Stuart Glasoe

1997-99 Puget Sound Water Quality Work Plan

Prepared by the

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Revised to reflect budget decisions made by the 1997 Washington State Legislature

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If you need this document in an alternate format contact the office of the PSWQAT at 360-407-7300 or 1-800-54-SOUND. Our TDD number is 1-800-833-6388. This work plan is also available on the Action Team's web site at:
http://www.wa.gov/puget_sound/pslibrary/workplan/Chap1.html

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CHAPTER I

INTRODUCTION

PROTECTING WATER QUALITY IN PUGET SOUND

This work plan calls out the priority actions that state and federal agencies and local governments will take during the 1997-99 Biennium to protect Puget Sound. Work plan priorities were determined by the Puget Sound Water Quality Action Team and Puget Sound Council through a public decision-making process. The actions contained in this work plan build on the goals and objectives of the *1994 Puget Sound Water Quality Management Plan.*

Other actions important to the protection of Puget Sound — but not specifically addressed in the management plan — are also included in this work plan.

Since 1986, federal, state and local government activities to protect and enhance the biological resources and water quality of Puget Sound have been coordinated through the management plan. This comprehensive management plan was adopted in 1986 by the Puget Sound Water Quality Authority and revised by the Authority several times, most recently in 1994. In 1991 the Environmental Protection Agency accepted the management plan as the Comprehensive Conservation and Management Plan for Puget Sound under the National Estuary Program.

During the last decade, we have significantly improved our stewardship of Puget Sound. Having a comprehensive plan to protect Puget Sound has helped federal, tribal, state and local governments coordinate their activities, leading to more effective solutions. Programs for limiting pollution from point sources, on-site sewage systems and disposal of dredged material have been improved. New programs to address stormwater, nonpoint sources of pollution and the loss of wetlands and habitats have been established, especially by local governments. Many local governments have also incorporated water quality protection into their growth management plans and development regulations. A coordinated ambient monitoring program is giving us better data on the condition of the Sound. Businesses, communities, citizens and citizen groups have made significant contributions to the protection of Puget Sound.

The partnership fostered by the management plan provides strong linkage among federal, state, and local programs and improves opportunities to coordinate on tribal government and transboundary issues.

Legislation passed in 1996 changed the way the management plan is carried out. The Puget Sound Water Quality Protection Act (Chapter 90.71 RCW) established the Puget Sound Water Quality Action Team and directs it to prepare a biennial work plan and budget (in this case, covering the period from July 1, 1997, through June 30, 1999).

The law establishes that . . . it is the policy of the state of Washington to coordinate the activities of state and local agencies by establishing a biennial work plan that clearly delineates state and local actions necessary to protect and restore the biological health and diversity of Puget Sound . . . [and] to implement the *Puget Sound Water Quality Management Plan* to

the maximum extent possible. The law directs that the work plan prescribe the necessary federal, state, and local actions to maintain and enhance Puget Sound water quality, including but not limited to, enhancement of recreational opportunities, and restoration of a balanced population of indigenous shellfish, fish, and wildlife. A number of tribal governments requested that their activities be included in this work plan; these represent only a portion of the activities that tribes will undertake to protect Puget Sound during the next two years.

THE ACT DIVIDES THE BASIN INTO FIVE AREAS TO AID IN SETTING PRIORITIES FOR LOCAL AND STATE ACTIONS.

THE PUGET SOUND WATER QUALITY ACTION TEAM AND COUNCIL

The new law directs the Action Team to meet the following objectives in developing biennial work plans:

- Use water quality elements of the *Puget Sound Water Quality Management Plan* to set priorities for local, and state and federal actions necessary to restore and protect the biological health and diversity of Puget Sound.
- Consider the problems and priorities identified in local plans.
- Coordinate work plan activities with other relevant activities, including but not limited to, agencies' activities that have not been funded through the management plan, local plans, and governmental and nongovernmental activities to restore watersheds.

The law divides the basin into five areas (shown on the map) to aid in setting priorities for local and state actions.

Between July and December 1996, the Action Team support staff completed the following activities to assist in the preparation of the work plan:

- Met with the 12 counties surrounding Puget Sound and as many cities as time would allow. The counties and cities were asked to invite conservation districts and other jurisdictions, groups and citizens, as they wished. The support staff also met with a number of local government associations. At each meeting, representatives of the local jurisdictions described their key water quality issues, actions they expect to accomplish during the next biennium, and how state agencies, the Action Team and others could help. The Action Team support staff summarized responses and then asked the representatives of the jurisdictions (or associations) to review the summaries for accuracy. A number of local government officials voiced concern that actions they identified not be turned into state mandates. Hence, this document says that local governments intend to take various actions when they have stated them as objectives.
- Met with agencies on the Action Team and other state and federal agencies to identify actions they planned to carry out during the next biennium, as well as proposed budgets for those actions.
- Distributed the draft work plan for public review.
- Held five public hearings on the draft work plan.

- Compiled written and oral public comments on the draft work plan and distributed the full text of comments and a summary to the Action Team and Council along with staff recommendations based on the comments.

In August 1996, the Action Team and Puget Sound Council held a joint meeting. The Puget Sound Council held two additional meetings. The Action Team met a second time on November 19, 1996, to adopt the work plan. The Action Team and Council agreed on the following overall priorities for the 1997-99 work plan: on-site sewage management; shellfish protection and restoration; stormwater management; fish passage and fish and wildlife habitat restoration and protection; local watershed action plan implementation; continued work with British Columbia; and education related to these priorities. The Action Team and Council also agreed to include as a priority action the Council's role in tracking the progress of work plan implementation by federal, state and local jurisdictions. These priorities and the actions necessary to address them are described in the key actions section (chapter II) as well as in chapter IV.

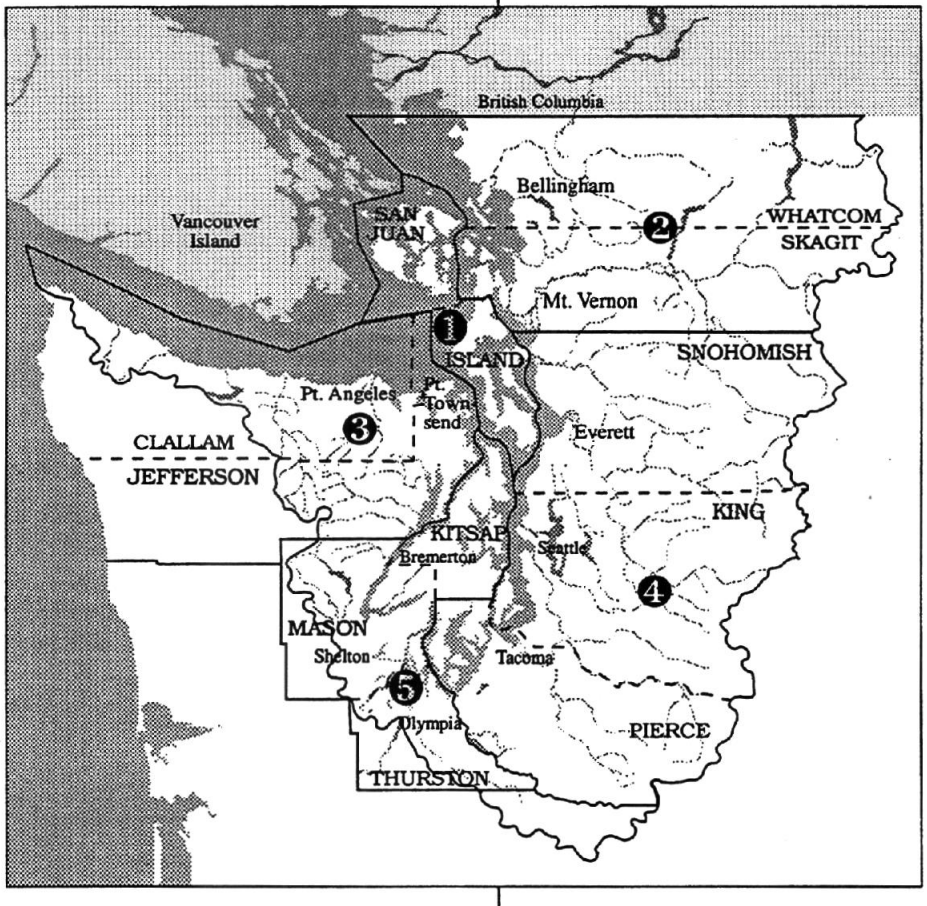
In summary, the work plan is based on:

- An assessment of the priorities and needs of a range of local governments.
- Recommendations of the Puget Sound Council, based on public comments and communication with Council members' constituencies.
- Recommendations of and approval by the Action Team.

