

2. APPLICABLE REGULATIONS, POLICIES & PROGRAMS

Numerous federal, State of Washington and local regulations, laws, policies and programs affect how stormwater and surface water are managed in unincorporated Pierce County. This chapter describes those pertinent to the Mid-Puyallup Basin with emphasis on coordination with other programs and consistency with adopted policies and plans.

2.1 Federal Clean Water Act

Section 402 National Pollutant Discharge Elimination System (NPDES)

The goal of the Clean Water Act is to restore all of the nation's waters to a "fishable and swimmable" condition. To meet this goal, a nationwide regulatory program called the National Pollutant Discharge Elimination System (NPDES) was established. In 1987, amendments to the Clean Water Act required the Environmental Protection Agency (EPA) to promulgate regulations for storm water discharges. The regulations defined certain stormwater discharges as point source discharges subject to the NPDES Permit Program. Two broad areas were created as follows:

1. "Stormwater Discharges Associated with Industrial Activity"
2. "Municipal Separate Storm Sewer Systems" in two phases. "Phase I" applies to municipalities with populations greater than 100,000 people. "Phase II" requirements, expected to be implemented by 2005, apply to municipalities with populations of 10,000 people or more and certain urban areas.

EPA delegated responsibility for implementation of the NPDES permit program to the Washington State Department of Ecology (Ecology).

Ecology issued the "Phase I" NPDES Permit for the South Puget Sound Water Quality Management Area (which includes Pierce County) in July 1995. Ecology administratively extended the "Phase I" Permit in 2000 pending development of a "Phase II" permit. All permit requirements remain legally binding in an administratively extended permit.

The NPDES stormwater permit requires that permit holders control pollutants in stormwater to the maximum extent practicable, primarily by implementing a stormwater management program, a functional component of which is the basin plans. Ecology approved the Pierce County's Stormwater Management Program in 1998. Required elements include:

- A program to control runoff from new development, redevelopment, and construction sites
- Treatment and source control measures for existing commercial and residential areas

- An operation and maintenance program for new and existing stormwater facilities
- Practices for maintaining public streets and highways to reduce stormwater runoff impacts
- A program to include water quality considerations in flood management projects
- A program to reduce pollutants from pesticide and fertilizer use
- A program to detect, remove, and prevent illicit discharges to the municipal separate storm sewer system
- A program to reduce stormwater pollution from industrial facilities that discharge into the separate storm sewer system. An educational program for residents, businesses, industries, construction contractors, government employees, and others
- A monitoring plan to determine the effectiveness of program activities
- Reporting requirements
- Coordination among jurisdictions sharing water bodies
- Actions to meet waste load allocations of adopted “Total Maximum Daily Loads” (TMDL’s)

Effect of the Current Stormwater NPDES Permit on the Mid-Puyallup Basin Plan

Recommendations of the Basin Plan must adhere to the County’s Stormwater NPDES Permit requirements cited above and provisions of the County Stormwater Management Plan. For a description of inter-jurisdictional coordination, see Chapter 3. Chapter 4 describes existing water quality conditions. Chapter 6 analyzes water quality problems and presents alternative solutions. Chapter 9 contains the recommendations for addressing water quality problems most cost-effectively.

2.1.1 Section 303(d) List & Total Maximum Daily Loads (TMDL’s)

Section 303(d) of the Clean Water Act requires Ecology to prepare a list of water bodies that are not meeting, or will not meet water quality standards, after application of technology-based effluent limits. Ecology submitted its candidate Section 303(d) list for 2002 in early 2004. Until it is approved by EPA, the State’s 1998 list is applicable. Under the 303(d) listing, a *Total Maximum Daily Load* (TMDL) must be calculated for out-of-compliance pollutants. A TMDL specifies the maximum load of the pollutant that can be discharged into the waterbody by regulated activities. Effluent limits for pollutant sources discharging to the waterbody are adjusted downward until the TMDL can be met.

The Puyallup River is the 1998 list for biochemical oxygen demand (BOD), ammonia, and residual chlorine. However, it does not include any of the waterways tributary to the river within the Mid-Puyallup Basin planning area. Waterbodies in the Basin included on the Candidate 2002/04 303d List (Category 4/Fish Habitat) are: Ball Creek, Fennel Creek, Canyon Fall Creek, Horsehaven Creek.

