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# McAllister/Eaton Creek Comprehensive Drainage Basin Plan

Thurston County, Washington  
March, 1994



RESOLUTION NO. 10582

A RESOLUTION to adopt the McAllister/Eaton Creek Comprehensive Drainage Basin Plan, and the recommended level of service.

WHEREAS prevention of water quality and flooding problems are important goals of the Thurston County Comprehensive Plan and the Puget Sound Water Quality Management Plan; and

WHEREAS the County entered into Interlocal Cooperation Agreements pursuant to RCW 39.34 regarding joint Storm and Surface Water Management within the Cities of Lacey, Olympia, and Tumwater to provide a means by which existing and potential pollution, erosion, and flood damage to property and aquatic resources could be more effectively managed; and

WHEREAS uncontrolled stormwater runoff in McAllister/Eaton Creek basin can cause flooding problems, ground water contamination and pollution that may threaten public health and safety and damage natural habitat; and

WHEREAS actions to minimize these problems can result in significantly decreased flooding and improved water quality in the future; and

WHEREAS the McAllister/Eaton Creek Comprehensive Drainage Basin Plan contains policies and recommendations that can accomplish these goals over time and, therefore, serve the public health and safety;

NOW, THEREFORE BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF THURSTON COUNTY that:

The Thurston County Board of Commissioners shall adopt the McAllister/Eaton Creek Comprehensive Drainage Basin Plan, and the recommended level of service; and that

Thurston County shall prioritize these recommendations in relation to all the other drainage basin recommendations for the Stormwater Utility area; and that

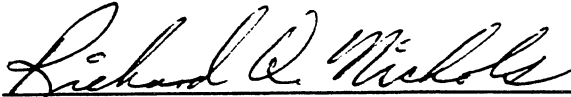
Thurston County shall implement these recommendations in prioritized order, to the extent that funding is available.

ADOPTED: March 21, 1994

ATTEST BY:

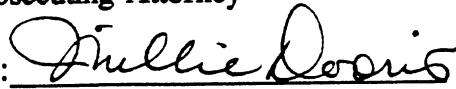
BOARD OF COUNTY COMMISSIONERS  
Thurston County, Washington


  
Clerk of the Board

  
Richard Q. Nichols, Chairman

Approved as to form:  
Patrick D. Sutherland  
Prosecuting Attorney

  
Judy Wilson, Commissioner

By:   
Deputy Prosecuting Attorney

  
Diane Oberquell, Commissioner

DETERMINATION OF NONSIGNIFICANCE

Proponent: Thurston County Water & Waste Management  
921 Lakeridge Way  
Olympia, WA 98502

Description of Proposal: Adoption of the McAllister/Eaton Creek Comprehensive Drainage Basin Plan.

Location of Proposal: McAllister/Eaton Creek Drainage Basins in the NE portion of Thurston County.

Threshold Determination: The lead agency for this proposal has determined that it does not have a probable significant adverse impact upon the environment. An Environmental Impact Statement is not required under RCW 43.21C.030(2)(C). This decision was made after review by the Lead Agency of a completed Environmental Checklist and other information on file with the Lead Agency. This information is available to the public on request.

Jurisdiction: Thurston County  
Lead Agency: Planning Department  
Responsible Official: Fred Knostman, Acting Planning Director

Date of Issue: November 19, 1993

  
Paula Ehlers, Environmental Review Officer

There is no comment period for this Determination of Nonsignificance (DNS). The lead agency and other agencies with jurisdiction over the proposal may issue or continue processing any necessary approvals. If no other approvals are necessary, the applicant may begin work.

NOTE: Pursuant to RCW 43.21C.075 and Thurston County Code 17.09.160, a project denial based upon environmental information, and a conditioned or mitigated DNS may be appealed by any agency or aggrieved person. Appeals may only be filed for those conditions or mitigating measures identified in this DNS and the threshold determination is not appealable. Appeals are filed either with the Planning Department when there is also an underlying government action or with the Board of County Commissioners if there is no underlying governmental action. Appeals to the Board must be filed within ten (10) working days of the issuance of the written decision (refer to the Thurston County Code for time periods on appeals filed with the Planning Department).

NOTE: The issuance of this Determination of NonSignificance does not constitute project approval. The applicant must comply with all applicable requirements of Thurston County Departments and/or the Hearing Examiner prior to receiving construction permits.