STATE AGENCY WORK PLAN ACTIONS AND BUDGET

Information in this work plan was considered by the governor and the legislature in making decisions about state agency appropriations for the 1997-99 Biennium. Table 2 in chapter IV shows the original work plan request and how much the legislature appropriated, subject to budgetary provisos, to implement each work plan action. The legislature committed a total of $27.3 million for the work plan — $22.9 million in continuing funds and $4.4 million in enhancements.

Most state activities described in chapter IV of this work plan implement goals and strategies of the *Puget Sound Water Quality*



The Puget Sound basin includes Puget Sound; Hood Canal; the marine waters stretching north to the Canadian border and west to the Pacific Ocean, including the Strait of Juan de Fuca; and all of the land that drains to those marine waters.

THIS WORK PLAN PRESENTS THE ACTIVITIES THAT WILL BE CARRIED OUT BY FEDERAL, STATE AND LOCAL ENTITIES DURING THE NEXT TWO-YEAR BUDGET PERIOD, SUBJECT TO FUNDING.

Management Plan. Each section, such as "Agriculture," begins with a description of the management plan goal and strategy. Included in the parentheses at the end of each action is a note indicating which management plan goals or program elements that action addresses.

Interested readers may obtain a copy of the Management Plan from the Puget Sound Water Quality Action Team by calling 1-800-54-SOUND or by visiting the Action Team's web site at:

http://www.wa.gov/puget_sound/pslibrary/94plan/cont.html

The work plan is available at:

http://www.wa.gov/puget_sound/pslibrary/workplan/Chap1.html

A BRIEF GUIDE TO THE WORK PLAN

This work plan presents the activities that will be carried out by federal, state and local entities during the 1997-99 budget period, subject to funding. The work plan is organized into four chapters with a budget table included at the end of chapter IV (page 102).

CHAPTER II describes the priority actions identified by the Action Team and Puget Sound Council. These key actions provide a clear focus for efforts to protect and restore Puget Sound during the 1997-99 Biennium. They are pulled from a longer list of actions contained in chapter IV.

CHAPTER III summarizes the meetings held with local jurisdictions between July and December 1996 as well as additional information received during the public comment period. The information is organized by the five geographic areas defined in the Puget Sound Water Quality Protection Act.

CHAPTER IV describes the actions which will be taken by federal, state and local jurisdictions during the 1997-99 Biennium to protect Puget Sound. There are many actions which representatives of local jurisdictions said they intend to take and others recommended by the Action Team. No budgets for local activities are shown but the Action Team requests that agencies which administer grant and loan programs use this work plan in considering local government proposals.

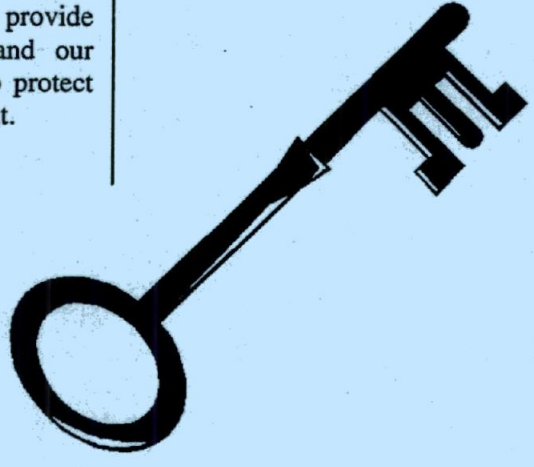
CHAPTER IV also describes actions state and federal agencies will take to protect Puget Sound and provide technical assistance to local jurisdictions. The Action Team and Council recommended enhancements totalling $36.4 million for state agencies. The 1997 legislature reviewed these proposals and approved $4.4 million in enhancements — $2.6 million from the state general fund, and $1.8 million of capital budget funds.

CHAPTER II
KEY ACTIONS

The *Puget Sound Water Quality Management Plan* establishes goals for the protection and restoration of Puget Sound and details federal, state and local actions to achieve those goals. The Puget Sound Water Quality Action Team and the Puget Sound Council confirm the importance of implementing all of the actions contained in the management plan. In addition, the Action Team finds that local jurisdictions need additional funding to protect Puget Sound, that existing federal and state programs which provide grants or loans to local jurisdictions should be fully funded, and that the abilities of local jurisdictions to raise their own funds should be preserved.

This *Puget Sound Water Quality Work Plan* presents the actions which federal, state and local jurisdictions will carry out between July 1, 1997, and June 30, 1999, provided funding is available, to implement the management plan and protect Puget Sound. The purpose of this two-year work plan is to provide a clear focus for efforts to protect and restore Puget Sound. The Action Team recognizes the need to prevent new harm to Puget Sound from the full range of human activities that threaten it. The population of the Puget Sound basin continues to increase rapidly. We can only prevent the damage to water quality and natural resources that will result from rapid growth by incorporating sound stormwater and sewage management controls into new developments. Repairing inadequate or damaged on-site sewage systems that affect water quality is extremely important, but we will gain little if new systems are improperly designed, sited or installed during the next two years. While it is important that we carry out on-the-ground projects that improve habitat and water quality, we must also monitor conditions in Puget Sound to know whether we are winning or losing the race to protect the Sound from the pressures of an ever-increasing population.

This chapter contains the key actions to protect and restore Puget Sound for the next two years. These actions are taken from the much longer list of actions contained in chapter IV. That chapter provides a more complete list of activities that are planned or proposed for the next two years; many of them are continuing programs that are crucial to the protection of Puget Sound but do not need the emphasis of the key actions. A good analogy might be maintaining your home. Key actions for the next year might include repairing a leak in the roof and adding a second bathroom. Most of your attention and new spending would target those things. But you would also probably continue to mow the lawn, vacuum the rugs, pay the insurance and replace light bulbs that burn out. In the same way, while the priorities in this chapter provide a focus for our efforts and our spending, other activities to protect the Sound are also important.



PRIORITIES FOR THE 1997-99 PUGET SOUND WATER QUALITY WORK PLAN

The top priorities for the 1997-99 work plan are:

- **Fix existing and prevent future stormwater problems.**
- **Fix existing and prevent future on-site sewage system problems.**
- **Prevent downgrades or closures of certified shellfish growing areas and reopen closed areas on a priority basis.**
- **Implement local watershed action plans.**
- **Improve fish passage and fish and wildlife habitat.**
- **Work with British Columbia to promote protection of Puget Sound and the Georgia Basin.**
- **Provide education related to the other key priorities.**

STORMWATER is water that falls as rain on impervious surfaces and is routed into natural or artificial drainage systems. Pollutants in stormwater can include sediments, nutrients, bacteria, oils, grease, metals and other toxicants. These contaminants can harm marine life, destroy fish and wildlife habitat, contribute to restrictions on shellfish harvesting and swimming, and contaminate sediments. Infiltration and inflow problems increase wet weather flows, making stormwater problems worse. Stormwater volume and peak flows also disrupt natural flows and can literally blow out the bottom and sides of a stream, destroying fish habitat and property. Stormwater problems can be prevented by good local land-use planning and by incorporating appropriate management practices in new construction.

ON-SITE SEWAGE SYSTEMS are an effective and efficient way to treat and dispose of sewage when properly designed, sited, installed and maintained. When systems fail, the resulting pollution can force the closure of shellfish growing areas and threaten public health. These problems can be minimized by installing appropriately designed systems and maintaining them, and by finding and fixing older systems that are failing.

SHELLFISH. Puget Sound is rightly famous for the quality of its shellfish. Clams, mussels, scallops and oysters are economically important and are also prized by recreational harvesters. But shellfish require good water quality. Shellfish in many areas of Puget Sound cannot be safely harvested because of bacterial contamination. Shellfish growing areas provide a clear focus for our efforts to control pollution, both to prevent contamination and downgrades of growing areas, and to restore water quality to allow areas to be reopened.

NONPOINT POLLUTION can be likened to death by a thousand cuts. Water quality and habitats are damaged by the cumulative effect of many small problems from many individual sources. Under the *Puget Sound Water Quality Management Plan*, local governments have formed citizen committees to review the problems in priority watersheds, identify appropriate actions to fix the problems, and prepare local watershed action plans. Implementing these plans will protect and restore

water quality and habitats, including many shellfish growing areas.