Effect of Section 303(d) Listings on the Mid-Puyallup Basin Plan

Although the Mid-Puyallup Basin does not contain streams with reaches on the 1998 303(d) list, care should be exercised to avoid contributing any additional BOD and ammonia to the Puyallup River. One way of preventing a 303(d) listing and TMDL is to monitor water quality according to Ecology protocols and document monitoring results. This provides a source of data on water quality against which to compare other agencies monitoring results. Another is to examine the various methods of reducing pollutants against water quality standards given the level of development planned for areas draining to the creeks and draining directly to the Puyallup River.

2.1.2 Section 404 Wetland Fill Permits

Placement of fill in waters of the United States is regulated under Section 404 of the CWA. Waters of the United States include wetlands adjacent to streams with flow greater than five (5) cubic feet per second and isolated wetlands greater than one acre that are hydraulically connected to regulated streams. Storm drainage projects that involve filling or work in small areas of wetlands may be permitted under one of several nationwide general permits. An individual permit must be obtained for projects that involve filling more than five (5) acres of wetlands.

Section 404 is administered by the U.S. Army Corps of Engineers (Corps); the Corps' Seattle District is responsible for issuing Section 404 permits in Pierce County. Because the goal of Section 404 is to avoid a net loss of wetlands, permits usually require compensatory mitigation for any loss of wetlands.

Some of the projects identified in Pierce County's earlier storm drainage and surface water management plan have proven more costly to build than estimated because they involved work in wetlands. In general, capital projects that adversely effect wetlands should be avoided.

Effect of Section 404 Regulations on the Mid-Puyallup Basin Plan

Wetland protections argue for several basin plan approaches. First, wherever possible wetlands can be acquired to conserve the natural stormwater runoff and flood storage capacities they provide. Second, the cost estimates of future storm drainage facilities should include the costs of compensatory mitigation. Third, new programs or program revisions designed to protect existing wetlands or create wetlands can be identified by basin plans. Fourth, basin plan recommendations can be prioritized in part upon the extent to which wetland protection and enhancement can be achieved.

2.2 Federal Endangered Species Act

The Endangered Species Act (ESA) directs the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration (NOAA) Fisheries¹ to promulgate a list of endangered and threatened species and designate critical habitat for the listed species. Listed species with the greatest potential to affect surface water management in Pierce County are the chinook salmon (listed as "threatened" in March 1999) and the bull trout (listed as "threatened" in

¹ NOAA Fisheries was previously called the National Marine Fisheries Service (NMFS).

October 1999). NOAA Fisheries has indicated that additional salmonid species may be listed in the next few years. Chinook salmon are found in the Mid-Puyallup Basin.

Section 9 of the ESA prohibits “taking” of listed species. To “take” means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” The regulation explains that “harm” may include “*significant habitat modification where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.*”

If a proposed action is federally funded or if it requires a permit from a federal agency, and if it could have an effect on a listed species, then Section 7 of the ESA requires the involved federal agency to consult with USFWS or NOAA Fisheries. After consultation, USFWS or NOAA Fisheries issues a biological opinion regarding the effects of the action on the protected species. If USFWS or NOAA Fisheries finds that the action could jeopardize the continued existence of the species, the action cannot be permitted. If USFWS or NOAA Fisheries finds that the continued existence of the species is not jeopardized, then one of the agencies will issue an “Incidental Take Statement” and allow the action to proceed.

Section 4(d) of the ESA requires USFWS and NOAA Fisheries to adopt regulations as necessary to conserve the species listed as threatened. USFWS typically applies the Section 9 “take” prohibitions directly to threatened species. NOAA Fisheries typically promulgates “4(d) rules” that identify specific activities that can be conducted without constituting an unlawful take of the threatened species.

Pierce County has policies and programs that help to preserve and restore salmon habitat. NOAA Fisheries has approved a set of transportation maintenance procedures that if followed protect transportation maintenance projects from liability under ESA. For Pierce County (and other jurisdictions), other actions include culvert replacements to improve fish passage and restoration and acquisition of key habitats.

