

Chapter 5 Policy And Regulation

5.1 INTRODUCTION

Over the past thirty years Federal, State, and local governments have adopted regulations and developed programs to protect surface waters from degradation. The Federal government has retained responsibility for enforcing some of those regulations and delegated the authority for others to the States. The States, in turn, have retained some authority and delegated some to cities and counties. These local entities, in turn, have enacted policies and regulations and developed programs to implement them.

Originally, these efforts aimed at controlling pollution from point sources of pollution, such as sewage treatment plants or factory outfalls. Recently efforts to protect surface waters have focused on avoiding pollution and increased flows from non-point sources, such as stormwater runoff.

This Chapter discusses the Federal, State, and County policies and regulations that guide surface water management in Jefferson County.

5.2 FEDERAL REGULATIONS

The principle Federal regulations related to surface water management are the Federal Water Pollution Control Act, the National Pollutant Discharge Elimination System Program, and the Endangered Species Act. In addition the Federal government's flood hazard management program and management of Federal lands including National Parks and National Forests and tribal treaty rights to harvest fish and shellfish greatly affect surface water management in Jefferson County.

Federal Water Pollution Control (Clean Water) Act

The Clean Water Act (CWA) is a 1977 amendment to the Federal Water Pollution Control Act of 1972 that established the basic structure for regulating discharges of pollutants to waters of the United States. The CWA aims to "restore and maintain the chemical, physical, and biological integrity of the nation's waters". It authorizes the Federal Environmental Protection Agency (EPA) to set effluent discharge standards and water quality standards for all contaminants in surface waters.

The CWA makes it unlawful to discharge pollutants into waters of the United States unless a National Pollutant Discharge Elimination System (NPDES) permit is obtained. The NPDES permit program was originally focused on reducing pollution from point sources, such as factory and sewage treatment plant outfalls. In recent years the focus has been on more diffuse, non-point sources of pollutants, such as stormwater runoff. This typically occurs from rainfall or snowmelt flowing over the surface of roads, buildings, parking lots, lawns, and agricultural lands; picking up pollutants; and transporting them to surface waters and groundwater. Pollutants may be dissolved, suspended in the water, or attached to particles that are physically transported. Non-point source pollutants include oil and grease; sediment; bacteria and viruses; metals such as lead, zinc, and copper; nutrients such as nitrogen and phosphorus; and herbicides and pesticides.

The CWA authorizes the EPA to delegate permitting, administrative, and enforcement functions to State governments. In Washington State these functions are delegated to the Department of Ecology (Ecology).

NPDES Phase I Stormwater Permits

In 1990, the United States Environmental Protection Agency (EPA) established regulations for NPDES Phase I Stormwater Permits for municipalities with populations over 100,000. To obtain a NPDES permit, municipalities must develop a plan that reduces the discharge of pollutants to the "Maximum Extent Practicable" and satisfies the appropriate water quality requirements of the Clean Water Act. Jefferson County is not subject to the NPDES Phase I program.

NPDES Phase II Stormwater Permits

NPDES Phase II applies to urban municipalities with populations greater than 10,000 that operate municipal stormwater systems. They are required to develop a stormwater management program and obtain a Phase II stormwater permit. The program must include the following Best Management Practices (BMPs):

- Public Education and Outreach,
- Public Involvement and Participation,
- Illicit Discharge Detection and Elimination,
- Construction Site Stormwater Runoff Control,
- Post-Construction Stormwater Runoff Control, and
- Pollution Prevention / Good Housekeeping for Municipal Operations.

These program components must include quantitative goals and a description of how these goals will be met. This requirement makes on-going monitoring and adaptive management important components of the NPDES program.

The Department of Ecology anticipates that the NPDES Phase II municipal stormwater permit for Washington State will be adopted in 2006.

Jefferson County is not subject to most NPDES Phase II requirements. However, the NPDES Phase II program provides excellent guidance for developing a stormwater management component of a Surface Water Management Program for Jefferson County. The NPDES Phase II BMPs are discussed in more detail in Chapter 6 Program Components.

Ecology has adopted a Construction General Stormwater Permit that is a component of the Phase II NPDES Program. It requires a permit for all development activities where more than one acre will be disturbed and stormwater will be discharged to surface water or to storm drains that discharge to surface water. If all stormwater is retained on-site, a permit is not required. Construction site operators must obtain a permit 60 days prior to discharging stormwater. This requirement applies in Jefferson County.

For additional information regarding the NPDES Program go to:
<http://cfpub.epa.gov/npdes/stormwater/menuofbmps/menu.cfm>

Clean Water Act Section 303(d)

Section 303(d) of the CWA requires States to identify water bodies that do not meet water quality standards and develop Total Maximum Daily Load (TMDL) Plans to achieve those standards. A TMDL Plan determines the amount of pollutants a water body can receive and still meet water quality standards and identify actions to achieve this goal. Under an agreement with the EPA,

Ecology will develop TMDL Plans for all Washington State waters by 2013. Ecology will begin working on TMDL Plans for Jefferson County streams in 2006. Chapter 2 lists the water bodies in Jefferson County that are on the 303(d) list.

Chimacum Creek is on the 303(d) list for exceeding temperature and fecal coliform standards. Jefferson County has applied for a Centennial Clean Water Fund grant for data collection, public education and outreach, and implementing best management practices that will address TMDL issues on Chimacum Creek. Information gathered through this project will be incorporated into Ecology's TMDL Plan for Chimacum Creek.

Endangered Species Act

The Federal Endangered Species Act (ESA) significantly affects surface water management in Jefferson County. The purpose of the ESA is to "provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved". The ESA authorizes the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) to list species as endangered or threatened and to identify and protect the critical habitat of listed species. USFWS has jurisdiction for terrestrial and freshwater plants and animals. NMFS has jurisdiction for marine species.

