4. COMMUNITY AND REGULATORY FRAMEWORK

This surface water management plan is written in the context of other programs, plans, and policies being implemented at community, and local, state and federal levels of government. Table 4-1 lists the relevant laws and regulations that apply to the Illahee Creek watershed. The integration of this plan with existing plans and regulations is discussed below.

Table 4-1. Regulatory Framework of Surface Water Management in Illahee Creek

Law	Implementing Entity	Regulatory Programs	Intent and Specifics	Relevance to Illahee
Clean Water Act	Washington State Department of Ecology	National Pollutant Discharge Elimination System Phase II Municipal Separate Storm Sewer System Permit (NPDES)	Eliminate discharge of pollutants into the Nation's water, and achieve water quality levels that are protective of beneficial uses	Illahee is located in unincorporated Kitsap County. Kitsap County is a NPDES Phase II permittee and must comply with conditions of the permit.
	Washington State Department of Ecology	Surface Water Quality Standards	Protect and regulate the quality of surface water in Washington State through (1) sustaining "designated uses", (2) meeting numeric water quality criteria, and (3) implementing "antidegradation" policies.	Illahee Creek is listed on the State's 303(d) Category 5 list for water quality impairment by fecal coliform bacteria and low dissolved oxygen because of non-compliance with numeric water quality standards.
	Washington State Department of Ecology and U.S. Army Corps of Engineers	Sections 401 and 404	Requires a permit for activities classified by the U.S. Army Corps of Engineers for dredge or discharge of fill material to Waters of the United States	Illahee Creek and tributaries and Port Orchard Bay are considered Waters of the United States. In-water activities that meet minimum dredge and fill limits require a permit.
	Washington State Conservation Commission, Kitsap Conservation District		Conserve natural resources by providing technical assistance to private landowners (mostly agriculture-related)	The Kitsap Conservation District can provide resources and management tools to help individual landowners improve water quality, woodlands and other natural resources.
Tribal Agreements and Related Case Law	Suquamish Tribe		Protect fish populations in traditional fishing grounds of Indian Tribes	Suquamish Indian Tribe is party to SEPA review of development proposals and programs within Illahee watershed

Table 4-1. Regulatory Framework of Surface Water Management in Illahee Creek (continued)

Law	Implementing Entity	Regulatory Programs	Intent and Specifics	Relevance to Illahee
Endangered Species Act	United States Fish and Wildlife Services and NOAA Fisheries in consultation with lead Federal Agencies		Prevent further decline of listed terrestrial and aquatic species, including Puget Sound chinook salmon, steelhead trout, marbled murrelet, and other species.	Steelhead trout may reside in Illahee Creek. The documented presence of steelhead trout would require project proponents to consider potential impacts to listed species during project reviews if a federal nexus was present (i.e., federal permit such as Section 404 permit or federal funding)
State Environmental Policy Act (SEPA)	Kitsap County conducts reviews and issues SEPA determinations on proposed projects		Identify and require mitigation of the environmental impacts of proposals and programs	SEPA is used to address impacts on projects in the Illahee watershed that are not covered in other County code requirements
Shoreline Management Act	Kitsap County Shoreline Master Plan		Protect use and functions (economic, ecological, aesthetic) of shoreline areas.	The Illahee watershed has many shoreline areas and uses, both along Illahee Creek and Port Orchard Bay. The Port of Illahee oversees the use of the Illahee community dock.
Washington State Hydraulic Code	Washington State Department of Fish and Wildlife		Sets requirements for placement of culverts and other hydraulic devices that may impact fish use	Projects within ordinary high water mark of streams must obtain a Hydraulic Project Approval permit from WDFW. Culverts must be fish passable where fish are present.
Growth Management Act	Kitsap County implements GMA	Kitsap County Comprehensive Plan, Illahee Community Plan	Regulate land use to meet growth targets while providing necessary services and protecting sensitive environmental resources	Illahee watershed is located in a designated urban growth area within Kitsap County.

4.1 KITSAP COUNTY SURFACE WATER CODE AND REQUIREMENTS

4.1.1 Surface Water Code

Kitsap County manages surface water through the Public Works Department, Surface and Stormwater Management Program. The primary goals of this program are to address non-point source pollution and flooding concerns in the County to meet State and Federal requirements and protect public health and natural resources. Kitsap County Code, Title 12 is the "Storm Water Management Ordinance," which by reference includes the Kitsap County Stormwater Design Manual (Kitsap Manual). The Kitsap Manual outlines management techniques for stormwater quantity and quality control from sites that meet minimum requirements, mostly based on impervious surface coverages. The impacts of stormwater and the technologies to control it have evolved significantly since 1992, when the current Kitsap Manual was implemented. As a result, outdated requirements continue to be implemented on new developments in the Illahee watershed. Compliance with new standards will likely be required for projects permitted after August 2009, when Kitsap County must have stormwater controls equivalent to Ecology's 2005 Western Washington Stormwater Management Manual as part of their National Pollutant Discharge Elimination System (NPDES) Municipal Separated Storm Sewer (MS4) Phase II Permit (discussed in more detail below). The Kitsap County Community Development Department is responsible for permit, code and manual review for new development and redevelopment. The Kitsap County Public Works department conducts maintenance and repair of existing stormwater infrastructure and implements water quality projects.