Effect of ESA on the Mid-Puyallup Basin Plan

The listings of the Puget Sound chinook salmon and bull trout prompted local governments to include salmonid recovery efforts in all aspects of operations. The listings have a broad regulatory impact in that water quantity and quality, as well as other fish habitat conditions, must be addressed to protect the species. The Mid-Puyallup Basin Plan must identify existing habitat condition and problems, consider the effects of recommended capital projects on listed species, and identify projects and programs that can improve existing and protect future fish habitat conditions. Coordination with the varied agencies working on fish habitat initiatives should be reflected in recommended solutions to prevent overlap or duplication of effort.

2.3 National Flood Insurance Program

In 1968, the U.S. Congress initiated the “National Flood Insurance Program” (NFIP) (Chapter 44 CFR) under the National Flood Insurance Act to relieve the burden of disaster relief on the national treasury and State and local tax bases. The NFIP is administered by the Federal Insurance Administration (FIA), which is part of the Federal Emergency Management Agency (FEMA). The NFIP makes available affordable flood insurance to communities that adopt approved flood-

plain management regulations. Communities that do not participate in the NFIP do not qualify for certain flood disaster relief. FEMA's Flood Insurance Rate Maps (FIRMs) form the basis for critical area zoning for flood hazards.

2.3.1 NFIP

Pierce County participates in the NFIP. Flood hazard management regulations are codified in Title 17A.50 of the County Code and criteria and procedures are laid out in Chapter 9 of the Pierce County Stormwater Management and Site Development Manual. Federally subsidized flood insurance is available to local residents because of the County's participation. To continue coverage, the County must remain in the NFIP and maintain minimum floodplain management regulations. FEMA requires a certification letter for any revisions to a FIRM. Certification activities include stream channel modifications, installation of culverts, and bridge construction.

2.3.2 Community Rating System (CRS)

As a reward for communities willing to do more than meet minimum NFIP requirements by taking actions to minimize flood losses and promote public awareness of flood hazards, FEMA created the Community Rating System (CRS). The CRS offers reduced insurance rates based upon the class rating of a community. The CRS contains ten classes. "Class 1" gives the greatest insurance premium reduction. A "Class 10" community receives no premium reduction. Pierce County was the first county in the nation to earn a "Class 5 rating".

Effect of the NFIP and the CRS on the Mid-Puyallup Basin Plan

Basin plans serve as part of the flood hazard mitigation plan for Pierce County. To serve in meeting the prerequisites for a "Class 4" rating, the Mid-Puyallup Basin Plan has been developed to meet or exceed the following CRS prerequisites:

Floodplain Management Planning Elements - CRS Planning Steps

1. Organize – Use a steering committee of department staff.
2. Involve the public – Engage people living and working in the floodplain to identify problems, community goals and alternatives that will solve problems and to evaluate alternatives.
3. Coordinate – with other local governments in the planning area, State and federal agencies, Indian tribes, other Pierce County departments and programs.
4. Assess the hazard(s).
5. Assess the problem(s).
6. Set goals.
7. Review possible activities.
8. Draft an action plan.
9. Adopt the plan.
10. Implement the plan; evaluate it periodically; and revise it as needed to keep it current and effective.

Table 2-1 Federal and State Laws and Regulations and Mid-Puyallup Creek Basin Plan	
Law or Regulation	Application to the Mid-Puyallup Basin
Federal Laws	
Clean Water Act. Section 402 National Pollutant Discharge Elimination System (NPDES)	Pierce County Stormwater NPDES Permit, consistency with coordination requirement,
Clean Water Act. Section 303(d) List. Total Maximum Daily Load (TMDL)	Must consider ways of reducing stormwater contributions to pollutant loads
Clean Water Act. Section 404 Permit Requirements for Wetland Filling	Pierce County provides direction for basin plans to avoid recommendations that would have negative impacts on wetlands
Endangered Species Act	Consistency between the basin plan & Tri-County Endangered Species Act Response Implementation of the Puyallup WRIA Conservation Plan
National Flood Insurance Program	Acknowledgement of the programs initiated with the Consistency with NFIP objectives and CRS standard Pierce County Flood Hazard Management Code
State Laws, Plans & Regulations	
Water Quality Standards	Analyze water quality and develop projects & programs toward maintaining water quality standards
Puget Sound Water Quality Management Plan	Drainage development standards; Stormwater Management Manual; Stormwater Pollution Control Manual
Growth Management Act	Critical areas regulations
State Environmental Policy Act	SEPA review for basin plan and individual projects
Shoreline Management Act	Pierce County Shoreline Master Program
State Hydraulic Code	Hydraulic Project Approvals required for in-stream work
The Non-Point Rule	Puyallup WRIA Watershed Action Plan