Hood Canal summer chum salmon and Puget Sound chinook salmon stocks in eastern Jefferson County and bull trout stocks in western Jefferson County have been listed as a threatened species.

Once a species is listed as endangered or threatened, the ESA makes it illegal for governmental agencies or private parties to "take" a listed species. "Take" is defined in Section 9 of the Act as killing, hunting, trapping, or otherwise "harming" a listed species or the habitat the species depends upon. The Federal courts have interpreted the term "take" to include "significant modification or degradation of critical habitat".

The ESA Section 9 "take" prohibition applies to all "persons", including governmental entities. Local governments are vulnerable to the "take" prohibition in two ways: through their governmental activities such as road maintenance and through the exercise of their regulatory authority such as oversight of development activities by private parties.

ESA listings therefore significantly affect activities such as operation of municipal water systems, land use and development regulation, road construction and maintenance, wastewater disposal, and surface water management.

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. Regulatory requirements include:

- Adopting critical areas protections including protecting riparian buffers, retaining vegetation, and limiting impervious surface in a watershed;
- Including an environmental protection element in comprehensive plans;
- Adopting stormwater operation and maintenance ordinances and requiring regular maintenance of stormwater facilities;
- Ensuring adequate inspection, enforcement, and monitoring of stormwater best management practices;

- Providing adequate funding for stormwater management infrastructure; and
- Limiting conversion of agricultural and forest land.

Activities that are likely to result in a “take” may be allowed under ESA Section 4(d) provided the “take” is “incidental” and occurs as the result of a program that adequately protects the listed species and its habitat. Section 4(d) is intended to encourage governments and private citizens to adjust their programs and activities to protect listed species.

One of the 4(d) “take” limitations is Limit No. 12 – Municipal, Residential, Commercial and Industrial (MRCI) Development and Redevelopment. It recognizes that development has the potential to result in a “take”, but that impacts can be minimized with appropriate safeguards. The following guidelines apply when determining whether local plans and development ordinances provide adequate protection:

1. Development will avoid inappropriate areas such as unstable slopes, wetlands, and areas of high habitat value.
2. Stormwater will not impact water quality and stream flow patterns.
3. Riparian areas around rivers, streams, lakes, and deepwater habitats will be adequately protected.
4. Stream crossings will be avoided where possible. Where crossings must be provided, they will be designed to have minimal impacts.
5. Historic stream meander patterns and channel migration zones will be protected and hardening stream banks and shorelines will be avoided.
6. Wetlands, wetland buffers and wetland functions will be protected.
7. The capacity of permanent and intermittent streams to pass peak flows will be protected.
8. Landscaping with native vegetation will be encouraged to reduce the need to water and apply herbicides, pesticides, and fertilizer.
9. Erosion and sediment runoff will be prevented.
10. Demand for water will be met without affecting the stream flows salmon need either directly or through groundwater withdrawals.
11. There will be mechanisms for monitoring, enforcing, funding, reporting, and implementing the program.

Flood Hazard Management

Flood hazard management is a component of surface water management. Development in floodplains has significant potential to add both volume and pollutants to surface waters. Flood control dams, dikes, and bank protection structures all affect surface water resources.

The Federal Emergency Management Agency (FEMA) administers flood hazard management activities for the Federal government. In the past, flood hazard management typically meant constructing flood control facilities such as dams and dikes, providing disaster assistance during and after flood events, and subsidizing flood insurance for structures located in flood prone areas. This approach has been criticized for encouraging development in areas subject to repeated flooding and for contributing to the degradation of rivers and streams.

In response the Federal government created the Flood Mitigation Assistance Program (FMAP) as part of the National Flood Insurance Reform Act of 1994. The goal of the FMAP is to reduce damage

claims under the National Flood Insurance Program. FMAP provides funding for planning and projects that assist States and communities to implement measures to reduce or eliminate the long-term risk of flood damage to structures insured under the National Flood Insurance Program (NFIP).

A recent Federal district court decision found that the Federal Flood Insurance Program (FIP) was subject to the Endangered Species Act. The court found that FEMA's administration of the FIP had supported floodplain development that had damaged critical salmon habitat. The court ordered FEMA to implement the FIP in a way that doesn't interfere with salmon recovery. This is expected to result in significant changes in Federal flood hazard management programs.

Federal Management of National Forests and Parks

The Federal government owns and manages over 60% of the land in Jefferson County, including 539,000 acres in the Olympic National Park (ONP) and 166,000 acres in the Olympic National Forest (ONF). Federal activities on these lands, including activities that affect Jefferson County's surface waters, are not subject to control by Jefferson County.

The Olympic National Park occupies large areas mostly in the upper reaches of major County watersheds, including the Big Quilcene, Dosewallips, Duckabush, Bogachiel, Hoh, Queets, and Quinault Rivers. Federal management of the ONP with its emphasis on preserving wilderness characteristics and minimizing development has had a very great, beneficial affect on Jefferson County's surface waters.

The Olympic National Forest occupies large areas of the major County watersheds listed above, as well as smaller rivers and streams. Federal management of the ONF has had mixed affects on Jefferson County's surface waters. On the one hand, the preservation of forest cover with minimal impervious surface has had a beneficial affect. On the other hand road construction and timber harvest, particularly on steep slopes and in riparian areas, have increased storm flows, erosion, and landslides that have in turn contributed to channel instability, sediment transport and deposition, flood events, and fish habitat degradation in the lower reaches of watersheds outside of the ONF.

Tribal Treaty Rights

Native American Tribes, including the S'Klallam, S'Kokomish, Quinault, and Hoh Tribes, have treaty rights to harvest fish and shellfish in Jefferson County. Federal courts have interpreted these rights to include the right to co-manage these resources and to protect critical habitat components, including surface waters. Activities by Jefferson County or activities by private parties that are under the County's regulatory authority that degrade these resources could violate these treaty rights and result in action against the County.

