather, reduced demand, etc. Provisions must also be made for storage or disposal of water that does not meet the treatment and water quality criteria, perhaps due to a treatment upset or equipment failure.

The Reuse Standards require reliability for individual treatment units such as biological treatment, secondary clarification, coagulation, filtration, and disinfection. Generally, if long-term storage or an alternative disposal method is not available, the facility must have redundant units each capable of treating the entire flow, or short-term storage with standby replacement equipment provided. Furthermore, coagulation and chlorination unit processes must have standby chemical feed equipment provided, regardless of storage and disposal options, to ensure uninterrupted chemical feed.

Washington State began a rulemaking process in 2006 to update and to convert the 1997 Water Reclamation and Reuse Standards (Washington State Department of Ecology, 1997) into a regulation, the Reclaimed Water Rule, Chapter 173-219 Washington Administrative Code (Washington State Department of Ecology, 2010). The Rule is intended to provide a consistent and efficient regulatory process as well as to be sufficiently adaptable in order to govern reclaimed water production over a long time period.

The Rule refers to a Reclaimed Water Facilities Manual, a.k.a. the "Purple Book," for supplemental guidance on implementing the Rule. Gray & Osborne, Inc. was retained by the Washington Coalition for Clean Water and the Washington State Department of Ecology (Ecology) to assist in development of the manual, which has been released in draft form for review by stakeholders. The date for final adoption of the Reclaimed Water Rule is uncertain due to State financial and policy issues; the earliest potential adoption is early 2016.

NATIONAL ENVIRONMENTAL POLICY ACT

The National Environmental Policy Act (NEPA) was established in 1969 and requires federal agencies to determine environmental impacts on all projects requiring federal permits or funding. Federally delegated activities such as NPDES permits or Section 401 Certification are considered state actions and do not require NEPA compliance. If a project involves federal action (through, for example, an Army Corps of Engineers Section 404 permit), and is determined to be environmentally insignificant, a Finding of No Significant Impact (FONSI) is issued, otherwise an Environmental Assessment (EA) or Environmental Impact Statement (EIS) would be required. NEPA is not applicable to projects that do not include a federal component. The Cities will need to follow NEPA procedures in order to obtain the permits required for upgrades to the WWTF, which are outlined in the Capital Improvement Plan of this document. Compliance with NEPA is also required to obtain federal funding for any improvements to the two cities' wastewater collection systems or the City of Bingen wastewater treatment facility.

When both federal and state licenses or permits are required, then both NEPA and SEPA requirements must be met. WAC 197-11-610 allows the use of NEPA documents to meet SEPA requirements.

FEDERAL CLEAN AIR ACT

The Federal Clean Air Act requires all wastewater facilities to plan to meet the air quality limitations of the region. Bingen and White Salmon fall in the jurisdiction of the Ecology Central Regional office. Ecology is responsible for enforcing federal, state and local outdoor air quality standards and regulations in Klickitat County.

STATE STATUTES, REGULATIONS AND PERMITS

STATE WATER POLLUTION CONTROL ACT

The intent of the state Water Pollution Control Act is to “maintain the highest possible control standards to ensure the purity of all waters of the state consistent with public health and the enjoyment...the propagation and protection of wildlife, birds, game, fish and other aquatic life, and the industrial development of the state.” Under the Revised Code of Washington (RCW) 90.48 and the Washington Administrative Code (WAC) 173-240, Ecology issues permits for wastewater treatment facilities and land application of wastewater under WAC 246-271.

Submission of Plans and Reports for Construction of Wastewater Facilities, WAC 173-240

Prior to construction or modification of domestic wastewater facilities, engineering reports and plans, and specifications must be submitted to and approved by Ecology. This regulation outlines procedures and requirements for the development of an

engineering report that thoroughly examines the engineering and administrative aspects of a domestic wastewater facility project. This state regulation defines a facility plan as an engineering report under federal regulations, 40 CFR Part 35.