Source: Pierce County Water Programs

2.4 Settlement Agreement with the Puyallup Tribe

In 1989, the U.S. Congress passed the Agreement between the Puyallup Tribe of Indians, Local Governments in Pierce County, the State of Washington, the United States of America, and certain private property owners (Settlement Agreement). Pierce County signed the Settlement Agreement in 1988.

In the Settlement Agreement, the County agreed “The Tribe’s treaty fishery must be managed to achieve increased salmon and steelhead production, including protection of necessary habitat, while providing for residential, commercial, industrial and other development, natural resource use, and protection of lives and property from flooding.” The County promised to consult with the Tribe when amending land use and resource plans lying within the 1873 Survey Area. (See *Figure 1.2, Study Area*) Consultation consists of notifying the Tribe of the proposal, giving an

opportunity for consultation and discussion, and making good faith efforts to accommodate the concerns of the Tribe in rendering its decision.

Effect of the Settlement Agreement on the Mid-Puyallup Basin Plan

The Settlement Agreement underscores the Basin Plan objective of protecting and enhancing fish habitat through stormwater management activities. It imposes an obligation to consult with the Tribe in a formal consultation process as set out in Document 7 of the Settlement Agreement. To that end, Pierce County has conducted several briefings for the Tribe throughout the development of this Plan and has provided a copy of the preliminary draft to the Tribe for its review.

2.5 State Water Quality Standards

Washington Administrative Code (WAC) 173-201A (included in *Appendix A*) and 173-200 are the State's Water Quality Standards that determine the discharge of stormwater to surface water and groundwater, respectively, by establishing water quality standards for each of the different classes of water and articulating the federal anti-degradation policy. It classifies rivers and streams by the beneficial uses that they should be able to support and the level of support they should provide. It also specifies standards for water quality sampling. Classification identifies the standards that a stream *should* meet, and not whether it does so at the time of classification. WAC 173-200 also calls for designation of special groundwater protection areas based on unique characteristics (e.g., aquifer recharge areas, wellhead protection areas, or sole source aquifers). Chapter 4 describes how well the Mid-Puyallup Basin streams achieve the standards.

WAC 173-201A sets criteria for the following water quality parameters:

- ◆ Fecal coliform organisms
- ◆ Dissolved oxygen
- ◆ Total dissolved gas
- ◆ Temperature
- ◆ pH
- ◆ Turbidity
- ◆ Toxic material concentrations

The criteria vary based on the type of water body (e.g., lake or river), its classification, and whether it is fresh or saltwater. WAC 173-201A lists metals and organic compounds that are considered toxic and either provides numerical acute and chronic limits for each or defines a formula to derive the limits for a specific water body.

In July 2003, Washington adopted a new set of water quality standards. The new standards cannot be used until they are approved by EPA, which is expected in 2004. Updated rules establish standards for temperature to protect temperature-sensitive fish, such as bull trout and Dolly Varden. A new indicator (enterococci) will be used to measure the amount of bacteria in marine waters that are not used for shellfish harvesting. New values for ammonia in waters without salmon species have been added. Ecology will classify fresh waters by actual use (such as fish habitat, swimming and water supply), rather than by class (AA, A, B, C and Lake classes), to make the standards more closely linked to the uses of a water body evolve.

Effect of Water Quality and Standards on the Mid-Puyallup Basin Plan

Storm drainage planning is controlled by ground and surface water quality standards along with other factors when developing specific capital improvement alternatives, such as a large regional infiltration basin. This is largely because the standards are the foundation for other water quality programs such as NPDES permits, water clean-up plans (also known as TMDL's), and "401 Water Quality Certifications." Water quality standards are also used as benchmarks for developing recommendations for non-structural solutions.