HABITAT. The Puget Sound basin is blessed with valuable and diverse fish and wildlife. To maintain this bounty, we need to improve fish passage and fish and wildlife habitats. Aquatic habitats are lost in many ways. Barriers to migratory fish passage are especially bad because a single culvert or diversion structure can block migrating fish from using many miles of stream habitat. Removing barriers can have tremendous benefits for a relatively small investment. We also continue to lose habitat — particularly nearshore marine habitat — to development, but the cumulative rate of loss is not being measured. We can improve the situation through good land-use planning and management, and by acquiring habitat for protection, improving regulations, and tracking changes in the quantity and quality of habitat.

SHARED WATERS. One thing that marine life and water pollutants have in common is that they don't need passports to cross international borders. The marine waters and resources of Puget Sound and the Georgia Basin are shared by Washington and British Columbia. An international program has been established to promote the protection of these resources. Representatives of Washington and British Columbia work together to identify key problems and share information and techniques for solving them. Each side learns from the other and both sides are improving their protection efforts for less cost than if each worked alone.

EDUCATION. The difference between protecting Puget Sound and not protecting it is a matter of choices. We can choose to design new developments to manage sewage and stormwater. We can choose to inspect and maintain our on-site sewage systems. We can choose to protect and preserve habitat. But we will only do these things if we understand their importance to protecting Puget Sound. Education on the key priorities is the essential foundation for all the other activities.

THE PURPOSE OF THIS TWO-YEAR WORK PLAN IS TO PROVIDE A CLEAR FOCUS FOR EFFORTS TO PROTECT AND RESTORE PUGET SOUND.

The key actions which make up the rest of this chapter are repeated in more detail in chapter IV, where key actions are indicated by the 🗝 symbol. Soundwide actions, which will occur through out the Puget Sound basin, are listed first, followed by actions that are specific to each of the five areas of Puget Sound.

Agency activities described in this chapter are followed by budget action codes. Refer to Table 2 of chapter IV to find out how much funding was requested by the agency to complete each action and how much funding was appropriated by the legislature (with a proviso) for that purpose. The codes are printed in different type styles to indicate whether the budget proviso for this activity represents the full amount, a partial amount, or none of the funds that the agency requested to implement the work plan. For example:

"DOT-01"
means full proviso funding

"DOT-01"
means partial proviso funding

~~"DOT-01"~~
means no proviso funding

KEY ACTIONS SOUNDWIDE

The Action Team supports local and state programs that enable critical wetland habitats to be protected through acquisition and recognizes that there is a large unmet need for protection of additional high-quality wetlands and lands contributing to water quality improvement.

The Action Team expects state agencies to coordinate their efforts to implement the work plan, including providing funding and technical assistance, sharing information and providing education.

The following key actions will occur throughout the Puget Sound basin.

For **cities, counties, local health jurisdictions** and **other local jurisdictions** (consistent with their legal authorities):	⊶ Complete basic stormwater programs. ⊶ Develop comprehensive stormwater management programs. ⊶ Establish comprehensive on-site sewage programs. ⊶ Implement state on-site sewage regulations, including operation and maintenance programs. ⊶ Protect and restore shellfish beds, including creation of shellfish protection districts. ⊶ Protect wetlands and aquatic habitats using critical areas ordinances, shoreline master programs and non-regulatory tools.
For **agencies** which administer grant and loan programs:	⊶ Give priority to the actions identified in this work plan, especially the key actions, and give special consideration to local governments for additional funding to implement actions in the work plan.
For appropriate **federal** and **state agencies**:	⊶ Provide technical assistance using interagency teams, coordinated by Action Team support staff, which include agencies and technical specialties necessary to effectively address each particular problem or issue. (The interagency technical-assistance teams are a new approach.) (Funding provided at various levels, see Chapter IV.) ⊶ Serve on the Puget Sound/Georgia Basin International Task Force and its work groups and implement the recommendations of the work groups. (A number of agencies currently serve on the task force and its work groups. Participation is hampered by lack of funding.) (Funding provided at various levels, see Chapter IV.) ⊶ Continue to run a coordinated shellfish protection program which includes: classifying growing areas, assessing shellfish protection needs, developing closure response plans, undertaking restoration activities, and helping develop and implement watershed action plans. (The state agencies have complementary responsibilities on issues associated with the proper management of shellfish, including water quality protection, shellfish sanitation, resource enhancement and harvest management. Added coordination is needed to ensure consistency and to improve the results of these activities.) (Funded, see chapter IV.)
For the **Puget Sound Council**:	⊶ Track the progress of federal, state and local jurisdictions in implementing the work plan. (*PSAT-01*)

For the **Action Team**:

- Use the Public Involvement and Education Fund to support local public involvement and education projects that target work plan priorities. (*PSAT-03,05*)
- Educate the public about Puget Sound. (*PSAT-03*)
- Coordinate education about Puget Sound so that organizations providing education work together effectively and efficiently. (*PSAT-03,05*)
- Educate local elected officials and staff about Puget Sound issues, the *Puget Sound Water Quality Management Plan* and the work plan. (*PSAT-03*)
- Coordinate interagency technical-assistance teams. (*PSAT-03*)
- Coordinate an interagency discussion of alternatives for consolidating funding programs and for new funding vehicles for local government activities. (*PSAT-01*)
- Collect, maintain and distribute information on funding sources which could support implementation of local actions called for in this work plan. (*PSAT-01*)

For the **Department of Ecology**:

- Support restoration of degraded wetlands through implementation of a watershed-based wetland initiative for Puget Sound. (Ecology developed this approach in 1993, has completed the Stillaguamish watershed, and is moving to the Nooksack watershed and elsewhere, subject to funding.) (DOE-09)
- Complete the update of the stormwater technical manual and work with local governments to have them adopt Ecology's stormwater manual or an equivalent manual. (Two of the four volumes of the manual will be updated in 1997; the other volumes will be updated by the end of the biennium, July 1999. Ecology's work with local governments is ongoing.) (DOE-08)
- Continue and broaden the five-year cycle watershed approach to address nonpoint pollution sources and more fully embrace watershed action plans developed under Chapter 400-12 WAC as valuable components of the overall water quality program. (Ecology has begun to include local watershed action plans in each cycle of its watershed approach and will issue an update of its nonpoint strategy in 1997.) (DOE-04)
- Take enforcement actions in support of the work plan when technical assistance and the opportunity for voluntary compliance have failed to produce results. (*DOE-02*)

For the **Department of Fish and Wildlife**:

- Develop an environmental impact statement for bulkheading projects in Puget Sound. (No work has been done on this project.) (~~DFW-06~~)
- Develop a pilot aquatic habitat database. (No database currently exists.) (~~DFW-02~~)
- Track, map and monitor past and current Hydraulic Project Approval projects (HPAs) and cumulative impacts of HPA projects to fish and wildlife. (No work has been done on this project.) (~~DFW-05~~)

For the **Department of Health**:	⊶ Establish procedures to identify and address water quality declines in shellfish growing areas prior to downgrades in classification. (Health monitors water quality and surveys pollution sources to classify shellfish growing areas. Better detection of changing conditions will encourage preventive actions.) (DOH-02) ⊶ Provide technical assistance to local health jurisdictions on conventional, alternative and experimental on-site sewage treatment and disposal systems. (Health provides information on various on-site technologies and, with the help of a technical advisory committee, determines which systems may be used in the state as alternative or experimental technologies.) (DOH-08, 10, 11) ⊶ Issue contracts to research and demonstrate alternative and experimental on-site sewage technologies. (Health tracks technological developments but has no resources dedicated to investigating technical issues and alternative approaches to on-site sewage treatment.) (DOH-11) ⊶ Provide outreach and technical assistance on local on-site sewage issues. (Health provides information on a range of issues associated with on-site sewage treatment. Outreach and assistance has focused on support to local health jurisdictions to implement the state on-site sewage regulations.) (DOH-07, 08, 10, 11)
For **local health jurisdictions** and **the Department of Health**:	⊶ Take enforcement actions in support of the work plan when technical assistance and the opportunity for voluntary compliance have failed to produce results.
For the **Department of Transportation**:	⊶ Fix priority fish passage barriers identified in cooperation with the Department of Fish and Wildlife. (~~DOT-12~~) ⊶ Provide grant funds to local communities for retrofitting priority stormwater outfalls. (~~DOT-01~~)
For the **U.S. Army Corps of Engineers**:	⊶ Track cumulative losses of wetlands under the nationwide permit program. (The Corps currently does not track cumulative losses.)