Key provisions of WAC 173-240 are provided below:

- An engineering report for a wastewater facility project must contain everything required for a general sewer plan unless an up-to-date general sewer plan is on file with Ecology.
- An engineering report shall be sufficiently complete so that plans and specifications can be developed from it without substantial changes.
- A wastewater facility engineering report must be prepared under the supervision of a professional engineer.

Criteria for Sewage Works Design, Washington State Department of Ecology

Ecology has published design criteria for collection systems and wastewater treatment plants. While these criteria are not legally binding, their use is strongly encouraged by Ecology since the criteria are used by the agency to review engineering reports for upgrading wastewater treatment systems. Commonly referred to as the “Orange Book,” these design criteria primarily emphasize unit processes through secondary treatment, and also includes criteria for planning and design of wastewater collection systems. Any expansion or modification of the City of Bingen or White Salmon’s collection system and/or WWTF plant will require continued conformance with Ecology criteria otherwise the cities would be required to justify and obtain exceptions to these criteria.

Certification of Operators of Wastewater Treatment Plants, WAC 173-230

Wastewater treatment plant operators are certified by the state Water and Wastewater Operators Certification Board. The operator assigned overall responsibility for operation of a wastewater treatment plant is defined by WAC 173-230 as the “operator in responsible charge.” This individual must have state certification at or above the classification rating of the plant.

The City of Bingen’s WWTF is currently assigned a Class II rating and the operating staff assigned to the plant have the required certification. One of the operators has a Class III certification and the other has a Class II certification.

SURFACE-WATER QUALITY STANDARDS (WAC 173-201A)

WAC 173-201A establishes water quality standards within the State of Washington. The state adopted revised water quality standards on July 1, 2003. The standards are based on two objectives: protection of public health and enjoyment, and protection of fish,

shellfish, and wildlife. For each surface water body in the state, the standards assign specific uses, such as aquatic life, recreation or water supply.

Water quality standards have been developed for each use, for parameters such as fecal coliform, dissolved oxygen, temperature, pH, turbidity, and toxic, radioactive, deleterious substances. The surface water criteria include 29 toxic substances, including ammonia, residual chlorine, several heavy metals, polychlorinated biphenyls (PCBs), and pesticides.

The water uses that are defined in the standards for the portion of the Columbia River to which the WWTF discharge include:

Aquatic Life Uses

- Salmonid spawning, rearing

Recreational Uses

- Primary contact

Water Supply Uses

- Domestic water
- Industrial water
- Agricultural water
- Stock water

Miscellaneous Uses

- Wildlife habitat
- Harvesting
- Commerce and navigation
- Boating
- Aesthetics

It is the policy of the State of Washington to maintain existing beneficial uses of surface water by preventing degradation of existing water quality. However, certain allowances are made by Ecology for discharging treated wastewater into a surface water that enable a temporary or mitigated degradation to occur. These allowances are made by establishing mixing zones and determining the assimilative capacity of the receiving water.

The anti-degradation policy aims to maintain the highest possible quality of water in the state by preventing the deterioration of water bodies that currently have higher quality than the water quality standards require. The revised water quality standards define three tiers of waters in the anti-degradation policy.

Tier I water bodies are those with violations of water quality standards from natural or human-caused conditions. The focus of water quality management is on maintaining or improving current uses and preventing any further human-caused degradation.

Tier II water bodies are those of higher quality than required by the water quality standards. The focus of the policy is on preventing degradation of the water quality and to preserve the excellent natural qualities of the water body. New or expanded actions are not allowed to cause a “measurable change” in the water quality unless they are demonstrated to be “necessary and in the overriding public interest.”

Tier III are the highest quality “outstanding resource waters.” Tier III(A) prohibits any and all future degradation, or Tier III(B) which allows for de minimis (below measurable amounts) degradation from well-controlled activities

Discharging to surface water requires an NPDES permit issued by Ecology under WAC 173-220. Wastewater treatment plants must generally meet technology-based limits that include 30 mg/L Total Suspended Solids (TSS) and 30 mg/L 5-day Biochemical Oxygen Demand, BOD₅ (typically termed “30-30 limits”). Additionally, under WAC 173-201A-060, State Water Quality Standards, Ecology is authorized to condition NPDES permits so that the discharge meets water quality standards. Therefore, other permit conditions in addition to or more stringent than the 30-30 limits could be added to ensure that the water quality of the receiving water is not degraded.