2.6 Safe Drinking Water Act of 1974

The *Safe Drinking Water Act of 1974* (SDWA) transferred responsibility for regulation of drinking water to the EPA and called on the EPA to take a number of steps to protect the quality of the nation's drinking water supplies. EPA has set maximum contaminant levels (MCL) in drinking water for more than 100 substances. Section 1424(e) of the SDWA established a "Sole Source Aquifer Program." EPA was authorized to identify aquifers that are the only or principal source of drinking water for an area.

The program also calls for EPA to review all federally funded projects planned for the area. Based on the review, the EPA administrator may withhold federal financial assistance for projects determined to be potential threats to a designated aquifer. Part of the Mid-Puyallup Basin south and west of the Puyallup River lies in a designated sole source aquifer. The Fennel Creek Watershed encompasses the municipal water supply of the City of Bonney Lake.

In 1986, a new provision of the SDWA (Section 1428) required every state to develop a wellhead protection program to guard the quality of groundwater bodies used for water supply so that water arrives at a well uncontaminated. The Tacoma-Pierce County Health Department administers the wellhead protection program in Pierce County.

Effect of Aquifer & Wellhead Protection Regulations on the Mid-Puyallup Basin Plan

Basin plans take into account the locations of wells and wellhead protection requirements in siting new storm drainage facilities or recommending improvements to existing facilities. Stormwater infiltration facilities must be designed to meet groundwater quality standards or be sited to avoid areas where groundwater intersects aquifers providing potable water supplies.

2.7 The Growth Management Act & the Comprehensive Plan for Pierce County Washington

2.7.1 Growth Management Act

The Growth Management Act (GMA) directed local governments of fast-growing counties, cities, and towns to prepare and adopt comprehensive plans and implementing regulations for managing their growth. Pierce County was required to prepare a comprehensive plan that meets the GMA precepts. The Comprehensive Plan for Pierce County Washington (County Comprehensive Plan) became effective in December 1994. Development regulations to implement the comprehensive plan were adopted in 1995. Current law requires an update of these regulations by December 2004.

Three GMA planning goals directly apply to storm drainage planning:

- “Urban growth. Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.”
- “Environment. Protect the environment and enhance the state’s high quality of life, including air and water quality, and the availability of water.”
- “Public facilities and services. Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time it is available for occupancy and use without decreasing service levels below locally established minimum standards.”

In addition, the CMA requires jurisdictions to develop and adapt six-year capital facilities plans. The basin plans fulfill Pierce County’s compliance for CFP, storm drainage facilities.

The GMA influences the provision of storm drainage and surface water management services and facilities by requiring that: (1) frequently flooded areas (flood hazard areas) be identified and protected; (2) urban facilities be constructed in urban areas only; (3) a level of service standard be established for storm drainage facilities; and (4) capital improvements be identified to meet the adopted level of service given planned land use.

Local governments are required to classify and designate “resource lands of long-term commercial significance” and “critical areas.” Resource lands of long-term commercial significance include agricultural, forest, and mineral resource lands. Critical areas include wetlands, fish and wildlife habitat areas, aquifer recharge areas, frequently flooded areas, and geological hazardous areas.

2.7.2 Pierce County Comprehensive Plan

The Pierce County Comprehensive Plan was developed and adopted in 1995 and is subject to updates every two years in response to the requirements of the GMA, and is codified in Title 19A of the County code. The Comprehensive Plan provides county-wide policies in 11 areas in cooperation with all cities and towns in the county. The community planning process uses the comprehensive plan as a foundation, with specific community elements for local conditions and objectives. Municipalities are required under the GMA to coordinate on matters of county-wide growth management policy.

Effect of the GMA on the Mid-Puyallup Basin Plan

The GMA mandates that comprehensive plans be internally consistent (RCW 36.70A.070) and that counties perform their activities and make capital budget decisions in conformity with their comprehensive plans (RCW 36.70A.120). Because basin plans recommend capital improvement projects and form the basis of the annual capital budget for the Pierce County Storm Drainage and Surface Water Management Utility, basin plan recommendations are required to be consistent with the county comprehensive plan.