KEY ACTIONS IN AREA 1

In addition to the key actions Soundwide, the key actions are:

For **Island County** and other jurisdictions as appropriate:	⊶ Address flooding and stormwater. ⊶ Implement priority actions from the North Whidbey Island watershed action plan. ⊶ Develop and adopt the South Whidbey Island watershed action plan.
For **San Juan County** and other jurisdictions as appropriate:	⊶ Develop a plan to protect marine resources. ⊶ Develop and adopt a local watershed action plan. ⊶ Develop a working relationship on cross-border issues with Canadian jurisdictions.

KEY ACTIONS IN AREA 2

In addition to the key actions Soundwide, the key actions are:

For **Skagit County** and other jurisdictions as appropriate:	🗝 Identify and help fix failing on-site sewage systems. 🗝 Implement priority actions from the Nookachamps, Padilla Bay and Samish Bay watershed action plans. 🗝 Implement the Fidalgo Bay plan when it is approved. 🗝 Improve fish passage in streams and rivers. 🗝 Assist with implementation of the shellfish closure-response strategy for Samish Bay.
For the **Skagit Conservation District:**	🗝 Implement priority actions from the Nookachamps, Samish and Padilla Bay/Bayview watershed action plans.
For **Whatcom County** and other jurisdictions as appropriate:	🗝 Implement the shellfish closure-response strategy for Drayton Harbor. 🗝 Implement priority actions from the Drayton Harbor watershed action plan.
For **federal** and **state agencies and local** and **tribal governments:**	🗝 Implement the Bellingham Bay Pilot Demonstration Project which will expedite and coordinate the cleanup of contaminated sediments and restore and enhance other aquatic habitats. (A plan that will guide future activity is currently being developed and should be completed by spring 1997.)

KEY ACTIONS IN AREA 3

In addition to the key actions Soundwide, the key actions are:

For the **Jamestown S'Klallam Tribe:**	🗝 Implement priority actions from the Dungeness Water Resources Management Plan. 🗝 Continue coordinating the Dungeness River Management Team in cooperation with Clallam County.
For **Clallam County** and other jurisdictions as appropriate:	🗝 Implement priority actions from the Port Angeles, Dungeness River and Sequim Bay watershed action plans. 🗝 Participate on the Dungeness River Management Team. 🗝 Develop a watershed action plan for the West End Watershed.
For **Jefferson County** and other jurisdictions as appropriate:	🗝 Implement priority actions from the Port Ludlow watershed action plan.
For the **Jefferson County Conservation District:**	🗝 Continue working with landowners, community groups and tribes to improve fish habitat in streams and rivers. 🗝 Work with commercial shellfish growers to protect shellfish habitat. 🗝 Provide owners of shoreline bluffs with technical assistance and

For **Jefferson County Conservation District**, continued:	information on vegetation management and pre-development planning to prevent destabilization of bluffs.
For **Washington State University** and **University of Washington field agents**:	🗝 Assist local health jurisdictions in educating the public about the proper operation and maintenance of on-site sewage systems. (The field agents have been providing education and technical assistance on a variety of water quality issues since 1989.) (UW-01, WSU-01)

KEY ACTIONS IN AREA 4

In addition to the key actions Soundwide, the key actions are:

For the **City of Everett**:	🗝 Participate in the Snohomish River Basin Work Group.
For the **City of Renton**:	🗝 Implement the Cedar River watershed management and basin plan.
For the **City of Seattle**:	🗝 Implement priority actions from the Pipers Creek and Longfellow Creek watershed action plans. 🗝 Develop a watershed plan for the Thornton Creek watershed.
For **King County** and other jurisdictions as appropriate:	🗝 Establish and fund the Regional Needs Assessment program. 🗝 Coordinate regional prioritization of clean water projects through the watershed forums. 🗝 Continue support for the Cedar River Watershed Council. 🗝 Implement priority actions from the Cedar River Watershed Management and Basin Plan.
For **Pierce County** and other jurisdictions as appropriate:	🗝 Develop a watershed action plan for the Key Peninsula, Gig Harbor and Islands watersheds. 🗝 Develop a watershed action plan for the Upper Puyallup River. 🗝 Implement priority actions from the Lower Puyallup River watershed action plan. 🗝 Implement the shellfish closure-response strategy for Rocky Bay. 🗝 Continue support for the Puyallup Watershed Council.
For **Snohomish County** and other jurisdictions as appropriate:	🗝 Develop a local watershed action plan for the French Creek watershed. 🗝 Develop a master drainage plan for the Lake Stevens area. 🗝 Participate in the Snohomish River Basin Work Group. 🗝 Design or build projects to rehabilitate drainage systems, improve water quality, stabilize stream banks and restore fish habitat.
For the **Snohomish Conservation District**:	🗝 Implement agricultural recommendations in the local watershed action plans for the Stillaguamish River, Quilceda/Allen Creeks, North Creek and Swamp Creek.

KEY ACTIONS IN AREA 5

In addition to the key actions Soundwide, the key actions are:

For **Kitsap County** and other jurisdictions as appropriate:	🗝 Identify and help correct failing on-site sewage systems in Gorst and in other priority areas. 🗝 Collaborate with Mason County to develop a regional sewage treatment solution for lower Hood Canal. 🗝 Create a shellfish protection district and assist with implementation of the shellfish closure-response strategy for Port Gamble Bay. 🗝 Implement priority actions of the Dyes Inlet and Sinclair Inlet watershed action plans. 🗝 Implement priority actions of either the Upper Hood Canal watershed action plan or the Liberty-Miller Bay watershed action plan.
For **Mason County** and other jurisdictions as appropriate:	🗝 Update the Oakland Bay watershed action plan. 🗝 Implement priority actions of the lower Hood Canal and Totten-Little Skookum Inlet watershed action plans. 🗝 Complete sewer feasibility studies and implement sewerage plans for North Bay and lower Hood Canal. 🗝 Conduct a small-community sewage treatment study for the Finch Creek community. 🗝 Implement the shellfish closure-response strategy for lower Hood Canal. 🗝 Begin watershed planning for the West-Shore Hood Canal drainages.
For **Thurston County** and other jurisdictions as appropriate:	🗝 Implement priority actions from the Henderson Inlet, Eld Inlet, Totten-Little Skookum Inlet and Budd-Deschutes watershed action plans. 🗝 Update the Totten-Little Skookum watershed action plan. 🗝 Implement the shellfish closure-response strategy for Nisqually Reach.
For **Washington State University** and **University of Washington field agents**:	🗝 Assist local health jurisdictions in educating the public about the proper operation and maintenance of on-site sewage systems. (The field agents have been providing education and technical assistance on a variety of water quality issues since 1989.) (UW-01, WSU-01)

CHAPTER III
LOCAL WATER QUALITY ISSUES AND CONCERNS

ASSESSING THE NEEDS OF LOCAL GOVERNMENTS

The Action Team support staff met with elected representatives of local governments and their staff in each area throughout the Puget Sound basin to assess their priority water quality issues, what they hope to accomplish in addressing those issues during the next biennium, and how state agencies, the Action Team and others can help. The Action Team support staff also heard from local governments, tribes, conservation districts and citizens regarding local priorities during the draft work plan's public review period. The information gathered from meetings with local governments and from public comments has been included in this chapter as well as in Chapter 4.

Participants in this assessment expressed concern about a common set of water quality problems and the programs needed to solve them. These are, in no priority order:

- Cooperation and coordination among jurisdictions
- Funding
- Habitat protection
- Information and technical assistance needs, including research and monitoring
- Protection of shellfish
- Public education
- Sewage
- Stormwater and other non-point pollution sources
- Watershed planning and plan implementation

How the jurisdictions viewed these issues, and the kinds of assistance they wanted varied according to their size and location in Puget Sound. Large urban jurisdictions were concerned about upgrading sewage treatment plants and addressing combined sewer overflows, while more rural jurisdictions emphasized problems with failing septics and alternative septics systems. Large urbanizing counties discussed the need for improved coordination among the many cities, towns and regional jurisdictions within their boundaries and between state agencies and local governments. More rural jurisdictions emphasized implementation of local watershed action plans as focal points for problem-solving. Counties in south Puget Sound, particularly those bordering Hood Canal, emphasized regional coordination and common concerns such as on-site sewage system failures, while those at the north end requested assistance in developing working relationships with their Canadian neighbors and expressed concern about oil spills.