Critical Drainage Areas

Kitsap County Code Title 12 has a provision for special drainage improvements to eliminate drainage-related impacts to "critical drainage areas' in Chapter 12.28. In the case of critical drainage areas, the "director may require drainage improvements in excess of those required in other sections of this title." Based on a review of criteria for designation as a critical drainage area, it appears that much of the Illahee watershed should be classified in this manner. The following are characteristics present in Illahee that meet the critical area designation:

- Lands having a slope greater than 30%; and
- Lands within 200 feet of the ordinary high water mark of bodies of water possessing fish spawning and rearing habitat for anadromous and resident fish species, as designated by the State Department of Fish and Wildlife. The mainstem of Illahee Creek is classified as spawning habitat for coho salmon (WDFW 2007).

It is possible that other criteria also could be used to designate Illahee a critical drainage area, including "…high potential for drainage and water quality problems, and/or are sensitive to the effects of construction or development" and "lands that have existing local requirements for the management of groundwater, aquifers or sole source aquifers."

4.1.2 NPDES Phase II Permit

In 1987, the Federal Clean Water Act (CWA) was modified to include stormwater in the NPDES permit program. This modification required municipalities to obtain a permit to discharge stormwater from storm sewer systems to surface waters. In the state of Washington, the United States Environmental Protection Agency (EPA) has granted Ecology authority to issue such permits.

EPA developed rules to implement the permits in two phases, Phase I and II. Phase I went into effect in 1990 and applied to municipalities with a population greater than 100,000 (referred to as Phase I municipalities). In 1995, Ecology issued a Phase I permit for Clark, King, Pierce and Snohomish counties, as well as the cities of Seattle and Tacoma. This permit was re-issued in January 2007.

Phase II of the program went into effect in 1999 and included all municipalities in census-defined urban areas with a population greater than 1,000 (referred to as Phase II municipalities). In January 2007, Ecology issued the Phase II permit to more than 100 such municipalities in the state of Washington, including Kitsap County.

Both the Phase I and Phase II permit require operators of MS4s to develop and implement a SWMP with overall goals to:

- Reduce the discharge of pollutants from its MS4 to the "maximum extent practicable"
- Meet state requirements to use all known, available, and reasonable methods to prevent and control pollution of waters of the state
- Protect water quality

Phase II Permit Components

To achieve these goals, the Phase II permit requires that the SWMP address the following components:

- Public Education and Outreach – educate the public (general, business, commercial) on why stormwater is of concern and what they can do to prevent stormwater pollution.
- Public Involvement and Participation – provide opportunities for the public to be involved in development of the stormwater management program.
- Illicit Discharge Detection and Elimination (IDDE) – develop a proactive (rather than just reactive) program to identify and eliminate illegal discharges to the storm sewer system.
- Control Runoff from New Development, Redevelopment, and Construction Sites – apply technical standards and structural controls to manage stormwater from constructions sites either for new development or redevelopment.
- Pollution Prevention and Operations & Maintenance (O&M) for Municipal Operations – apply "good housekeeping" techniques to prevent stormwater pollution at its source and develop a program to ensure the proper upkeep of structural stormwater controls so that they can operate as designed.
- Monitoring – develop a program to monitor the quality of stormwater from targeted outfalls, measure program effectiveness, and for the Phase I municipalities, measure the effectiveness of Best Management Practices (BMPs).

Phase II Permit Timeline

Table 4-2 provides an overview of major Phase II Permit component deadlines for implementing permit requirements for cities, towns, and counties. Note that this overview is for guidance only; the reader should review the actual permit for additional details and related requirements.