5.3 WASHINGTON STATE LAWS AND PROGRAMS

The principle Washington State regulations and programs related to surface water management are the Water Pollution Control Act, Puget Sound Water Quality Management Plan, Shoreline Management Act, and Growth Management Act. Some of these establish and define State authority, while others delegate authority and responsibility to local governments. Other important State regulations governing flood control, forest practices, salmon recovery, water rights, and watershed planning also affect surface water management. Finally the Washington Department of *Ecology Stormwater Management Manual for Western Washington* provides guidance and technical standards for stormwater management.

State Water Pollution Control Act (RCW 90.48)

Water Pollution Control Act (WPCA) declares “the public policy of the State of Washington to maintain the highest possible standards to insure the purity of all waters of the State”. The WPCA provides that, “Consistent with this policy, the State of Washington will exercise its powers, as fully and as effectively as possible, to retain and secure high quality for all waters of the state.” This language commits the State of Washington to a higher standard than found in the Federal CWA.

The State Legislature delegated rule-making and permitting authority to implement the WPCA to the Department of Ecology. The rules that implement the WPCA and the State water quality standards are contained in the Washington Administrative Code (WAC) Chapter 173. The standards are based on existing and potential use and natural water quality potential and limitations. The following water quality standards are of primary concern for surface water management in Jefferson County:

- **Maximum Temperature** for salmon and trout spawning, rearing, and migration: 60.8°F measured as the 7-day average of the daily maximum temperature;
- **Minimum Dissolved Oxygen** for salmon and trout spawning, rearing, and migration: 9.5 milligrams/Liter measured as the 1-day minimum;
- **Turbidity**, the clarity of water (expressed as nephelometric turbidity units or NTUs) for salmon and trout spawning, rearing, and migration: Not to exceed 5 NTU over background when the background is 50 NTU or less or a 10% increase when the background is more than 50 NTU;
- **PH**, the measurement of acidity or alkalinity, for salmon and trout spawning, rearing, and migration: Within the range of 6.5 to 8.5, with a human-caused variation of less than 0.2 units; and
- **Maximum Bacteria Counts** for extraordinary water contact recreation: Fecal coliform shall not exceed a geometric mean value of 50 colonies/100mL, with not more than 10% of all samples exceeding 100 colonies/100mL.

Growth Management Act (GMA) (RCW 36.70A)

While the Growth Management Act is usually associated with land use regulation, the Act’s requirements also provide the basis for much of the State’s approach to managing surface water resources. The GMA directs cities and counties to develop comprehensive plans that:

- Designate and protect critical areas, including aquifer recharge areas, fish and wildlife habitat, flood hazard areas, and wetlands;
- Designate and protect natural resource lands, including agricultural lands and forest lands;
- Prevent low density sprawl by restricting urban development to designated urban growth areas;
- Protect rural character by designating rural residential, commercial and industrial areas;
- Develop capital facilities elements that ensure that adequate facilities are available to serve anticipated growth and development; and
- Develop policies to address drainage, flooding, stormwater runoff, and polluted discharges to the waters of the State, including Puget Sound.

The GMA also requires local governments to use best available science to develop comprehensive plans and regulations to ensure that development does not degrade water quality, aquatic species and habitat, and natural hydrology. Local plans and development regulations should:

- Designate urban growth areas with appropriate densities and sufficient urban facilities and services to reduce sprawl;
- Provide vegetative buffers and setbacks in critical areas to protect riparian zones, shorelines, wetlands and other sensitive areas;
- Assess how full build-out according to the comprehensive plan will alter natural hydrology, water quality and aquatic species; and
- Incorporate measures to retain natural hydrology, such as limiting impervious surfaces and preserving open spaces and forests.

By protecting critical areas, preserving forest and agricultural lands, concentrating development in urban areas, limiting the extent of impervious surface in rural areas, and requiring policies that address stormwater management, water quality protection and flooding, GMA is a fundamental component of the State's overall approach to surface water management.

Puget Sound Water Quality Management Plan

RCW 90.71 Puget Sound Water Quality Protection established the State's framework for managing and protecting Puget Sound. It directed the State government to develop the *Puget Sound Water Quality Management Plan*, a wide-ranging document that includes numerous programs related to surface water management. It also established the Puget Sound Action Team (PSAT). The Action Team prepares and implements a biennial *Puget Sound Work Plan (Puget Sound Plan)*.

The *2000 Puget Sound Plan* recommends that local governments enact Growth Management planning and develop comprehensive stormwater management programs to protect water quality.

Growth Management Planning

In addition to the growth management measures discussed above, the *2000 Puget Sound Plan* emphasizes:

- Assessing how full build-out based on the local comprehensive plan will alter natural hydrology, water quality, and aquatic species and
- Incorporating measures to retain natural hydrology, such as limiting impervious surfaces and preserving open spaces and forests.

Comprehensive Stormwater Management Programs

The *2000 Puget Sound Plan* states that local governments should develop and implement a comprehensive stormwater management program that includes:

- a. **Stormwater Controls for New Development and Redevelopment** – Require best management practices (BMPs) to control and treat stormwater and prevent erosion and sedimentation.
- b. **Stormwater Site Plan Review** – Review development project plans to ensure that stormwater control measures are adequate.
- c. **Inspection of Construction Sites** – Adopt an ordinance that requires maintenance of BMPs and authorizes inspection of construction sites and enforcement of violations. Regularly inspect construction sites. Train inspectors in erosion and sediment control BMPs.