Thurston County Planning Department, Environmental Review Officer  
Building #1, Administration  
2000 Lakeridge Drive SW  
Olympia, WA 98502 (206) 786-5554

37:sm

cc: Department of Ecology (2)  
Thurston Co Building & Fire Safety  
Thurston Co Environmental Health Dept  
Department of Fisheries  
Thurston County Parks Department  
City of Olympia

Sub-Area #1-10  
Adjacent Property Owners  
Th Co Roads & Transportation Serv  
T.C. Water/Waste Mgmt, Ben Alexander  
Nisqually Indian Tribe  
City of Lacey



MCALLISTER/EATON CREEK  
COMPREHENSIVE DRAINAGE BASIN PLAN

Prepared by:  
Thurston County Department of Water and Waste Management  
Storm and Surface Water Program  
Olympia, WA

March, 1994

Partially funded by:  
Washington State Department Of Ecology  
Centennial Clean Water Fund Grant No. TAX90031



McAllister/Eaton Creek  
Comprehensive Drainage Basin Plan

Acknowledgements:

Thurston County project staff:

Ben Alexander, Project Manager  
Susie Vanderburg, Public Involvement Coordinator  
Loretta Swanson, Program Manager  
Tom Holz, Senior Design Engineer  
Phil Jensen, Design Engineer  
Kirk Christiansen, Assistant Design Engineer  
Pat Klavas, Assistant Design Engineer  
Linda Prewett, Office Assistant

McAllister/Eaton Creek Basin Citizens Advisory Task Force:

Brian Blowers, chair	Bruce Anderson
Tom Weiger	Helen Jacobs
Tom Connor	Hal Michael
Tony Whiley	Conrad Bergstrom

Consultants:

Brown and Caldwell, Consulting Engineers in association with Adolfson Associates  
and Sweet-Edwards/EMCON  
Golder and Associates

Plan reviewers:

Andy Haub, City of Olympia  
Mark Blosser, City of Olympia  
Joanne Richter, City of Olympia  
Greg Williamson, City of Lacey  
Maureen Knutson, City of Lacey  
Art Starry, Thurston County  
Jane Hedges, Thurston County  
Jeanne Koenings, Thurston County  
Tom Clingman, Thurston County  
Steve Morrison, Thurston Regional Planning Council  
Jim Fraser, Washington Department of Fisheries  
Steve Evans, Washington Department of Fisheries  
Jay Hunter, Washington Department of Wildlife  
Debbie Carnevali, Washington Department of Wildlife  
Louise Vicenzio, Nisqually National Wildlife Refuge  
Tony Whiley, Nisqually Indian Tribe





## FORWARD

The McAllister/Eaton Creek Comprehensive Drainage Basin Plan provides Thurston County residents and government with a road map for the future of surface water management in the basin. The plan is intended to be a living document that responds to the changing face of the basin landscape and the evolving needs and concerns of its residents. As conditions change and new information is developed, the plan will be reevaluated and revised appropriately.

Thurston County is strongly committed to protecting water resources and maintaining the quality of life. County government has a responsibility to balance the needs of each basin and watershed equitably, and consider the entire range of programs, services and capital facilities required to protect and serve the public interest. McAllister/Eaton basin is only one of six drainage basins in Thurston County with basin plans either adopted or under development. Each plan contains recommendations which will require additional funding beyond the County's current financial capacity. In addition, parks, roads, utilities, public buildings and other important needs are all competing with basin plans for limited funds to insure public health and safety.

Adoption of this basin plan does not commit actual funds to the recommendations described within. These recommendations will be reviewed by the Board of County Commissioners as well as various citizen advisory groups, in the context of all the County's needs. Specific recommendations will be prioritized and considered for funding in the annual budgets which are subject to the approval of the Board of County Commissioners. The recommendations will be implemented to the extent that funding is available. The County will continue to look for opportunities for reducing costs to residents and will pursue outside funding wherever possible.

Actions designed to prevent further degradation of water resources will receive top priority, followed by actions designed to correct existing known problem sites. Lowest priority will be assigned to all other recommendations. In this way, the County hopes to make the most efficient use of limited financial resources and protect the water which is essential to our way of life.