Table 4-2. Ecology Phase II NPDES Timeline

Permit Component	Feb. 2007	Feb. 2008	Feb. 2009	Aug 2009	Feb 2010	Dec 2010	Feb 2011	Aug 2011	Feb 2012
S5.A SWMP	Set up process to track costs, actions and activities. Establish coordination among permittees as possible.		Begin tracking costs.					Program fully implemented.	
S5.C.1 Public Education & Outreach			Implement education program. Public hotline starts. Begin measuring public understanding, adoption						
S5.C.2 Public Involvement		Program begins. SWMP and annual reports available to the public and posted on website. Create opportunities for public input.							
S5.C.3 IDDE			Establish public hotline to report spills and illicit discharges.	Adopt IDDE codes & regulations to prohibit non stormwater discharges, establish escalating enforcement. Develop enforcement strategy. IDDE staff training. Recordkeeping.	Train all municipal field staff. Prioritize receiving waters for visual inspection		Complete storm system map and keep updated. Assess 3 high priority water bodies.	Program fully implemented: field assessment, inspections, procedures, processes to ID priority areas. Distribute info on IDDE.	

Table 4-2. Ecology Phase II NPDES Timeline (continued)

Permit Component	Feb. 2007	Feb. 2008	Feb. 2009	Aug 2009	Feb 2010	Dec 2010	Feb 2011	Aug 2011	Feb 2012
S5.C.4 Runoff Control	Make available NOIs for construction, industrial stormwater permits. Record-keeping (inspections, maintenance, enforcement).			Adopt regulations, implement program for runoff control, site plan review, inspection, enforcement, LID. Adopt/implement O&M regulations for post-construction BMPs & facilities. Staff training.					
S5.C.5 Municipal Pollution Prevention and O&M					Adopt and implement SWPPP(s), inspection & maintenance schedule, procedures. Staff training.				
S8 Monitoring						Select sites for long-term discharge monitoring & questions/ sites for SWMP effectiveness monitoring			

4.2 KITSAP COUNTY COMPREHENSIVE PLAN AND WASHINGTON STATE GROWTH MANAGEMENT ACT

The Washington State Legislature enacted the Growth Management Act (GMA) in 1990 in response to growth and development pressures. As a result of the GMA, Kitsap County was required to develop a comprehensive plan that outlines where and how growth will occur. In Kitsap County's 1998 Comprehensive Plan, the Illahee area was designated as an Urban Growth Area (UGA) and, as such, is under increased pressure to infill to the maximum extent possible. The UGA designation is in direct conflict with the rural feel of the community and the large tract of natural open space that constitutes the Illahee Forest Preserve. The Illahee community is currently in the process of developing a community plan, consistent with GMA requirements, that will allow the community to develop in a way more appropriate to the unique natural features and historical uses of the community.

4.2.1 Illahee Community Plan

In the draft Illahee Community Plan (Illahee 2008), the vision for the Illahee community articulated by many of the residents is to maintain the community charm and quaintness of Illahee and "protect the unique quality of the natural environment, park areas, wetland, streams, and wildlife habitat." There is a desire to permit growth where infrastructure enhancements already exist and environmental protections are ensured. The community plan emphasizes the need to manage and minimize stormwater and groundwater impacts to Illahee Creek from new developments, and to develop solutions to resolve existing water quantity and quality issues in order to maintain Illahee Creek as a viable salmon and trout stream. This surface water management plan specifically addresses these issues and provides recommendations consistent with the goals outlined in the community plan, including the following:

- Goal 4.3 Protect Illahee Creek
- Goal 4.4 Protect Critical Aquifer Recharge Areas
- Goal 6.4-1 Support development of a comprehensive approach to storm water management.
- Goal 6.4-2 Encourage storm water management systems that preserve natural drainage systems, such as streams, and construct facilities that complement these systems by taking advantage of opportunities for filtration, infiltration, and flow control where feasible and reasonable.
- Goal 6.4-3 Limit the amount of impervious surface that can be created on individual residential lots to reduce future increases in stormwater runoff.

4.2.2 Critical Areas Ordinance

Under the GMA, Kitsap County is required to have a Critical Areas Ordinance (CAO) to protect or minimize impacts to (1) wetlands, (2) fish and wildlife conservation areas, (3) aquifer recharge areas, (4) geologically hazardous areas, and (5) frequently flooded areas. In Kitsap County, the CAO, adopted in 2005, supplements Title 17 (Zoning Ordinance) of the Kitsap County Code.

Critical Aquifer Recharge Areas

Much of the Illahee watershed is classified as a Category I or Category II Critical Aquifer Recharge Areas (CARAs). The primary reason for these CARAs is to protect groundwater

resources from contamination from surface discharges, and therefore many types of land uses are prohibited within these areas. What CARAs do not do is to protect replenishment of the aquifers from natural rainfall and infiltration. Because residential developments have lower risk for contamination (as opposed to an auto-body shop, for instance), these types of land use activities are allowed in CARAs. Additionally, there are no specific limits on impervious surface coverages, even though these can impede the downward migration of rainwater that recharges aquifers.

Geologically Hazardous Areas

Most of the geologically hazardous areas in the Illahee watershed are located within the Illahee Forest Preserve and include the steep sidewalls of the Illahee Creek valley. These areas would not be developed, both because of the geologic hazard of building on steep slopes and because they are located in the protected Illahee Forest Preserve.