- d. **Maintenance of Permanent Stormwater Management Facilities** – Require all permanent stormwater management facilities to be regularly maintained. Develop maintenance agreements for private facilities. Train maintenance personnel.
- e. **Source Control** – Implement a pollutant source control program for development projects and for existing development.
- f. **Illicit Discharges and Water Quality Response** – Prohibit dumping and illicit discharges to storm sewer systems. Implement a program to detect and prevent illicit discharges and respond to spills and water quality violations.
- g. **Identification and Ranking of Problems** – Identify and rank surface water problems. Conduct hydrologic analysis and map stormwater drainages, outfalls and impervious surfaces by watershed. Develop plans and schedules and identify funding to fix identified problems.
- h. **Public Education and Involvement** – Educate and involve citizens, businesses, elected officials, site designers, developers, builders and other members of the community to increase awareness and understanding of stormwater and water quality issues. Provide practical alternatives to actions that degrade water quality and aquatic resources.
- i. **Low Impact Development Practices** – Encourage low impact development practices that infiltrate stormwater on-site in order to reduce runoff, recharge aquifers, maintain in-stream flows, and enhance habitat functions.
- j. **Watershed Planning** – Participate in watershed planning.
- k. **Funding** – Create adequate local funding for stormwater management activities.
- l. **Monitoring** – Monitor program implementation and environmental conditions and trends to measure program effectiveness.
- m. **Schedule for Implementation** – Develop an implementation schedule with specific target dates and funding sources to help plan program activities.

Additional information regarding the Puget Sound Water Quality Management Plan Stormwater Program can be found at:

http://www.psat.wa.gov/Programs/GMA/II_fa_q_web.pdf

The *2003-2005 Puget Sound Plan* included the following priority actions related to surface water management in Jefferson County:

- Conserve and recover salmon and forage fish;
- Protect and restore marine and freshwater habitat;
- Protect shellfish resources;
- Manage the harmful impacts of stormwater runoff;
- Reduce contamination from on-site septic systems;
- Prevent introduction of new aquatic nuisance species and eradicate those already present;
- Monitor to better understand conservation challenges; and
- Educate diverse audiences in shared conservation endeavors.

The *2005-2007 Puget Sound Plan* focuses on core priorities, specifies expected results, and identifies entities to conduct activities. It includes the following priorities related to surface water management in Jefferson County:

- Improve water quality in Hood Canal by improving sewage management and management of wastes such as salmon carcasses and manure;
- Conserve and recover orcas, salmon, forage fish, and groundfish;

- Prevent nutrient and pathogen pollution by improving onsite septic system management and reducing human and animal waste;
- Protect shorelines and critical areas that provide important ecological functions by adopting updated critical areas ordinances and shoreline management programs and through public education;
- Restore degraded nearshore and freshwater habitats; and
- Reduce harm from stormwater runoff.

Additional information regarding the Puget Sound Action Team can be found at:

http://www.psat.wa.gov/Site_index/Site_index.htm

Stormwater Management Manual for Western Washington

The Department of Ecology *Stormwater Management Manual for Western Washington* (2001, revised 2005) provides guidance and technical standards for avoiding impacts from stormwater runoff through site design, planning, and provision of stormwater management facilities. It provides guidance for stormwater management facility design, construction, and operation. It establishes 11 Minimum Requirements and describes Best Management Practices (BMPs) for:

- Preparing stormwater site plans,
- Construction stormwater pollution prevention,
- Source control of pollutants,
- Preservation of natural drainage systems,
- Managing stormwater by infiltrating, dispersing, and retaining it on-site,
- Treatment of stormwater runoff,
- Flow control of stormwater runoff,
- Wetlands protection,
- Watershed planning, and
- Operation and maintenance of stormwater management facilities.

Stormwater Manual BMPs include using small-scale, decentralized Low Impact Development (LID) practices to detain and infiltrate stormwater runoff close to its source in order to maintain the existing hydrology. These BMPs include:

- Applying hydrologic and stormwater management concepts to site design,
- Preserving natural vegetation,
- Minimizing impervious surfaces,
- Using permeable pavement,
- Using roof downspout infiltration,
- Dispersing stormwater runoff,
- Amending post-construction soils to promote infiltration and revegetation, and
- Grading landscaped areas to collect runoff and promote infiltration.

Technical guidance for implementing these practices is provided in the *Low Impact Development Technical Guidance Manual* developed by the Puget Sound Action Team and Washington State University.

Stormwater Control (RCW 36.89)

RCW 36.89 authorizes county governments to construct, operate, and maintain public facilities including stormwater control facilities. This also includes conducting surface water management program activities such as water quality monitoring, stream gauging, and public education. It

authorizes Counties to finance these facilities and programs with general obligation and revenue bonds, stormwater control facility fees, and utility local improvement district assessments. Public property, including County Roads and State Highways are subject to fees for stormwater control facilities. These revenue sources are discussed in detail in Chapter 7 Revenue.

Utility Local Improvement Districts (RCW 36.89)

RCW 36.89.110 authorizes counties to form utility local improvement districts (ULIDs) to construct and fund stormwater control facilities. A ULID can be initiated either by petition of the owners of 51% of the land within the proposed District or by a Board of County Commissioners resolution.

Jefferson County could use this authority to construct regional stormwater management facilities, for instance in the Port Hadlock UGA.

Sewerage, Water, and Drainage Systems (RCW 36.94)

RCW 36.94 that authorizes counties to construct and operate water and sanitary sewer systems, also authorizes counties to construct and operate storm sewer systems, stormwater treatment facilities, and water quality monitoring programs. Counties are authorized to fund these systems through general obligation bonds, revenue bonds, and utility local improvement districts. Public property, including County Roads and State Highways are subject to fees for stormwater control facilities.

Prior to developing a sewer system, counties are required to prepare a General Sewer Plan (GSP). The Plan analyzes the proposed service area and presents options for collection, treatment, and disposal facilities. It also analyzes preliminary engineering and funding options to ensure feasibility. Jefferson County has prepared a General Sewer Plan for a sanitary sewer system in the Port Hadlock UGA. The County is currently preparing a Port Hadlock Sewer Facility Plan that will recommend a specific sewer system design. The UGA sewer system could also include constructing and managing stormwater control facilities. However, since this was not analyzed in the General Sewer Plan, the GSP would have to be amended to address this.