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## **CHAPTER 1: INTRODUCTION**



## **CHAPTER 1: INTRODUCTION**

The McAllister/Eaton Creek Comprehensive Drainage Basin Plan has evolved in response to growing concerns over the impacts of development on surface water and other natural resources, and especially on McAllister Springs. Pollutants travel rapidly down through the coarse soils in the basin and contaminate the underlying aquifer which provides drinking water to more than 50,000 people. Pumps can force contamination into wells as they draw water from the ground. Several wells in the basin have already been contaminated with nitrates and pesticides, which take decades to dissipate after the pollution source has been eliminated, so inaction now may cause problems for many years in the future.

Several areas in the basin also experience chronic flooding of roads and homes, causing damage to property and endangering public safety. Flooding also causes water pollution by washing untreated runoff directly into streams, which occurred during the severe floods in the midwest during the summer of 1993. High flood flows cause erosion of stream banks, which damages property and destroys fish and wildlife habitat. The condition of fish and aquatic life and their habitat provide a valuable indication of the overall health of the stream system.

The basin plan offers a comprehensive, watershed approach to solving current and future problems in the creek system and surrounding drainage area, including flooding, erosion, pollution, and loss of fish and wildlife habitat. The recommended plan integrates a broad array of strategies, from building spill control structures to improving stormwater systems to increasing public education programs and strengthening regulations. No single approach can effectively prevent nonpoint source pollution, reduce erosion, or improve habitat. Thousands of individuals must change the way they care for landscapes, maintain septic systems, perform automotive repairs, tend domestic animals and dispose of household chemicals, in order to reduce the cumulative effects which threaten ground water supplies. Capital construction projects can prevent localized flooding and reduce some threats to McAllister Springs, but public education and involvement is essential for protecting the long-term quality of life and the environment.

Residents of the basin and the county must carefully weigh the costs of implementing the plan against the costs of postponing action. The problems addressed in the basin plan will cost taxpayers and property owners for many years into the future. Flood damage, declining fisheries, shellfish harvesting restrictions, contaminated wells, and condemned land all carry costs and economic impacts. Perhaps most significant, contamination at McAllister Springs would threaten the livelihood of thousands of businesses and families representing about half the population of the Olympia/North Thurston County area. Furthermore, loss of water at state offices would severely curtail or halt the functioning of state government. Providing alternate water supplies and cleaning up contamination at the Springs would be enormously expensive. The economic consequences would include lost jobs, business income and tax revenues, increased insurance costs, and loss of income-producing resources such as shellfish and salmon. These consequences are very real to the basin residents who have already been



forced to relocate because their wells have become polluted, and to the businesses that have lost income because of restrictions on commercial shellfish harvesting at the mouth of McAllister Creek.

## **1.1 BACKGROUND**

The McAllister/Eaton Creek basin lies east of Lacey and west of the Nisqually River. It encompasses urbanizing areas of the county around Martin Way, rural agricultural areas in the McAllister floodplain and Evergreen Valley, and large areas preserved in relatively natural conditions on the Nisqually National Wildlife Refuge, the city of Olympia McAllister Springs Watershed, and Fort Lewis. A tiny portion of the city of Lacey lies within the basin as well. Map 1 in Appendix A shows the basin location, and Map 2 illustrates the basin boundaries.

The basin encompasses approximately 20,467 acres or 32 square miles, about 23% of which is currently developed. New development in a large portion of the basin halted temporarily in 1988 when the Thurston County Board of Health passed a resolution which established the McAllister Springs Geologically Sensitive Area (GSA), placed a partial moratorium on new construction in the GSA, and established standards for on-site sewage disposal systems in the GSA. In 1990, the Board of Health and the Board of County Commissioners revised the GSA boundaries and made them permanent, updated the moratorium, and zoned the GSA for a maximum 1 unit per 5 acres. Map 3 in Appendix A shows the current GSA boundaries. The moratorium expired in February, 1991.

Since 1988, development has focussed in the area north of the GSA, including some large planned communities north of Martin Way. That area lies partially within the long-term Urban Growth Management Area (UGMA), which is intended to receive city utility services as the area grows.

Investigation into the McAllister/Eaton Creek basin began in 1987, in response to discovery of toxic chemicals in drinking water wells near McAllister Springs and Lake St. Clair. At the same time, a regional basin management effort started by analyzing flooding and pollution problems on Percival, Woodard, and Woodland Creeks.