The jurisdictions involved in the assessment also shared common visions of the kind of assistance they will need from the state and others to make headway in solving and preventing water quality problems. These, again in no priority order, are:

- Improved communication, coordination and cooperation between the state and local jurisdictions.
- Increased funding for program

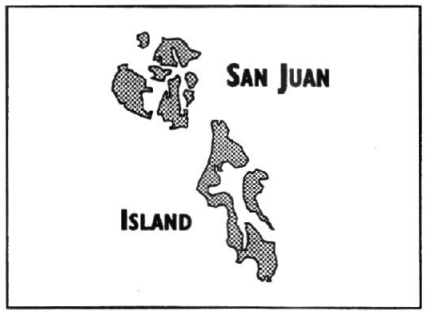
implementation at the local level.

- Coordinated technical assistance from the state to local jurisdictions on the key water quality issues.
- Increased information, including results of research and monitoring, on all water quality problems.
- Improved coordination among or combining of state programs dealing with quality and quantity of surface and ground waters.

Following is a summary for each of the five geographic areas identified in the Puget Sound Water Quality Protection Act.

AREA 1 – SAN JUAN AND ISLAND COUNTIES

Action Team support staff met with the Island and San Juan county commissions and their staffs to discuss local priorities for protection of Puget Sound in Area 1. Representatives of other local interests, including the San Juan County Conservation District, the City and Port of Friday Harbor, the aquaculture industry and the environmental community also attended the San Juan County meeting.



Area 1

Nonpoint Pollution

Both counties indicated that nonpoint source pollution is the major concern. However, they are at different junctures in planning for nonpoint pollution prevention, and so have different perspectives on the issues and assistance they need. San Juan County has just embarked upon the local watershed action planning process, under Chapter 400-12 WAC, and is concerned about the availability of baseline and monitoring data, characterizations of water quality in problem areas, and information about state programs, funding and technical assistance. The county is also concerned about the development of realistic, short-term goals for water quality protection.

Having completed one watershed plan and about to start development of another, Island County is focusing on education as a solution and sees support of local stewardship programs as a top priority. Island County has significant drainage and stormwater problems, and listed sources of pollution from failing on-site septic systems, development, small farms, and forestry practices as priority concerns. Protection of ground water, water resources and natural resources (shellfish, wetlands, streams) were identified as priorities in both counties. Island County officials expressed concern about funding for local protection programs, and about the need for increased communication among and within state agencies.

Other Issues

The two counties each identified other issues. Island County has much more land devoted to agriculture, and identified agricultural runoff as a serious concern. As the county with the most significant tourist economy in the state, San Juan County officials cited protecting habitat and demands on infrastructure as priority issues. San Juan County is concerned about the effects of pollution from Canadian rivers and cities and about potential oil spills resulting from tanker traffic. The county established an advisory committee to develop a marine resources plan and would like support for that effort. San Juan County officials also identified aquaculture, the treatment of

sewage from recreational boats, and the disposal of biosolids as issues of concern.

AREA 2 – SKAGIT AND WHATCOM COUNTIES

Action Team support staff met with the Whatcom County Council, the executive board of the Whatcom County Council of Governments, the Skagit County Board of Commissioners, the Skagit Council of Governments, the Bellingham City Council and their staffs to discuss local priorities in Area 2. Representatives of other local interests, including the Whatcom Conservation District, the aquaculture industry, Washington State University Cooperative Extension and the Swinomish Tribe, also attended some of these meetings.

Shellfish Protection

Both Skagit and Whatcom counties are concerned about protecting and restoring their shellfish beds. Skagit County is concerned about the threat to private shellfish beds in Skagit, Similk, Padilla, Samish and Turner bays from failing on-site sewage systems, poor agricultural practices, and siltation. In Whatcom County, upgrading shellfish beds in Drayton Harbor is a high priority.

Coordination and Funding

Jurisdictions in both counties listed lack of cooperation, coordination and consistency among state, federal and local agencies as an issue, citing duplication of effort, conflicting goals, poor communication, and delays in processing permits. They hope to see an increased emphasis on incentives to use best management practices, rather than more regulations.

Adequate funding to solve local problems and address state directives is a major concern for both counties. They requested guaranteed, consistent funding support for the duration of projects, such as implementation of watershed action plans, including monitoring. Skagit County officials suggested an ongoing need for a mechanism to prioritize watershed restoration projects for state funding. Whatcom County jurisdictions listed an ongoing need for funding to solve a variety of local problems, such as stormwater, failing septic systems, and protection of Lake Whatcom and Drayton Harbor. Skagit County requested financial assistance for upgrading failing septic systems that threaten shellfish.

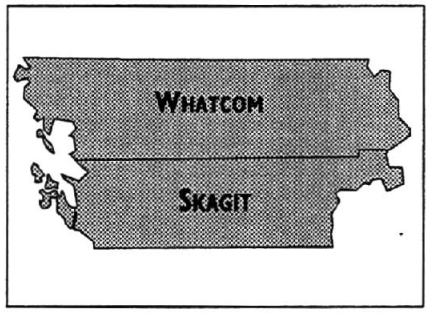
MORE RURAL JURISDICTIONS EMPHASIZED IMPLEMENTATION OF LOCAL WATERSHED ACTION PLANS AS FOCAL POINTS FOR PROBLEM-SOLVING.

Habitat Protection

Restoring and protecting fish habitat is a priority in both counties. Skagit County jurisdictions and the Swinomish Tribe requested help to implement their prioritized list of fish passage projects.

Dairy Waste Management

The Whatcom Conservation District listed dairy waste handling to prevent nonpoint source pollution as its highest priority. The district stated that best management practices need to be implemented on all commercial and small farms. Skagit County views the lack of state enforcement of existing dairy waste regulations for manure lagoons and agricultural practices as a major problem. Skagit County also requested that the state revise



Area 2

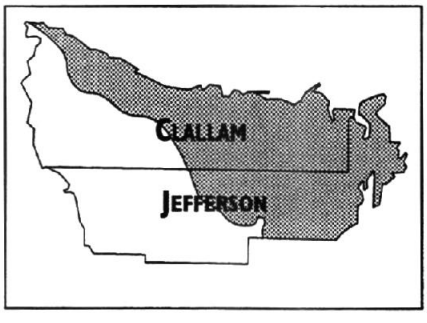
dairy waste regulations to allow for more flexibility in the timing of manure applications based on weather conditions.

Watershed Protection

Implementation of three watershed action plans created under Chapter 400-12 WAC and of the Fidalgo Bay plan is a high priority for jurisdictions in Skagit County. Whatcom County jurisdictions are very interested in implementing the Lake Whatcom watershed management plan. The importance of educating the public and involving them in nonpoint pollution issues was mentioned by both counties.

Monitoring

Ongoing water quality monitoring in rivers and streams is important to Skagit County, as is investigating specific problem sources of pollution. Whatcom County officials felt that better baseline data and a means of separating naturally caused contamination from that caused by humans was needed. They also requested DNA testing to determine the sources of fecal contamination of Drayton Harbor.



Area 3

Other Issues

Degradation of water quality from a variety of sources was a concern mentioned in both counties. The Swinomish Tribe requested that a total maximum daily load (TMDL) be established for the Swinomish Channel, and is concerned about protecting water quality in the Anacortes watershed. The tribe is also concerned about the lack of compliance with water quality-related permits by non-tribal residents on its reservation. Jurisdictions in Skagit County, including the tribe, are concerned about the threat of oil spills and would like information and training on oil spill response. Stormwater was mentioned as a problem in both counties. Whatcom County would like to see the use of settling ponds along rivers to capture natural siltation, to store flood waters, and for water supply.

Other issues of concern for jurisdictions in Skagit County include exotic (non-native) species and toxic leachate from landfills; Whatcom County jurisdictions listed the effects of marine mammals on fish stocks and water quality, enforcement, and funding to install portable toilets along stretches of rivers heavily used for recreation.