Basin plans are also used to formulate the longer-term (six-year) capital improvement plan, required by the GMA, also known as the Capital Facilities Element of the County Comprehensive Plan. [The Supplemental Environmental Impact Statement in Chapter 10 examines the consistency of this plan’s recommendations with the county comprehensive plan.]

Land use decisions drive stormwater management infrastructure needs. Adopted land use/zoning and current development regulations are used in this basin plan to model future hydrologic conditions and determine the type, size and location of facilities that will be needed to support planned growth.

Critical areas designations are used to indicate potential sites for stormwater facilities, such as infiltration ponds (aquifer recharge areas) or natural stormwater detention sites (wetlands and riparian corridors). Conversely, surface water management recommendations can influence land use density and intensity choices, for instance if a basin plan identifies stream reaches that must be protected from the adverse hydrologic effects of new development. Existing and planned land use is described in Chapter 4, Existing Conditions.

2.8 Shoreline Management Act

The Shoreline Management Act (SMA) establishes a broad policy for how shorelines of the state can be used, giving preference to uses that:

- Protect the quality of water and the natural environment
- Depend on proximity to the shoreline (water-dependent uses)
- Preserve and enhance public access or increase recreational opportunities for the public along shorelines

Shorelines of the state include all marine waters, streams with a mean annual flow greater than 20 cubic feet per second; lakes 20 acres or larger; upland areas 200 feet landward from mean high water; biological wetlands, river deltas, some or all of the 100-year floodplain, including all wetlands within the entire floodplain, when they are associated with one of the other listed waters.

The SMA divides authority for compliance between local and State governments. Cities and counties are the primary regulators. Each city and county adopts a shoreline master program and use regulations that are based on State guidelines but tailored to the needs of the community. Pierce County adopted its “Shoreline Master Program” in 1974 and the Use Regulations in 1975 (amended in 1992). Shoreline use regulations set out a permit system for administering the program. The County is currently considering an update to its Master Program (2009).

Effect of the Shoreline Master Program & Use Regulations on the Mid-Puyallup Basin Plan

Many of the proposed projects contained in this Basin Plan are likely to be located within a regulated shoreland and subject to permit requirements. In the Mid-Puyallup Basin, only the Puyallup River is a regulated shoreland. Projects within 200-feet of the Puyallup River must comply with County’s Shoreline Use Regulations. The conditions that might be imposed on recommended projects are considered in Chapter 10, Supplemental Environmental Impact Statement, the Land and Shoreline Use section.

2.9 State Hydraulic Code

The Washington State Hydraulic Code (RCW 75.20.100-140) regulates any activity affecting the bed or flow of the state’s fresh waters and salt waters for the protection of fish life. The Hydraulic Code is administered by the Washington State Department of Fish and Wildlife (WDFW). The WDFW requires any person, organization, or government agency whose construction project

affects the bed of flow of any surface waterbody to obtain a “Hydraulic Project Approval (HPA) Permit.” The HPA Permit typically specifies how construction projects are designed, managed, sequenced, and conducted to minimize adverse effects on fish and shellfish.

Effect of the State Hydraulic Code on the Mid-Puyallup Basin Plan

Numerous projects are likely to involve work within regulated streams. Conceptual design and cost estimates for these facilities should take into consideration the conditions likely to be imposed on the project via the HPA Permit.

2.10 The Nonpoint Rule

WAC Chapter 400-12 establishes criteria and procedures for ranking watersheds in Washington state and for developing and implementing non-point source pollution control action plans for watersheds that need corrective and/or preventive actions. The purpose of WAC 400-12 is to reduce pollutant loading from nonpoint sources, prevent new sources from being created, enhance water quality, and protect beneficial uses. The planning process encourages collaborative problem solving among local, State, tribal, and federal interests. It relies on voluntary actions, local ordinances, and State and federal laws, regulations, and programs for implementation.