Thurston County contracted with consultants to map and analyze ground water flows into McAllister Springs, and assess risks to ground water from surface runoff. The consultants, Golder Associates Inc, and Brown and Caldwell in association with Adolfson Associates, Inc, and Sweet-Edwards/EMCON, used information from the United States Geological Survey (USGS) to develop their own hydrogeologic computer models of the GSA. The county also worked with the USGS to develop a highly sophisticated hydrologic computer model to predict future flows in Percival, Woodard and Woodland creeks under a variety of land use scenarios. A consultant applied the same USGS hydrologic computer model to selected sub-basins in the McAllister/Eaton Creek drainage.

Basin planning for the McAllister/Eaton Creek basin started in 1989 with funding from a Washington State Department of Ecology (DOE) Centennial Clean Water Grant (TAX90031). Basin plans have also been completed and adopted for the Indian/Moxlie basin in Olympia and Thurston County, and the Percival Creek basin in Olympia and Thurston County. Basin plans are currently under development for the Woodland/Woodard and Chamber/Ward/Hewitt basins in Olympia, Lacey and Thurston County.

The basin planning effort has identified both basin specific and regional solutions to a variety of problems within the McAllister/Eaton Creek basin. Basin specific solutions are primarily capital improvements needed to solve or prevent problems. Regional solutions are aimed at correcting problems common to all basins in the north Thurston County area.

Comprehensive Public Involvement and Education (PIE) activities have been offered during the planning process, and are described in detail in Appendix L. Activities include a citizen advisory committee, public workshops, and Steam Team training and field activities. Public involvement is a continuing aspect of plan development and adoption.

## **1.2 STRUCTURE OF THE BASIN PLAN**

This plan is arranged into 10 chapters:

- Chapter 1, "Introduction", outlines the goals and objectives of the basin plan, explains the projected use of the plan, describes the legal authority for basin planning, and briefly reviews related laws and policies.
- Chapter 2, "Basin Characterization", describes the natural resources and cultural characteristics of the basin.
- Chapter 3, "Problem Identification", describes existing and potential future problems identified during the basin planning process.
- Chapter 4, "Management Approaches", describes a variety of structural and nonstructural methods for addressing stormwater problems.
- Chapter 5, "Level of Service Alternatives", defines 3 levels of service for stormwater management in the basin: recommended, minimum, and no action (existing); and evaluates the results of each alternative.
- Chapter 6, "Recommended Plan", presents a detailed description of the proposed recommendations, benefits, and costs.
- Chapter 7, "Minimum Service Alternative", presents a detailed description of the minimum measures required to comply with state and federal laws.

- Chapters 8-10 discuss the implementation costs, funding alternatives, and implementation strategy for the preferred alternative.

### **1.3 GOALS AND OBJECTIVES**

In September, 1990, the stormwater managers from Olympia, Lacey, Tumwater and Thurston County established broad goals for the basin planning process, which may be found in Appendix E. The following goals and objectives for this basin plan were developed by the McAllister/Eaton Creek Citizen Advisory Task Force.

#### **1.3.1 Goals**

- Protect the aquifers of the McAllister Geologically Sensitive Area to preserve drinking water sources.
- Protect public health and safety.
- Prevent ground water and surface water contamination and improve water quality.
- Solve existing flooding problems and prevent future flooding problems.
- Prevent erosion.
- Preserve natural hydrology.
- Preserve natural drainage systems and critical areas.
- Restore the natural functions of the basin's stream systems.
- Maintain the purity and health-giving qualities of the basin's water resources.
- Improve fish and wildlife habitat.

#### **1.3.2 Objectives**

These objectives are intended to be the specific goals of actions recommended by this plan.

- Determine the background (ambient) levels of pollutants in surface water.
- Evaluate the existing condition of the basin's water resources.