AREA 3 – CLALLAM AND JEFFERSON COUNTIES

Action Team support staff met with officials of Jefferson and Clallam counties, and their staffs, to discuss local priorities for Area 3. Representatives of other local interests, including the conservation districts from both counties, Washington State University Cooperative Extension, the Jamestown S'Klallam Tribe, the City of Port Townsend, and the public also attended these meetings. Public comments on the draft work plan from the Jefferson County Conservation District, Clallam County, the Jamestown S'Klallam Tribe and the City of Port Townsend have been incorporated into this section.

Funding

The need most commonly expressed by local jurisdictions is for more consistent and long-term funding for water projects and programs in rural areas, particularly those oriented toward prevention of degradation. This includes funding

for watershed action plans and councils, stormwater controls, volunteer monitoring programs, and public involvement and education. Both counties stressed that the Centennial Clean Water Fund (CCWF) as currently structured is not meeting their needs. They cited problems with grant writing, the dependability of the CCWF as a long-term funding source, and eligibility for funding of projects dealing with water quantity. Funding for preventing pollution in pristine areas and for basic volunteer monitoring programs was also identified as a need.

The Jefferson County Conservation District expressed support for programs such as Jobs for the Environment and for the Washington Conservation Corps to implement best management practices. These programs complement the district's planning and design work by providing labor for landowners. The City of Port Townsend identified the need for funding for implementation of the Dungeness/ Quilcene Pilot Project as well as the establishment of funding sources for local governments which are readily accessible without involved application processes.

Protection of Shellfish

Shellfish protection is a priority for both counties. Clallam County is interested in preventing downgrades of shellfish beds in the future. Jefferson County would like information on how recreational shellfish harvesting allocations are determined.

On-Site Sewage

Jefferson County listed failing on-site sewage systems as a major issue. Clallam County identified technical and financial assistance to educate the public and to develop a program for operating and maintaining on-site sewage systems as high priorities. Jefferson County would like assistance in addressing the failure of alternative on-site sewage systems and educating the public about these systems.

Stormwater Management

Both counties view stormwater and combined sewer overflows at some locations as major issues. Both cited the need for technical and financial assistance in implementing effective stormwater controls. Jefferson County would like help to develop a clearing and grading ordinance. The City of Port Townsend expressed concern about the effects of pesticide and herbicide application practices on water quality. The city suggested that cooperation, technical assistance and public education are necessary to address the problem.

THE NEED MOST COMMONLY EXPRESSED IN AREA 3 WAS FOR MORE CONSISTENT AND LONG-TERM FUNDING IN RURAL AREAS.

Watershed Protection

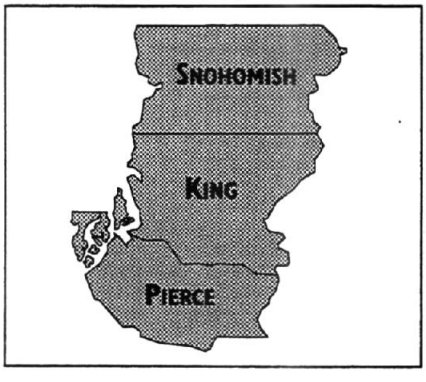
Each county has three watershed action plans developed under Chapter 400-12 WAC, and would like more support from the state to implement them, as well as more technical assistance on all sources of nonpoint pollution.

Both counties want the state to adopt a more holistic approach toward watersheds that would combine water quality and quantity, surface water and ground water. Clallam County officials want less emphasis on regulations and more on incentives and improved coordination among multiple local jurisdictions within watersheds.

Both counties stated a strong need for countywide baseline data and long-term monitoring information. Clallam County would like assistance developing its geographic information system. Jefferson County wants help acquiring essential characterization and monitoring data for its streams. Both counties cited problems maintaining existing volunteer monitoring programs. Clallam County would like the state to evaluate the effectiveness of various types of nonpoint programs and best management practices currently used in Puget Sound. Both counties requested information on creosote contamination, including its impacts on shellfish and fish and proper disposal of treated pilings.

Educating and Involving the Public

Both counties cited a need for more financial and technical assistance (including enabling volunteers) to educate the public, particularly about the importance of preventing degradation of pristine areas. Clallam County is focusing on educating and involving realtors. Jefferson County would like help educating the public about how water resources are allocated.



Area 4

AREA 4 – SNOHOMISH, KING AND PIERCE COUNTIES

Action Team support staff met with the King County Regional Water Quality Committee, the Pierce County Council and Executive's office, the Snohomish County Council and Executive's office, the Pierce County Cities and Towns Association, the Snohomish Association of Cities and Towns, the City of Everett's Mayor and Council, the City of Renton Utility Committee, representatives from the City of Bellevue, the chair of the Seattle City Council's Utilities and Environment Committee, and the City of Tacoma's Environmental Commission to discuss local priorities in Area 4. County and city staff, representatives of other jurisdictions including the Snohomish County Health District, and members of the public also attended some of these meetings. Public comments on the draft work plan from the King Conservation District, King County and the cities of Bellevue, Renton, Everett, Edmonds and Mercer Island have been incorporated into this section. In addition, the King County Regional Water Quality Committee adopted resolution #96-769, which details the issues, concerns, priorities and intended actions of the county and cities related to the work plan. The City of Everett adopted resolution #4332 which describes what the city would like to see included in the work plan. Information from these resolutions has been included in this section.

All jurisdictions wanted increased regulatory flexibility so they can respond to the variety of regulatory challenges, including meeting requirements of National Pollutant Discharge Elimination System (NPDES) permits for stormwater and upgrading wastewater treatment systems to comply with the federal Clean Water Act. Seattle, Bellevue and the associations of cities in Snohomish and Pierce counties want greater flexibility to determine how to spend money to achieve the greatest improvement in environmental protection. Seattle and the Snohomish jurisdictions also suggested that much of the money currently being spent to improve wastewater treatment could provide greater benefit if directed to prevention of non-

point source pollution and habitat protection.

Seattle suggested that if water quality standards set by the state reflected the importance of flow in maintaining the beneficial uses of a stream segment, more funds could be used to address water quantity and habitat protection. King County would like information from its water quality assessment incorporated into the state's water quality regulations. Everett and Renton joined Seattle in requesting greater flexibility in meeting the goals of the Clean Water Act. Both Seattle and Bellevue are concerned that current state water quality standards are unrealistic for urban areas.

Jurisdictions in Snohomish County, the City of Seattle, and Pierce County also mentioned a related issue — the lack of integration of water quality, water quantity, and wastewater in both regulations and planning by the state. King County is committed to supporting water supply initiatives that further clean water objectives and to implement flood control plans and capital projects which also protect water quality. Pierce County and its jurisdictions believe state agencies have overlapping and inconsistent requirements of local governments and would like to see improved coordination among them. The City of Everett requested that the Action Team work to ensure maximum local flexibility and control and avoid the imposition of unfunded mandates on local jurisdictions.

Stormwater Management

Seattle, Everett, and Pierce and Snohomish counties are concerned about the National Pollutant Discharge Elimination System (NPDES) stormwater program and their own permits. Snohomish County is particularly concerned about the costs of the program. Seattle and Pierce County want more flexibility from the Department of Ecology to direct resources and more recognition for the work they have done to prepare for their permits. Mercer Island identified the need for stormwater technical assistance and suggested the Department of Ecology update its stormwater technical manual and develop a common manual for lo- cal jurisdictions. Some cities in Pierce County want a regional approach to stormwater. Several city officials noted a problem with infestation of open stormwater detention ponds by exotic plant species and pathogens. Bellevue will make continuing its stormwater program and utility a priority for the next biennium and cited retrofitting older facilities in newly annexed areas as an issue.

URBAN JURISDICTIONS WERE CONCERNED ABOUT UPGRADING SEWAGE TREATMENT PLANTS...MORE RURAL JURISDICTIONS EMPHASIZED PROBLEMS WITH FAILING SEPTICS.

The many jurisdictions currently implementing stormwater management programs agreed that maintenance and funding of these programs is an ongoing challenge. While describing its stormwater utility as adequate, Bellevue noted a concern about the lack of funds to support a variety of regional surface water needs, including fish habitat preservation, water quality and flooding projects. Bellevue and Edmonds expressed concern that affected communities were not adequately contributing to regional solutions to water quality problems such as stormwater. Snohomish

County cited a need to educate ratepayers about the long-term benefits of stormwater management and the importance of the county's stormwater utility.