Drainage Districts (RCW 85)

RCW 85 authorizes the creation of drainage districts as municipal corporations. They are created by a vote of the property owners within the proposed district boundary and governed by a locally elected board of commissioners. RCW 85.38 authorizes an assessment system to fund district operations. Assessments are based on the use of and benefit from facilities that are provided by the district. Drainage district assessments are discussed in Chapter 7 Revenue.

Drainage districts were originally intended to construct and maintain agricultural drainage systems. There is an inactive agricultural drainage district in the Chimacum Creek watershed. The District could be reactivated to support implementation of agricultural BMPs and drainage improvements necessary for salmon recovery and agricultural production.

More recently, drainage districts have been created to plan for and provide drainage and stormwater management systems in unincorporated developed areas. The Port Ludlow Drainage District, created in 2000, encompasses the portion of the Port Ludlow Master Planned Resort north of Ludlow Creek. It is anticipated that the district will eventually expand to cover the entire Port Ludlow MPR.

Flood Control (RCW 86)

RCW 86 authorizes counties to designate flood control zones; create flood control districts; plan, construct, and finance flood control facilities; and develop and implement comprehensive flood control management plans. It also designates the Department of Ecology to administer the State's floodplain management program and Flood Control Assistance Account Program.

The Flood Control Assistance Account Program (FCAAP) funds a wide variety of activities related to flood hazard mitigation including development of local flood hazard management (FHM) plans, the floodplain management element of all-hazards mitigation plans; hazard mitigation projects that implement adopted FHM Plans; floodplain acquisitions; and fish habitat protection and enhancement projects that have a flood hazard reduction component.

RCW 86 also authorizes counties to levy flood zone assessments to fund flood control activities. These revenues sources are discussed in Chapter 7 Revenue.

Water Rights (RCW 90)

Washington State law recognizes that the surface waters and groundwater are valuable and limited public resources that should be allocated to provide beneficial uses. RCW 90 establishes a system of water allocations that are based on water right permits issued by the State, claims filed with the State, and uses that are exempt from water right permit requirements. This exemption allows groundwater withdrawals up to 5,000 gallons per day for domestic use, stock watering, and industry. A recent State Appeals Court decision has interpreted the term industry to include commercial agriculture. Therefore, exempt wells can be used for agricultural production.

RCW 90.22 authorizes the Department of Ecology to set minimum instream flows to protect fish and wildlife, recreational uses, and aesthetics from future withdrawals. These minimum flows are a water right. The Washington Department of Ecology is currently in the process of setting minimum instream flow levels for the rivers and streams in WRIA 17 Quilcene – Snow which includes the Big and Little Quilcene Rivers and Chimacum, Salmon, Snow, Tarboo, and Thorndyke Creeks. This process will also establish a program for administering future water allocations in these watersheds. The instream flow rule will be codified in the Washington Administrative Code (WAC) Chapter 173-517. The draft rule originally proposed by Ecology (Pre-proposal Draft, 7-20-2005) states that with the exception of limited periods from November through February on the Big Quilcene River and Chimacum Creek, there is no surface water available for additional appropriation in WRIA 17. The draft rule provided a limited groundwater reserve in each watershed for future domestic use. It did not provide a reserve for agricultural use. Jefferson County has adopted a policy statement that addresses development of an instream flow rule. See Jefferson County Policy and Regulation, WRIA 17 Watershed Management Plan below. **[NOTE: Since an instream flow rule for WRIA 17 is currently under development, this section may need to be updated prior to Plan adoption.]**

Shoreline Management Act (RCW 90.58)

The State Shoreline Management Act (SMA) aims to protect, preserve, and restore waters of the State and upland areas that are within the shoreline jurisdiction – marine waters, rivers, streams with greater than 20 cubic feet per second mean annual flow, lakes larger than 20 acres, wetlands associated with these water bodies, and the area within 200 feet of their ordinary high water mark. The SMA states that shoreline uses shall minimize damage to the shoreline environment and control pollution. It establishes processes for shoreline planning and development permitting by local

governments. Local shoreline planning and use regulations are combined in a shoreline master program (SMP). The SMA requires a shoreline substantial development permit for most development activities that are within the shoreline jurisdiction to ensure that they are consistent with the SMA and local SMP.

Shellfish Protection Districts (RCW 90.72)

RCW 90.72 authorizes counties with shellfish tidelands to establish shellfish protection districts and programs in areas where shellfish farming or harvesting are threatened by water quality degradation from non-point pollution. The county commissioners are the governing body of the district. The county commissioners may appoint a local advisory council to assist in preparation and implementation of shellfish protection programs. This program may include elements deemed appropriate to deal with the non-point pollution, including

- Eliminating or decreasing contaminants in storm water runoff;
- Establishing a program to monitor, inspect, and repair on-site septic systems to ensure that they are adequately maintained and functioning properly;
- Ensuring that animal grazing and manure management practices are consistent with best management practices; and
- Establishing educational and public involvement programs to inform citizens about the causes of non-point pollution and what they can do to decrease it.

Shellfish protection district programs may be financed through county tax revenues, inspection fees and other fees for services, charges specified in its protection program, or Federal, State, or private grants.

Washington State Salmon Recovery Strategy (RCW 77.85)

The State's efforts to restore wild salmon, steelhead, and trout populations are coordinated by the Office of Salmon Recovery which developed the Statewide Strategy to Recover Salmon: "Extinction is Not an Option" (January, 1999). The Strategy provides for local input and some measure of local control over the salmon recovery effort. It creates criteria for prioritizing restoration projects and a monitoring protocol to measure the effectiveness of recovery efforts and adapt the program.

As a component of this effort the State created the Salmon Recovery Funding (SRF) Board. The Board assesses proposals for salmon recovery projects submitted by State and local agencies, tribes, and regional salmon enhancement group and awards grants to fund the projects.