- Improve understanding of the basin's water-related ecological processes and functions.
- Identify problems and determine trends in water quality, flood flows, and habitat.
- Prevent contamination of drinking water sources in the McAllister GSA.
- Convey stormwater runoff without flooding.
- Maximize stormwater runoff detention, treatment and infiltration.
- Maintain stormwater facilities so they work effectively and efficiently.
- Require drainage designs that minimize runoff and maximize ground water recharge.
- Prevent erosion and runoff from construction activities.
- Evaluate the effectiveness of specific stormwater management projects.
- Restore native vegetation to degraded stream corridors.
- Remove human-created barriers to fish passage in fish-bearing streams.
- Improve in-stream fish habitat.
- Encourage innovative land use planning which reduces impacts to water resources.
- Enforce regulations and respond to complaints quickly and effectively.
- Increase basin residents' understanding of their impacts on local water resources.
- Encourage practical changes which reduce nonpoint pollution.
- Increase public involvement in decision making and resources management.
- Coordinate basin plan implementation and water resources management between jurisdictions, especially in the Urban Growth Management Area.

#### **1.4 USE OF THE PLAN**

Government entities are expected to use the McAllister/Eaton Creek Comprehensive Drainage Basin Plan by:

- Administering city and county programs and services that affect the basin.

- Reviewing other plans and policies that affect the basin.
- Coordinating with other governments and groups interested in the basin.
- Preparing city and county capital improvement project lists, work programs, and operation and maintenance budgets.
- Reviewing development proposals in the basin for compliance with the plan.
- Developing future public involvement and education opportunities in the basin.

Others interested in the plan or proposing new development in the basin are anticipated to use the plan by:

- Understanding the community's vision and hopes for the McAllister/Eaton Creek basin.
- Designing projects that are consistent with the recommendations and visions outlined in the plan.
- Initiating projects and activities that protect or enhance the basin's natural and developed systems.

## **1.5 AUTHORITY OF THE BASIN PLAN**

This basin plan derives its legal authority from a variety of state and local laws. This section summarizes those laws, and Appendix D contains a more complete description.

### **1.5.1 Authorizing Legislation**

**RCW 36.70** Each jurisdiction in Washington is required by the Revised Code of Washington (RCW 36.70) to prepare a comprehensive plan. These plans are intended to facilitate orderly development and include a broad spectrum of planning issues. Comprehensive plans are required to contain a land use element that provides for:

- Protection of the quality and quantity of ground water used for public water supplies (RCW 36.70.330).
- Review of drainage, flooding, and stormwater runoff in the area and nearby jurisdictions (RCW 36.70.330).
- Guidance for corrective actions to mitigate or cleanse those discharges that pollute

Puget Sound or waters entering Puget Sound (RCW 36.70.330).

The RCW allows key aspects of the comprehensive plan to be "amplified and augmented in scope by progressively including more completely planned areas consisting of distinctive geographic areas or other types of districts having unified interests within the total area of the county" (RCW 36.70.340).

The RCW further authorizes basin planning through a comprehensive planning option to include "a conservation element for the conservation, development, and utilization of natural resources, including water and its hydraulic force, forests, watersheds, soils, rivers and other waters, harbors, fisheries, wildlife, and other natural resources", "a public services and facilities element showing general plans for sewage, refuse disposal, drainage and local utilities, and rights of way, easements and facilities for such service", and "a plan for financing a capital improvements program" (RCW 36.70.350).

**RCW 36.89** This Washington State law mandates basin-wide planning and authorizes counties to form stormwater utilities and collect rates from residents. The RCW states that stormwater facilities "generally require planning and development over the entire drainage basins, and affect the prosperity, interests and welfare of all residents of such county".

To accomplish that purpose, the RCW provides that "A county may create utility local improvement districts for the purpose of levying and collecting special assessments on property specially benefitted by one or more storm water control facilities."

**Puget Sound Water Quality Management Plan** The 1991 Puget Sound Water Quality Management Plan constitutes the official plan for Puget Sound under the Puget Sound Water Quality Act (RCW 90.70), and the Comprehensive Conservation and Management Plan for Puget Sound under Section 320 of the Federal Clean Water Act (PL100-4). **RCW 90.70** requires local governments in the Puget Sound basin to "evaluate, and incorporate as applicable, subject to the availability of appropriated funds or other funding sources, the provisions of the plan, including any guidelines, standards, and timetables contained in the plan". RCW 90.70 further authorizes basin planning by empowering local governments to "adopt ordinances, rules, and regulations that are applicable on less than a county-wide, city-wide, or town-wide basis".