Wastewater Treatment and Shellfish Protection

Many cities in Area 4 stated that they are struggling with the need to upgrade and increase the capacity of existing municipal wastewater treatment plants. They requested greater flexibility, especially in the reuse of wastewater effluent and in the use of alternative, cheaper technologies. Bellevue would like to see the state develop a set of pilot regulations that would allow the city to direct its resources to enhancing valuable habitat instead of correcting combined sewer overflows. Tacoma voiced concern about the continued use of on-site sewage systems along the shoreline and the ongoing problem of untreated sewage discharges from some shoreline communities. Snohomish County raised the issues of failing on-site sewage systems causing shellfish bed closures. King County is also interested in protecting and restoring shellfish growing areas. King County is planning to complete and adopt its wastewater management plan during this biennium.

ALL JURISDICTIONS IN AREA 4 CITED INCREASING REGULATORY FLEXIBILITY AS A PRIORITY.

Funding

Funding was cited as a major issue by the local jurisdictions in Area 4. Many stated that they have relied heavily on state assistance in the form of grants (especially the Centennial Clean Water Fund) and loans, as well as on their own local revenue sources. Many jurisdictions said that the CCWF must be continued to fund local water quality projects. Seattle recommended that the fund would be more helpful if it were administered as block grants to local jurisdictions. King County suggested allocating the CCWF by major watersheds. Renton suggested that the fund be available for multi-purpose water projects, such as those dealing with water quality, flooding and habitat. Everett and Snohomish County expressed concern about dwindling local revenue sources. Jurisdictions in Pierce County concurred, and identified funding for local water programs as a top priority. Pierce County would like to see legislation including additional funding for watershed action plans. Everett requested that the Legislature consider the effects of legislation, such as property tax caps, on the ability of local jurisdictions to raise needed funds. Snohomish County is seeking regional approaches to problem solving, including funding mechanisms such as a regional stormwater utility. Bellevue requested assistance with funding priorities identified by regional watershed forums. The City of Gold Bar requested that the Action Team provide local jurisdictions with information on funding opportunities. The King Conservation District noted that the local assessment from which it receives the majority of its funding is scheduled to sunset in December 1997. The district noted that the funding it receives from the state is not sufficient to continue the district's current programs.

Working Relationships

All jurisdictions in Area 4 listed coordination of efforts as a major priority. Many see a need for

increased coordination with other local jurisdictions and the state, and among state agencies as well. The King Conservation District, Seattle, Renton, Tacoma and other cities in Pierce County all suggested that the Action Team play a key role in improving coordination by acting as a clearinghouse for information about watershed activities within the Puget Sound basin. The King Conservation District expressed concern that other agencies are duplicating the district's efforts in education and environmental programs. Pierce County sees a role for the Action Team in facilitating water policies and coordinating programs among state and federal agencies, tribal governments and local governments. Everett requested that the Action Team ensure that the needs of Snohomish County jurisdictions receive attention equal to those of King and Pierce county jurisdictions within area 4.

Nonpoint Pollution

Many jurisdictions mentioned pollution from stormwater, failing on-site sewage systems, agricultural practices, logging and other sources as a growing challenge in this urbanizing area. Degradation of water quality and nutrient loading in the area's lakes are of particular concern. Flooding and siltation were identified as major concerns by Renton, Pierce County and local jurisdictions in Snohomish County. Some cities in Pierce County expressed a concern about the lack of sufficient facilities for disposal of boater sewage and about the Department of Natural Resource's policies concerning liveaboards in marinas. The King Conservation District noted its focus on solving nonpoint pollution problems in the area it serves

Watershed Protection

Implementation of watershed action plans is ongoing in each county. Pierce County is developing its third and fourth watershed action plans. In addition, King County and its jurisdictions are working together in watershed forums that build on the county's Regional Needs Assessment and are designed to develop local solutions to local problems. Key early concerns identified in the forums include flood hazards on the Snoqualmie and Lower Cedar rivers, excessive nutrient loading in Lake Sammamish and low sockeye salmon survival rates in Lake Washington. King County is developing an additional forum for areas that drain directly to central Puget Sound. The Snohomish Basin Work Group is another effort that involves local jurisdictions in long-term planning for the Snohomish basin. Everett supports this effort and the creation of legislation which would enable locally driven planning in its water basins.

THE MANY JURISDICTIONS CURRENTLY IMPLEMENTING STORMWATER MANAGEMENT PROGRAMS AGREED THAT MAINTENANCE AND FUNDING IS AN ONGOING CHALLENGE.

Educating and Involving the Public

General education about Puget Sound and water quality protection issues was requested throughout the area. In particular, Tacoma and jurisdictions in Snohomish County called for increased education of citizens and businesses. They also called for education of legislators about the needs of local governments. Pierce County requested that the state support increased

environmental education in schools as well as for the general public. Mercer Island identified the need for technical assistance and funding to involve the public and conduct education projects. In particular, Mercer Island would like assistance educating boaters and training on water quality issues. Snohomish County requested help in carrying out its education programs. Tacoma suggested the need for a world-wide web site that would provide information on progress made in protecting Puget Sound and other water quality information to students and interested citizens.

THE LOSS OF HABITAT AND DECLINING FISH RUNS WERE MENTIONED THROUGHOUT AREA 4.

Habitat Protection

The loss of habitat and declining fish runs were mentioned throughout Area 4. Seattle, Bellevue and King County are particularly interested in supporting studies of Lake Washington fisheries. Seattle is developing a habitat conservation plan for the upper Cedar River watershed. King County would like to work with the Washington Department of Fish and Wildlife and local cities to establish guidance for fish habitat projects in the Cedar River, with a goal of protecting and restoring the river's overall ecological health and biodiversity rather than managing it for a single species. Bellevue and Pierce County would like more flexibility from the state to spend habitat mitigation dollars in the most valuable habitat areas, rather than in streams where fish returns are minimal. Restoration is a priority for Tacoma (the Thea Foss and Hylebos waterways). Snohomish County has made protection of water quality to improve fish and wildlife habitat a continuing priority, as has Pierce County. Renton and Everett are exploring alternative ways to protect wetlands and restore habitat, and hope for assistance from the state to develop and implement wetland mitigation banking projects. They are proposing these projects to encourage economic development.

King County suggested establishing mitigation banks to direct the Washington State Department of Transportation (WSDOT) and other agency mitigation requirements to the highest priority needs. Pierce County recommended that WSDOT improve its coordination with other agencies on flood control and habitat mitigation projects. Seattle suggested revising the Shoreline Management Act to remove existing obstacles to shoreline habitat restoration.

Renton identified the protection of people and property from flood hazards as the top priority of its surface water utility. Its second priority is to protect and improve water quality and habitat. The Maplewood Creek Sedimentation Pond Reconstruction and Fish Channel projects, in the Maple Wood Creek Basin are multi-purpose projects that are reducing flooding problems and improving water quality and fish habitat.

Information Needs

Many local jurisdictions in this area cited the importance of scientific data and the need for more and better water quality information. Marysville suggested establishing benchmarks for water quality based on accurate and current data. Snohomish County and other jurisdictions intend to continue implementing their water quality moni-

toring programs. Local jurisdictions voiced specific needs for information about the relationship between water quantity and water quality, the fate of metals and toxics in groundwater, environmental indicators, the scientific validity of various regulations and requirements (particularly total maximum daily loads, or TMDLs), and the condition of fisheries in Lake Washington.

King County requested continued collaboration with Ecology in its water quality assessment and, with Tacoma, asked for technical assistance to improve information on the status of the marine environment for central Puget Sound. Pierce County stressed the need to evaluate progress made to date in cleaning up and protecting Puget Sound, and for improved information on how to prioritize spending to produce the greatest benefits to water quality. The county also recommended more research on trends in fisheries and on the impacts of land-use practices—as opposed to natural causes—on fish runs. The City of Mercer Island identified the need to expand monitoring and data analyses within the Puget Sound basin. The city suggested creating a directory of monitoring data and research information and also suggested holding a conference on research in the Puget Sound/ Georgia Basin.

Other Issues

Jurisdictions in Area 4 also expressed concern about a number of other issues, including management of household hazardous wastes, disposing of vactor wastes, pesticide applications, industrial discharges, combined sewer overflows, flooding and dredging, and groundwater protection.