Wetlands

The National Wetlands Inventory (USFWS 2007) does not show any wetlands in the Illahee Creek watershed aside from the 20-acre wetland at the headwaters of the North Fork. The Kitsap County Critical Areas Ordinance protects wetlands through avoidance, impact minimization, and mitigation in the event that impacts are unavoidable. Additionally, wetland buffers are assigned based on size and function. Kitsap County uses the Washington State Department of Ecology's 2004 wetland rating system for Western Washington.

Fish and Wildlife Conservation Areas

The Washington State Department of Natural Resources water typing system is used by Kitsap County to designate fish and wildlife conservation areas (WAC 222-16-030). Kitsap County based stream buffer widths on the Best Available Science for lowland, urbanized streams typical of Kitsap County.

4.3 KITSAP COUNTY HEALTH DISTRICT

Among the many public health issues addressed by the Kitsap County Health District (Kitsap Health) is water quality in the region's fresh and salt water resources. The primary goal of the Kitsap Health's water quality program is to protect public health through monitoring surface water quality for bacterial contamination, paralytic shellfish poising (PSP), and other harmful constituents. Kitsap Health issues advisories when contaminant levels are unsafe, and takes necessary steps to correct water quality problems.

While Illahee Creek is on the State Department of Ecology's 303(d) list as impaired for fecal coliform bacteria and low dissolved oxygen, samples collected by Kitsap Health near the mouth of the creek in 2007 met water quality standards and are showing a stationary trend (i.e., neither improving nor declining).

4.4 NORTH PERRY WATER DISTRICT

The North Perry Water District was created in 1942 under Title 57 RCW and serves about 6,200 customers in the area between Bremerton and Keyport on the Manette peninsula. The water district is responsible for 13 active groundwater withdrawal wells, some of which are located in the Illahee Creek watershed.

4.5 PORT OF ILLAHEE

The Port of Illahee's mission is to promote the economic development of the Port District and provide maintenance and repair for the Port's community dock.

4.6 KITSAP COUNTY PARKS

In addition to responsibilities for implementing land use and development regulations in the region, Kitsap County is the largest single property owner in the Illahee watershed. Kitsap County owns the Illahee Forest Preserve, which constitutes the majority of the remaining undeveloped land in the watershed. The Kitsap County Parks and Recreation Department manages the roughly 460-acre park under the direction of the Kitsap County Board of Commissioners. The Illahee Forest Preserve is classified as regional heritage park under the Parks Department's classification system, with the majority of the property managed for open space and habitat value. Forty acres of County-owned land is leased to the Rolling Hills Golf Course and contains approximately seven holes of the golf course. A Stewardship Plan for the Illahee Forest Preserve was created by Kitsap County in 2003 with the assistance of the Illahee Stewardship Committee. The Plan identifies overall management objectives for the Illahee Forest Preserve, as well as short-term and long-term goals for the County Park.

The Forest Preserve began in 2001 with the purchase of 352 acres from the Washington State Department of Natural Resources (WSDNR) with the help of WSDNR's Trust Land Transfer Program, which paid for the timber value on the property and reduced the sale price to the County. The Trust Land Transfer Program requires that a 30-year deed restriction be placed on the property that limits the use of the property to outdoor recreation. The Stewardship Plan calls for a long-term preservation strategy that will protect the Forest Preserve once the 30-year deed restriction expires.

4.7 WASHINGTON STATE CONSERVATION COMMISSION

The Washington State Conservation Commission works with local conservation districts, such as the Kitsap Conservation District to help citizens protect natural resources through incentive-based actions. In 2000, the Washington State Conservation Commission published the Salmonid Habitat Limiting Factors Report for Water Resource Inventory Area 15 (East), which included a description of Illahee Creek and action recommendations (Haring 2000). Among the recommended actions in that report were the following:

- Retrofit state-of-the-art stormwater quality and quantity best management practices to existing development (including the golf course) in the watershed;
- Reduce impacts of road crossings, including identified fish passage barriers, increased stormwater runoff to surface waters, water quality impacts from stormwater runoff, and increased fine sediment delivery from road surfaces and associated ditch maintenance;
- Protect the integrity of the estuary, limit further bulkheading of the estuarine shoreline;
- Limit dredging and disposal of dredge materials in the estuary;
- Transfer critical resource segments of DNR ownership in this watershed to protected status; and
- Reestablish functional riparian buffers along the northeast boundary of the Rolling Hills Golf Course.

DNR ownership has been transferred to Kitsap County Parks as the Illahee Forest Preserve, however, other recommendations from the Washington State Conservation Commission report have not been implemented.