The Office of Salmon Recovery has recognized the importance of public outreach and education to support salmon recovery. The OSR has determined that salmon recovery plans seeking approval and funding from the SRF Board must include an Outreach and Education Plan component that addresses public information needs, provides support for policy-makers, and communicates with specific audiences and constituency groups

Watershed Planning (RCW 90.82)

The State Watershed Management Act of 1998 sets a framework for addressing the State's water resource issues. It authorizes broad-based local watershed planning as a means to protect and enhance natural hydrologic processes and to maintain and restore watershed health. Watershed planning is based on State-defined Water Resource Inventory Areas (WRIAs).

Watershed planning is intended to coordinate efforts of State and local agencies, pool resources, ensure consistent methodologies and standards, and identify and rank water resource problems. The goal is to develop watershed management plans. A watershed plan is intended to be a decision-making tool for water resource management, including future water appropriations, setting instream flows, and land use and development decisions. Watershed plans must address water quantity and use and develop strategies for future use. At the discretion of the local planning group, plans may also address water quality, aquatic habitat, and groundwater recharge.

After watershed plans are adopted, local governments should incorporate plan recommendations and specific requirements into their comprehensive plans, stormwater programs, and site development ordinances.

Jefferson County has adopted a Watershed Management Plan for WRIA 17 Quilcene – Snow. Implementation of the Plan is discussed below.

Forest Management

Preserving forest cover has a beneficial affect on surface waters. Forest management activities, such as timber harvest and road building, have the potential to adversely affect surface waters. The State of Washington’s forest management policies and activities have the potential to affect surface water resources in Jefferson County in two ways.

First, the State Department of Natural Resources (DNR) regulates commercial timber management activities, including timber harvest and road construction, through permits established under the Forest Practices Act (FPA) (RCW 76.09). The FPA recognizes the public interest in a viable forest products industry and in managing forestlands consistent with protecting forest soils, fisheries, and water quantity and quality. The effectiveness of the DNR in administering FPA requirements affects Jefferson County’s surface water resources.

The FPA specifically prohibits local governments from regulating forest practices, except for forest practices on lands platted after January 1, 1960 and forestland that is being converted to other uses. The FPA requires the County to adopt an ordinance regulating these forest practices by December 31, 2005. Jefferson County has not adopted an ordinance.

Second, the State of Washington owns 195,000 acres of land in Jefferson County. Most of this is State forestland that is managed for timber production to fund schools, higher education, and other programs. The location and scale of timber harvest and road construction on State forestland also affects Jefferson County’s surface water resources.

5.4 JEFFERSON COUNTY POLICIES AND REGULATIONS

Jefferson County’s Comprehensive Plan and Unified Development Code are its principle policies and regulations related to surface water management.

Jefferson County Comprehensive Plan

Jefferson County adopted a Comprehensive Plan in 1998 that complies with the State Growth Management Act (GMA). The Comprehensive Plan guides the growth and development of Jefferson County. Over time it will tend to concentrate development in urban areas and limit population growth and development in rural areas. This will preserve forest cover, limit the extent of impervious

surface, and minimize pollutant generation all of which will have a significant beneficial affect on surface waters.

The following Comprehensive Plan elements address specific aspects of surface water management: ***Port Hadlock Urban Growth Area Element*** designates the external UGA boundary and internal zoning districts. By designating the UGA, a significant portion of the County’s residential, commercial, and industrial growth will be directed into an existing developed area where it can be served by adequate levels of capital facilities, including stormwater management facilities. This avoids large-scale development in rural and resource lands that would result in extensive clearing and impervious surface that can impact surface waters.

Jefferson County prepared a Stormwater Management (SWM) Plan for the UGA that analyzed existing and projected drainage patterns and impervious surfaces. It recognized that stormwater runoff from the UGA had the potential to impact Chimacum Creek and Port Townsend Bay. In order to ensure that surface water and groundwater resources are protected as the UGA develops, the SWM Plan recommended providing stormwater management facilities and program activities such as water quality monitoring and public education. The SWM Plan includes a stormwater management financial plan that identifies planning level costs for stormwater management facilities and activities and proposes funding them through a stormwater control fee.

Land Use and Rural Element designates areas for rural residential, commercial, and industrial development, sets rural residential densities, establishes goals and policies for rural developments. It also designates the Port Ludlow Master Planned Resort as an area for urban development and services.

Rural Residential Designations

There are approximately 65,000 acres in eastern Jefferson County that are designated for rural residential development at densities that range from 1 unit per 5 acres to 1 unit per 20 acres. Prior to the adoption of the Comprehensive Plan, development on small lots was allowed in rural Jefferson County. The designations avoid extensive clearing and impervious surface for residential development that can impact surface waters. In order to allow flexibility, concentrate development on more suitable portions of sites, and preserve larger areas for open space, agriculture, and forestry, the Comprehensive Plan allows subdivisions with clustered lots called planned rural residential developments.

Rural Commercial Designations

There are 2 Rural Village Centers (Brinnon and Quilcene) and 8 Rural Commercial Crossroads designations covering approximately 250 acres in eastern Jefferson County. This is a significant reduction from 967 acres that were previously designated for rural commercial development. These designations recognize existing commercial areas and provide commercial services and employment opportunities in rural communities without creating extensive areas of clearing and impervious surface that can impact surface waters.

Rural Industrial Designations

There are 7 rural areas with a total of is 592 acres designated for industrial uses. This is a reduction from 928 acres that were previously designated. Of these 418.5 are located adjacent to the City of Port Townsend in the Eastview Industrial Plat (8 acres), Glen Cove (126.5 acres), and the Port Townsend

Paper Company (284 acres). In addition there are 24.9 acres of forest resource-based industrial in Gardiner and 122.5 acres on the West End adjacent to US 101 and the Hoh River. There is also a 22-acre light industrial area in Quilcene.