**Washington Department of Ecology Stormwater Guidance Manual for the Puget Sound Basin** The Puget Sound Water Quality Management Plan directed the Department of Ecology to set minimum stormwater management standards for local government and review local programs for consistency with the Plan and Ecology's guidelines. Ecology published these guidelines in 1992. Local stormwater programs must include measures to address stormwater treatment and quantity control, maintenance, development regulations, and erosion control. Jurisdictions are expected to either adopt the Ecology manual or develop a similar one.

**Growth Management Act** Basin planning is supported by the requirements of the State Growth Management Act as amended (SHB 2929). The Washington State Legislature passed SHB 2929 in 1990, to promote comprehensive land use planning in order to:

- Protect the environment.
- Enhance economic development.
- Protect the quality of life in Washington State.

The Growth Management Act requires all jurisdictions to adopt regulations to protect critical areas including:

- Wetlands.
- Frequently flooded areas.
- Geologic hazard areas.
- Critical aquifer recharge areas.
- Fish and wildlife habitat.

The Growth Management Act emphasizes the interjurisdictional character of natural resources, and places a number of requirements on jurisdictions which basin plans fulfill, including:

- Working cooperatively to achieve cohesive land use policies on issues such as stormwater that do not recognize jurisdictional boundaries.
- Identifying capital stormwater facilities and planning for future capital improvements.
- Identifying innovative land use solutions for land management problems.

**Nisqually River Management Plan** The Washington State Legislature adopted the Nisqually River Management Plan in June, 1987, and directed the Department of Ecology to implement the plan recommendations. The plan includes Eaton and McAllister basins, and designates McAllister Creek corridor south of I-5 as a "Stewardship Management Zone", and the entire stream basin north of I-5 as a "Core Management Zone". Some of the plan's goals which support the McAllister/Eaton Creek basin plan include:

- "Maintain and protect water quality and stream flow quantity for all streams and lakes..."
- "Flood damage...should be minimized by regulating development in the 100-year floodplain, (and) by maintaining natural wetlands..."
- "Landowners, government resource and development agencies, Indian tribes, and river users should work together to maintain or enhance resident and anadromous fish populations and habitat..."

- "Wetland and estuarine habitats should be protected and where necessary enhanced..."
- "Local land use planning and regulation within the Core and Stewardship Management Zones should promote enhancement of the natural and recreational resources..."

**Thurston County Comprehensive Plan** The comprehensive plan for Thurston County was updated in 1988. Thurston County has jurisdiction in almost all of the basin. Basin planning is an integral part of Thurston County's stormwater management program. The Comprehensive Plan states policies regarding the natural environment in general, and stormwater management specifically.

According to the Thurston County Comprehensive Plan (Chapter 2, Natural Environment, Objective B), the following policies shall be followed in order to "ensure high quality surface and ground water, preservation of water resources and compatibility between land and water uses":

- Protect water quality, natural drainage, and habitat of streams, lakes, and wetlands.
- Require that development does not degrade fish-bearing streams and commercial shellfish areas, nor result in the loss of natural functions. Achieve this goal by avoiding excessive flows, protecting riparian habitat and streambank integrity, prohibiting pollution discharges, and avoiding water quality degradation.
- Restore degraded water quality when possible.
- Retain lakes, streams and wetlands and their corridors in their natural condition, by maintaining undisturbed natural buffers and prohibiting filling.
- Manage water resources for multiple uses, and give the natural system priority when conflicts arise.
- Protect ground water quality and prevent aquifer contamination through comprehensive management

The Comprehensive Plan's stormwater management element (Chapter 2, Utilities, Objective F) calls for a stormwater utility responsible for interjurisdictional coordination and promotion of development practices "which do not lead to surface water and ground water degradation or chronic flooding from storm water". Specific policies to achieve this goal include:

- Minimize runoff from new and existing development and avoid altering natural drainage systems.
- Minimize erosion and sedimentation from construction practices.



- Protect streams and other natural waterways.
- Retain wetlands and floodplains in their natural state.

Adoption of the McAllister/Eaton Creek Drainage Basin Plan by the Thurston County Commissioners would give the plan authority equivalent to the comprehensive plan.