STATE ENVIRONMENTAL POLICY ACT

WAC 173-240-050 requires a statement in all wastewater comprehensive plans regarding proposed projects in compliance with the State Environmental Policy Act (SEPA), if applicable. The capital improvements proposed in this plan will fall under SEPA regulations. A SEPA checklist is included in Appendix A of this report for use in the environmental review for the project. In most cases a determination of non-significance is issued (DNS); however, if a project will have a probable significant adverse environmental impact an environmental impact statement (EIS) will be required.

ACCREDITATION OF ENVIRONMENTAL LABORATORIES (WAC 173-050)

The State of Washington established a requirement that all laboratories reporting data to comply with NPDES permits must be generated by an accredited laboratory. This accreditation program establishes specific tasks for quality control and quality assurance (QA/QC) that are intended to ensure the integrity of laboratory procedures. Accreditation requirements must be met for any on-site laboratory or outside laboratory used to analyze samples. Only accredited laboratories may perform analyses reported for compliance with NPDES permits. In planning for an on-site laboratory, personnel staffing must be sufficient to allow for QA/QC procedures to be performed. The Bingen WWTF lab is currently accredited for determination of the following parameters TSS, BOD₅, ammonia, dissolved oxygen, pH and fecal coliform.

MINIMAL STANDARDS FOR SOLID WASTE HANDLING (WAC 173-304)

Grit and screenings are not subject to the sludge regulations in WAC 173-308, but their disposal is regulated under the state solid waste regulations, WAC 173-304. Waste placed in a municipal solid waste landfill must not contain free liquids, nor exhibit any of the criteria of a hazardous waste as defined by WAC 173-303. To be placed in a municipal solid waste landfill, grit, screenings, and incinerator ash must pass the paint filter test. This test determines the amount of free liquids associated within the solids, and includes the toxic characteristic leachate procedure (TCLP) test, which determines if the waste has hazardous characteristics.

WAC 173-308 BIOSOLIDS MANAGEMENT

The City produces Class B biosolids which are land applied. Unlike the grit and screenings mentioned above, these biosolids are governed under WAC 173-308. The State of Washington has adopted its own regulations governing the use or disposal of biosolids, WAC 173-308. These regulations became effective in March 1998 and are enforced by the State Department of Ecology (Ecology). The requirements in WAC 173 308 are very similar to the requirements of the federal 503 regulations.

There are three fundamental elements of the federal 503 and State 308 regulations that establish minimum criteria for beneficial use of biosolids:

1. Pollutant concentrations and application rates;
2. Pathogen reduction measures (Class A or B); and
3. Vector attraction reduction measures.

Management Practices

For biosolids that are Class “B” with respect to pathogens and have met the three criteria discussed above, the 503 and 308 regulations identify specific management practices that must be followed during land application of biosolids. The biosolids must be applied at a rate that is equal to or less than the agronomic rate. The placement of biosolids on land cannot adversely affect a threatened or endangered species. Biosolids cannot be applied to ground in a manner that would cause it to enter wetlands or a surface water body (e.g., on frozen ground or snow-covered ground) nor can it be applied within 10 meters or less of a surface water. Class “B” biosolids may not be applied to lawns or gardens.

Monitoring Requirements

Monitoring frequencies are based on quantities of biosolids produced. (It is not generally necessary to verify that pathogen and vector attraction reduction measures are met for

each individual load of biosolids that is land applied, per WAC 173-308-150(3).) The actual monitoring frequencies will depend on the frequency of applications.