Drainage, Flooding, Stormwater Management Issues, and Polluted Discharges

Background information and analysis regarding these issues was compiled for the 1998 Comprehensive Plan. The analysis recommended that Jefferson County should adopt a comprehensive surface water management plan and conduct public education activities regarding non-point source pollution and stormwater management. This Plan implements that recommendation.

Goals and Policies

The goals and policies in the Land Use Element address several issues, including surface water management. Land Use Policies (LNP) with particular relevance to developing a Surface Water Management Program are paraphrased below:

- Require developments to comply with the standards of the Department of Ecology *Stormwater Management Manual for Western Washington*. (LNP 25.1)
- Require the owners of private stormwater management facilities to enter into an agreement with Jefferson County to operate and maintain their facilities. (LNP 25.4)
- Implement an operation and maintenance program for stormwater management facilities. (LNP 25.5)
- Adopt a stormwater control fee to provide an adequate funding source for stormwater facility development, operation, maintenance, monitoring, and enforcement. (LNP 25.6)
- Participate in the National Flood Insurance Program's Community Rating System. (LNP 26.4)
- Establish a water resource data collection program to acquire, manage, and evaluate water resource information. (LNP 27.1)
- Conduct a long-term water quality monitoring program. (LNP 27.2)
- Focus water quality monitoring on suspected problem areas where there is inadequate data. (LNP 27.3)
- Work to improve water quality in areas with identified problems. (LNP 28.1)
- Ensure that County water quality programs complement programs conducted by local, State, and Federal agencies. (LNP 28.2)
- Implement the Puget Sound Water Quality Management Plan. (LNP 28.3)
- Adopt and implement agricultural best management practices to control harmful discharges to surface waters. (LNP 28.4)
- Develop and implement watershed management plans to reduce non-point pollution. (LNP 28.7)

Natural Resource Conservation Element designates agricultural and forest lands and restricts their development for uses that are incompatible with resource production.

Forestlands

The Comprehensive Plan designates approximately 88,000 acres of forestlands in eastern Jefferson County and establishes residential densities that range from 1 unit per 20 acres to 1 unit per 80 acres depending on the type of forestland designation. While the main purpose of these designations is to support forest management and limit conflicts with adjacent uses, it should also be recognized that properly managed forestlands provide significant surface water benefits. Their very low percentage

of impervious surface and an average stand age of 25-40 years help preserve a natural hydrologic cycle. The Element also recognizes the importance of forestry on lands that are not designated a commercial forest resource land. Goal NRG 5.0 encourages the continuation of forestry on these lands.

Agricultural Lands

The Comprehensive Plan designates approximately 4,400 acres of Agricultural Land of Commercial Significance in eastern Jefferson County. There are also approximately 3,900 acres of Agricultural Land of Local Importance. Residential densities are 1 unit per 20 acres. While the main purpose of these designations is to support agricultural production, allow agricultural-related uses, and limit conflicts with adjacent uses, it should also be recognized that properly managed agricultural lands have low areas of impervious surface and fewer surface water impacts than if they were developed for residential or commercial use.

Environment Element contains goals and policies to protect and restore surface water resources. Achieving these goals is based on implementing four strategies:

- Developing watershed management plans and conducting fish habitat restoration activities;
- Conducting consolidated environmental review of County plans and development proposals;
- Protecting critical areas related to surface water resources, particularly aquifer recharge areas, erosion hazard areas, fish and wildlife habitat, flood hazard areas, and wetlands; and
- Conducting public education and involvement activities.

The Environmental Element recommends developing a surface water management plan.

Watershed Management Plans

Jefferson County has been involved in the watershed planning process for WRIA 16 and WRIA 17 and has adopted the WRIA 17 Watershed Management Plan. A draft WRIA 16 Plan is under review.

Environmental Review

Jefferson County has adopted consolidated environmental review procedures in its Unified Development Code (Chapter 18.40).

Critical Areas Protections

Jefferson County has adopted critical areas protections (Environmentally Sensitive Areas) in its Unified Development Code (Chapter 18.15).

Public Education Strategy

The public education strategy is based on the premise that public education is an effective means for protecting environmental resources. When the public is educated regarding natural processes and resource protection, they will be able to manage their property and avoid taking actions that may cause environmental problems. In conjunction with the development of this Plan, the County has sponsored surface water public education activities conducted by the WSU Cooperative Extension and the Jefferson County Conservation District. This has included developing the Surface Water Management Public Education Plan contained in Chapter 9.

Jefferson County Unified Development Code (UDC)

The UDC is the principal tool for implementing Jefferson County's Comprehensive Plan goals and policies. It regulates land development and subdivisions in Jefferson County. Several sections of the UDC contain regulations that protect surface waters:

Chapter 18.05 Introductory Provisions

This section establishes a process to review development applications to ensure compliance with the Comprehensive Plan and UDC. This process involves the participation of the Department of Community Development (overall code administration and environmentally sensitive area protection), Public Works Department (stormwater management), and Environmental Health Department (on-site septic systems). This process ensures that surface water protection standards are met during development.

Chapter 18.15, Article II Land Use Regulations, Table 3-1 Allowable and Prohibited Uses

This table classifies land uses in the various land use districts. It prohibits most commercial and industrial developments on rural resource and rural residential lands and restricts the type and scope of development on rural commercial lands.

Chapter 18.15, Articles VI-D through VI-J Environmentally Sensitive Areas

This section designates Environmentally Sensitive Areas (ESAs), including fish and wildlife habitat areas, flood hazard areas, geologically hazardous areas (particularly erosion hazard area), and wetlands. It also establishes protection standards including restrictions on development in ESAs, buffers between development and ESAs, and stormwater management plans to ensure that erosion, sedimentation, and stormwater runoff don't impact ESAs.