**Nisqually Sub-Area Plan** The Nisqually Sub-Area Plan, adopted in 1992, defines zoning regulations and related land use programs for the area from the Nisqually Reach south to the southern boundary of the Nisqually Indian Reservation, and from the Urban Growth Management Area boundary east to the Nisqually River, and the area between Meridian Road and McAllister Bluff (see Map 3 in Appendix A). This area lies almost entirely within the McAllister/Eaton Creek Basin. The Sub-Area Plan guides development patterns which influence stormwater runoff, so the basin plan may make recommendations that would be implemented through the Sub-Area Plan. See Chapter 2, Zoning, for a more complete description of the Sub-Area Plan.

**Thurston County Code Title 15 Sec.05.010: Drainage Design and Erosion Control Manual for the Thurston County and the Cities of Lacey, Olympia, and Tumwater, Washington** The drainage design and erosion control ordinance provides that basin plan recommendations addressing stormwater management requirements will supersede any requirements in the ordinance.

### **1.5.2 Other Related Laws, Programs and Plans**

Other programs, both federal and state, have guidelines and requirements specific to the kinds of information and recommendations contained in this plan.

**The National Pollutant Discharge Elimination System (NPDES)** In 1987 the Federal Clean Water Act and associated NPDES program was amended to address stormwater discharges. Administered by the Washington Department of Ecology, NPDES regulates large and medium sized municipal storm sewer systems that discharge stormwater to receiving waters of the state. Requirements for permits include prohibition of non-stormwater discharges into the storm system and controls to reduce discharge of pollutants to the maximum extent practicable. Although Thurston County currently has a population below the permitting threshold, EPA will determine how to regulate smaller jurisdictions in the near future. The potential water quality improvements gained from basin plan recommendations will be instrumental in the future permitting process.

**Washington Departments of Fisheries and Wildlife** Guidelines for the protection of streams and fish habitat have been developed by the Departments of Fisheries and Wildlife. Specific guidelines focusing on stormwater issues and fisheries protection were developed in 1990. Fisheries and Wildlife both have authority to issue Hydraulic Project Approvals

(HPAs) under the Washington Hydraulic Code. Fisheries and Wildlife are currently revising the HPA rules to give the agencies greater authority over stormwater system design. These rules probably won't apply to Thurston County and other jurisdictions with Ecology-approved stormwater design ordinances. The Fisheries and Wildlife departments will be merging late in 1993, which should provide better consistency between agency rules and procedures.

**Grant and Loan Programs** Various grant and loan programs require the completion of a basin plan or flood management plan before a jurisdiction is eligible for funding assistance, or they increase the eligibility rating of specific projects contained in adopted plans. Those programs include:

- WDOE Flood Control Assistance Account Program (FCAAP)
- WDOE Centennial Clean Water Fund
- WDCD Public Works Trust Fund Loan Program
- WDOE State Revolving Loan Fund
- EPA Clean Water Act Section 319 Grants

The grant program requirements lend authority to the plan by enabling Thurston County to pursue additional outside funding sources.

**North Thurston County Ground Water Management Plan (GWMP)** The GWMP, adopted in 1992, provides a mechanism for comprehensive management of ground water in north Thurston County. The GWMP recognizes the potential impacts of stormwater on ground water and supports the current management efforts of the jurisdictions. Because of stormwater's importance to ground water quality, the plan includes numerous recommendations in support of existing programs as well as for additional work. Specific recommendations address public education, technical assistance, increased enforcement, facility maintenance, modification of the regional drainage manual, and other recommendations that are covered within this basin plan.

**Environmentally Sensitive Areas Ordinance (Critical Areas Ordinance)** Thurston County is currently revising its Environmentally Sensitive Areas Ordinance (renamed the Critical Areas Ordinance) in order to comply with the Puget Sound Water Quality Management Plan and the state Growth Management Act. This regulation applies to developments within or near wetlands, unstable slopes, streams, floodplains, significant wildlife habitat areas, and special management areas. Basin plans make recommendations about protecting certain critical areas, which may be implemented through the Environmentally Sensitive Areas Ordinance.

**Thurston County Code Title 19: Shoreline Master Program** Development on certain shorelines is regulated by the Shoreline Master Program, in addition to the Environmentally Sensitive Areas Ordinance. The shores of streams with average annual flows greater than 20 cubic feet per second come under this program, which includes McAllister Creek. The

Shorelines Master Program contains policies and regulations which define permitted uses and activities. The program also requires permits for certain types of development or use. Basin plans make recommendations about protecting these shorelines, which may be implemented through the Shorelines Master Program.