Recordkeeping, Reporting, and Certifications

The 503 and 308 regulations have specific recordkeeping, reporting, and certification requirements for land application of biosolids. The general biosolids permit implements requirements for recordkeeping and reporting in accordance with WAC 173-308-290 and -295. Records must be kept for meeting all pathogen reduction and vector attraction reduction requirements for biosolids and domestic septage. For biosolids, records must be kept of analyses performed for meeting trace pollutant criteria. Ecology requires that all facilities, regardless of size, make annual reports to both Ecology's headquarters and the appropriate regional office, by March 1 of each year.

Permitting

WAC 173-308-310 lists permitting requirements for municipalities managing biosolids. The primary permit required for biosolids management activities is the State General Permit for Biosolids Management. When applying for coverage under the General Permit, the permittee must carry out public notice as required under WAC 173 308 310(11), and public hearings if required in accordance with WAC 173 308 310(12), and comply with requirements of the State Environmental Policy Act (SEPA) as stipulated under WAC 173-308-310(030). Public notice requirements for facilities subject to this permit vary depending on the purpose the notice is serving and the quality of biosolids being managed. Notification must be made to the general public, affected local health departments, and interested parties.

WETLANDS

Dredging and Filling Activities in Natural Wetlands (Section 404 of the Federal Water Pollution Control Act)

A Corps permit is required when locating a structure, excavating, or discharging dredged or fill material in waters of the United States or transporting dredged material for the purpose of dumping it into ocean waters. Typical projects requiring these permits include the construction and maintenance of piers, wharves, dolphins, breakwaters, bulkheads, jetties, mooring buoys, and boat ramps.

If wetland fill activities cannot be avoided, the negative impacts can be mitigated by creating new wetland habitat in upland areas. If other federal agencies agree, the Corps would generally issue a permit.

Wetlands Executive Order 11990

This order directs federal agencies to minimize degradation of wetlands and enhance and

protect the natural and beneficial values of wetlands. This order could affect siting of lift stations and sewer lines.

SHORELINE MANAGEMENT ACT

The Shoreline Management Act of 1971 (RCW 90.58) establishes a broad policy giving preference to shoreline uses that protect water quality and the natural environment, depend on proximity to the water, and preserve or enhance public access to the water. The Shoreline Management Act jurisdiction extends to lakes or reservoirs of 20 acres or greater, streams with a mean annual flow of 20 cubic feet per second (CFS) or greater, marine waters, and an area inland 200 feet from the ordinary high water mark. Projects are reviewed by local governments according to state guidelines.

The Bingen wastewater treatment plant and portions of the collection system are located within shoreline areas.

FLOODPLAIN DEVELOPMENT PERMIT

Local governments that participate in the National Flood Insurance Program are required to review projects in a mapped floodplain and impose conditions to reduce potential flood damage from flood water. A Floodplain Development Permit is required prior to construction, including projects involving wastewater collection facilities.

HYDRAULIC PROJECT APPROVAL

Under the Washington State Hydraulic Code (WAC 220-110), the WDFW requires a hydraulic project approval (HPA) for activities that will “use, divert, obstruct, or change the natural flow or bed” of any waters of the state. For City activities such as pipeline crossings of streams or WWTF outfall modifications, an HPA will be required. The HPA will include provisions necessary to minimize project specific and cumulative impacts to fish.

CITY SEWER ORDINANCES AND PLANNING POLICIES

The City of Bingen and White Salmon each have separate Municipal Codes that regulate sewer services. These chapters of the municipal code have been included in Appendix D. The sewer ordinances address such issues as requirements for connections to sewer system, permits for sewer installation by developers, rates for sewer service, development requirements for private sewer systems, conditions for sewer service extensions, and sewage pretreatment regulations.

Per Section 13.12.010 of the Bingen Municipal Code, all properties within the City’s sewer service area are required to connect to the City’s sewer system.

Per Section 17.68.105 of the White Salmon Municipal Code, underground utilities, including sewer service, shall be provided in all zoning districts, unless waived by City Council due to impractical construction conditions. Per Section 13.12.030 of the White Salmon Municipal Code, sewer connections are required for all properties within the City and on any street or right-of-way in which there is now located, or may in the future may be located, a public sewer.