Chapter 18.25 Shoreline Management Master Program

This section adopts the County's existing Shoreline Management Master Program. The SMP includes development regulations that implement the State Shoreline Management Act (RCW90.58).

Chapter 18.30.050 Density and Dimension Standards, Table 6-1

This table limits the percentage of impervious surface area for developments in:

- Rural Resource Lands: 10%
- Rural Residential Areas: 25%
- Rural Village Centers and Rural Commercial Areas: 60%
- Rural Light Industrial Areas: 55%.

These restrictions limit the potential for impacts to surface water resources from stormwater runoff.

Chapter 18.30.060 Grading and Excavation and 18.30.070 Stormwater Management Standards

These sections adopt the standards of the Washington Department of Ecology *Stormwater Management Manual for Western Washington*. The *Manual* requires developments to provide appropriate erosion and sediment control, source control of pollutants, stormwater runoff treatment, and permanent stormwater runoff flow control. Developments that include more than 500 cubic yards of grading, more than 2,000 square feet of impervious surface, or more than 7,000 square feet of land disturbing activity are required to prepare and implement a stormwater site plan and obtain a stormwater permit. Smaller developments are required to implement erosion and sediment controls during development.

In order to ensure that stormwater management facilities are adequately maintained, Jefferson County requires developers to enter into a Stormwater Management Facility Maintenance Agreement with the County. The Agreement obligates the owner to maintain the stormwater management facility for the life of the development. The project developer files the Agreement with the County Auditor. The Jefferson County Public Works Department maintains an inventory of stormwater management facilities. At this time Jefferson County does not have a program to inspect and ensure the maintenance of private stormwater management facilities.

Agriculture and Fish & Wildlife Habitat Protection Plans

The Unified Development Code's fish and wildlife habitat protection standards exempt existing agricultural activities from stream buffer standards. In order to protect fish and wildlife habitat while helping to ensure the viability of agricultural operations on Agricultural Lands of Long-term Significance, Jefferson County entered into an agreement with the Washington Environmental Council (WEC) to develop agriculture and fish and wildlife habitat protection plans for County watersheds. The intent of the agreement is to achieve these goals in a voluntary and cooperative fashion without requiring additional regulation by Jefferson County.

Jefferson County Conservation District worked with agricultural stakeholders to develop an Agriculture and Fish & Wildlife Habitat Protection Plan for the Chimacum Creek watershed. The Plan:

- Contains background information regarding existing conditions;
- Adopts the standard that existing agricultural practices shall not to degrade fish and wildlife habitat;
- Recognizes the importance for agriculture of maintaining adequate drainage, particularly in low gradient reaches of the Creek;
- Establishes best management practices for livestock, nutrients and farm chemicals, soil erosion and sediment control, operation and maintenance of drainage systems, and maintaining riparian vegetation;
- Establishes a program of voluntary compliance and on-going monitoring to ensure that the Plan's standards are achieved;
- Recognizes important habitat improvements in the Chimacum Creek watershed that have been implemented over the past 20 years; and
- Discusses funding requirements to implement the Plan and identifies potential funding sources.

By the end of 2006, the Conservation District will complete an additional Agriculture and Fish & Wildlife Habitat Protection Plan that addresses the remaining County watersheds. The County is providing funds to develop the Plans. The District will be the lead agency for implementing the actions identified in the Plans.

The agreement with the WEC was an alternative to an appeal to the Western Washington Growth Management Hearings Board (GMHB). Under the agreement Jefferson County and agricultural landowners are obligated to implement the Plans. Effective implementation will require obtaining funds for habitat improvement projects and for Conservation District staff monitoring and implementation activities. Without effective implementation of the Plans, Jefferson County would likely face an appeal to the GMHB and potentially the requirement to regulate existing agricultural activities in fish and wildlife habitat areas.

The Chimacum Creek Plan identifies several revenue sources to fund implementation including the Washington State Salmon Recovery Funding Board, the National Fish and Wildlife Foundation, United States Department of Agriculture Farm Programs, Jefferson County Conservation Futures Program, the Chimacum Creek Drainage District, a Conservation District Special Assessment, and the Jefferson County Noxious Weed Control Board. The Plan also identifies potential funding from a Jefferson County Surface Water Management Program. These funding sources are discussed on Chapter 7 Revenue.

The Jefferson County Environmental Health Department in partnership with the with the Jefferson County Conservation District and the North Olympic Salmon Coalition has applied for a Centennial Clean Water Fund grant to implement the Chimacum Creek Clean Water Project. One of the primary objectives of the project is to improve water quality and fish habitat by implementing agricultural best management practices identified in the Chimacum Creek Plan. However, it should be noted that the Chimacum Creek Project is not intended to fully implement the agricultural BMPs identified in the Chimacum Creek Plan and would not implement the BMPs in other County watersheds.

Water Resource Inventory Area (WRIA) 17 Quilcene – Snow Watershed Management Plan

WRIA 17 includes the east Jefferson County watersheds north of the Dosewallips River. Jefferson County was the lead entity for the development of the WRIA 17 Watershed Management Plan. The Plan includes recommendations that address water quality and quantity, conservation, monitoring and data collection, public education, and habitat protection and restoration. The Planning Unit was unable to reach consensus on a recommendation for instream flows. Jefferson County adopted the WRIA 17 Plan in 2005.

In November 2005 Jefferson County adopted a policy statement committing the County to implementing recommendations of the WRIA 17 Plan. It also expresses both procedural and substantive concerns regarding the Department of Ecology’s draft proposal for setting instream flows, particularly the failure to allocate groundwater for agriculture. The policy states that Jefferson County supports developing a comprehensive water management strategy that protects salmon, ensures water supply, and supports local food production through an agricultural trust water right or other measures that would make available new, reserved, conserved, or transferred water sources. **[NOTE: Since an instream flow rule for WRIA 17 is currently under development, this section may need to be updated prior to Plan adoption.]**