Each lead agency (usually a county) convenes a committee to rank watersheds wholly or partly within the county boundaries, using criteria specified by the State. Local watershed management committees are then formed to develop action plans for the ranked watersheds. Pierce County has prepared action plans for both the Lower Puyallup and Upper Puyallup River watersheds, which includes the Mid-Puyallup Basin.

Effect of the Nonpoint Rule on the Mid-Puyallup Basin Plan

The objectives recommendations of the basin plan should be consistent with and implement the Lower Puyallup and the Upper Puyallup watershed action plans.

2.11 Pierce County Storm Drainage and Surface Water Management Master Plan (Volumes 1 and 2), James M. Montgomery, 1991 (1991 Plan)

The Pierce County Storm Drainage and Surface Water Management Master Plan (1991 Plan) is the original capital improvement program (CIP) and program plan for the Pierce County Storm Drainage and Surface Water Management Utility. It identified stormwater issues and recommended capital improvements for eight of the major drainage basins in Pierce County.

The Mid-Puyallup Basin was one of the rural basins that were not studied in detail. A general description of the rural basins in the 1991 Plan describes them collectively as primarily forested with some agricultural development and a few residential areas.

2.12 1997 Rate Structure Study

In 1997, Pierce County Water Programs prepared a Study on the authorities, drivers, programs, and funding of the surface water management function of the County. The Study recommended continuation of numerous programs and the enhancement of other programs. To that end, the Study recommended a new surface water management fee structure, based on levels of service needs for each of the County's 26 basins. It also recommended that due to the, "...significant changes in land use and the level of development..." In the County since the original program had been established, that Water Programs would update the overall 1991 Master Plan on a "basin-by-basin" basis. In 1997, the Pierce County Council adopted the recommended rate structure.

Effect of the 1997 Study on the Mid-Puyallup Basin Plan

This Basin Plan continues to implement the 1997 study by identifying projects and programs needed within the Basin to ensure funds generated in the Mid-Puyallup Basin stay within that basin. It also specifically implements the 1997 Study's recommendations to update the 1991 Master Plan on a basin basis.

2.13 Army Corps of Engineers General Investigation New Start Program

The "Army Corps of Engineers General Investigation New Start Program" funds large complex projects where there is a federal interest and when co-sponsored by a local government, agency or non-profit with local matching funds. Congressional approval is required to initiate a new start. Projects are managed by the Corps of Engineers. A New Start begins with research and study, a feasibility study, preliminary design and engineering. After the preliminary work is completed, but before construction of the identified projects, Congress must reauthorize the project and allocate funds.

Congress authorized a "General Investigation (GI) New Start" for the Puyallup/White Watershed area. The initial work for the GI New Start relies on work done by a group of scientists representing agencies and governments such as the Puyallup Tribe of Indians, Washington State Departments of Fish and Wildlife and Natural Resources, the cities of Puyallup, Sumner and Fife, the Pierce County Conservation District, and Pierce and King counties. With the Puyallup/White River Watershed area in mind, they identified a number of potential projects that could help in restoring water quality and fish habitat in the Watershed.

Effect of the GI New Starts Program on the Mid-Puyallup Basin Plan

Each of the projects in the GI New Start program is acknowledged in the flooding, habitat and water quality analyses. The Pierce Conservation District identified barriers to fish passage augmented the field investigations performed by the consultant, ENTRANCO. Coordination with each of the local co-sponsors is included in basin planning outreach efforts.

2.14 Existing Studies and Reports

Data from relevant documents were reviewed for integration into this Basin Plan. The original sources (listed in the reference list at the end of this report) should be consulted for comprehensive presentations of the overview provided here. A substantial amount of the information summarized in this report is taken from the following sources:

Environmental Analysis of the Fennel Creek Corridor, Foster Wheeler Environmental Corporation, 1999.

Lower Puyallup Watershed Action Plan, Lower Puyallup Watershed Management Action Committee, 1993.

Lower Puyallup Watershed “Phase I” Report, Lower Puyallup Watershed Management Committee, 1992.

Pierce County Storm Drainage and Surface Water Management Plan, James M. Montgomery, 1991.

Pierce County River Improvement, Puyallup River Basin Comprehensive Flood Control Management Plan, James M. Montgomery, 1991.