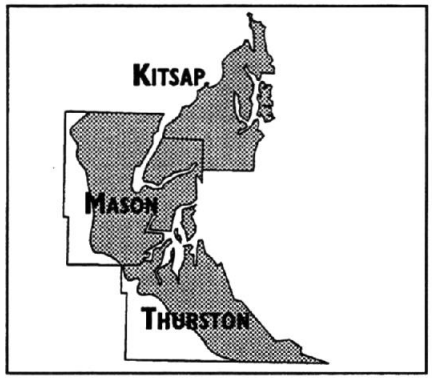
AREA 5 – KITSAP, MASON AND THURSTON COUNTIES

Action Team support staff met with Kitsap, Mason and Thurston county commissions and their staffs, the Thurston Regional Planning Council (including representatives of the Port of Olympia and the Nisqually Tribe), and the Bremerton City Council and its staff to discuss local priorities in Area 5. Representatives of other interests, including Washington Sea Grant, Washington State University Cooperative Extension, clean water districts for the Totten-Little Skookum and Lower Hood Canal watersheds, the Thurston Conservation District, and the public, also attended some of the meetings. Public comments on the draft work plan from the cities of Bremerton and Port Orchard, the Thurston Regional Planning Council, Thurston and Kitsap counties, the Suquamish Tribe and the Mason Conservation District have been incorporated into this section.

All jurisdictions in this area identified effective sewage management as one of their highest priorities. The counties in Area 5 have problems with pollution from failing on-site sewage systems and resulting restrictions on shellfish harvesting. They indicated that traditional approaches to waste disposal are proving inadequate, and that they are interested in innovative technologies for on-site sewage systems, as well as funding to connect small communities to sewer systems and funding for wastewater reuse projects.

Wastewater Treatment

Bremerton officials expressed concern that current actions to address failing on-site sewage sys-



Area 5

tems in unincorporated areas are not coordinated. They also identified management of their wastewater treatment plant and correction of combined sewer overflows (CSOs) as major priorities. The city is concerned with several related issues, including: a citizens' lawsuit against the city, the cost of reducing or eliminating CSOs, inconsistency between state and federal CSO requirements, and liability issues related to outfalls.

All jurisdictions identified poor farming practices, failing on-site sewage systems and stormwater as sources of pollution in Area 5.

Bremerton and Thurston County jurisdictions voiced the need for greater flexibility regarding the reuse of wastewater. In Thurston County, the LOTT sewage treatment plant partners (Lacey, Olympia, Tumwater and Thurston County) are planning for increasing demands on the Budd Inlet treatment plant.

Bremerton identified lack of coordination among state agencies and among state and federal agencies as a major problem. The city requested greater regulatory flexibility to achieve the goal of water quality protection, particularly with regard to reduction of CSOs.

Shellfish

Protecting shellfish is a priority for Bremerton and Kitsap and Mason counties; they have created, or plan to create, shellfish protection districts for specific downgraded areas. Mason County would like the state to develop an early warning process to notify them of a likely shellfish bed downgrade. Involvement in the Hood Canal Coordinating Council is important to Kitsap and Mason counties as a forum to address these issues, and Kitsap County recommended increased state support of the coordinating council. Mason County also identified the degradation of salmon habitat in Hood Canal as an important issue.

Nonpoint Pollution

All jurisdictions identified poor farm practices, failing on-site sewage systems and stormwater as sources of nonpoint pollution in Area 5. Kitsap County noted that the proper installation, operation and maintenance of on-site sewage systems are very important because about 66 percent of the impaired water bodies in the county are polluted with fecal coliform bacteria. The county identified the protection of beneficial uses as among the county's top priorities because of the importance of shoreline, stream and lake resources for the county's quality of life.

Bremerton requested that Ecology continue the process of coordinating jurisdictions' efforts to manage stormwater. The city voiced concern that technical assistance from the state for developing its comprehensive stormwater program was not yet available. Bremerton recommended using Ecology's Dam Safety Program as a model for organizing that agency's technical assistance on stormwater. The city also identified boaters as a source of pollution in the Sound and lack of regulatory jurisdiction over pollution from boats as a problem. Thurston County identified timber harvesting and land clearing activities as concerns. Thurston County jurisdictions want a more comprehensive approach to funding nonpoint pollution prevention and control, citing

the inability of local governments to use available funding sources, such as stormwater utilities or shellfish protection districts, to address nonpoint pollution. In addition, Thurston County cited specific problems with current Centennial Clean Water Fund and State Revolving Fund programs and with the lack of integration of surface and ground water issues in funding programs. The Mason Conservation District identified nonpoint pollution and salmon habitat restoration as its priorities.

Watershed Protection

Implementation of local watershed action plans is ongoing in Area 5. Kitsap County noted that population increases will likely increase nonpoint pollution problems affecting shellfish resources. The county added that watershed action plans must be effective and flexible enough to address this growing problem. Kitsap County has completed two watershed action plans and is finishing up two more. The county's creation of a surface water management utility has helped implement the watershed action plans. The county identified implementation of its watershed action plans as a major priority and noted a need for increased funding for plan implementation. Mason County also cited watershed plan implementation as a concern, and would like funds provided to update older watershed plans. Thurston and Mason counties consider implementation of their stormwater programs as important priorities. Thurston County jurisdictions are concerned about different levels of water quality protection by jurisdictions which share a watershed. The jurisdictions note that inconsistent protection between jurisdictions can create uneven impacts and can frustrate the efforts of jurisdictions with stricter regulations.

Information Needs

All the counties in this area expressed a need for more research on watershed issues such as the cumulative impacts of different kinds of development and land uses. In addition, Mason County wants more information on the scientific validity of using dye testing to identify failing on-site sewage systems and on available procedures to identify sources of fecal coliform. Thurston County expressed confidence in the dye-trace method based on studies conducted with funding from the Centennial Clean Water Fund. The county requested recognition of the scientific validity of this method to identify failing on-site sewage systems. Thurston County noted the lack of consistent benchmarks for measuring progress in implementation of the *Puget Sound Water Quality Management Plan.* Thurston County also expressed a desire to participate with the state in a revision of water quality standards and NPDES requirements to reflect actual beneficial uses of water bodies.

ALL THE COUNTIES IN AREA 5 EXPRESSED A NEED FOR MORE RESEARCH ON WATERSHED ISSUES.

Bremerton would like the state to provide scientific information to include in local programs. The city would also welcome technical and financial assistance for its water quality monitoring program and for public education which the city cited as an important priority.

Other Issues

Both Kitsap and Mason counties identified solid waste management and older landfills as issues which need interjurisdictional solutions.

Flooding is a major issue for jurisdictions in this area. In particular, flooding on the Skokomish and Nisqually rivers threatens property and ground water used for drinking.

The Suquamish Tribe identified the affects of current shoreline management practices as one of its concerns because the tribe depends on natural shore processes for the continuation of the shore resources.

CHAPTER IV
ACTIONS TO PROTECT PUGET SOUND

This chapter lists federal, state and local government actions that, if adequately funded, will occur during the 1997-99 Biennium to protect and restore Puget Sound. Most of these actions will carry out provisions of the *1994 Puget Sound Water Quality Management Plan* (management plan).

This chapter is organized according to the programs of the management plan. Each program section begins with a brief introduction to the program, followed by the program's goal and strategy and then by the work plan activities for the 1997-99 Biennium. The activities which will occur Soundwide are listed first, followed by the activities specific to each of the five areas of Puget Sound. A statement in parenthesis indicates whether the activity carries out a portion of the management plan program strategy, and/or one of the management plan program elements. State agency activities are followed by a code referencing an entry in the budget table located at the end of the chapter (pages 102-106). Activities included in the key actions chapter (pages 5-13) are indicated by "🗝."

DESCRIPTION OF ACTIVITIES

Please note how each activity is stated. An action identified by a local government is noted as, for example, "Mason County intends to...." This wording reflects the jurisdiction's stated intent to address the issue, while respecting the generally expressed local government concern that these actions not be considered mandates.

State and federal actions are stated as, for example, "The Department of Ecology will...." This means the agency has agreed to the activity and will carry out the activity if the budget is approved.

Where the Action Team considers an action necessary to protect or enhance water quality in Puget Sound and the action was not proposed by the appropriate federal or state agency or local government, the action is included as, for example, "The Action Team recommends that King County...."

THE 1994 PUGET SOUND WATER QUALITY MANAGEMENT PLAN

The *1994 Puget Sound Water Quality Management Plan* (management plan) was developed to fulfill the requirements of the Puget Sound Water Quality Act (Chapter 90.70 RCW) and Section 320 of the federal Clean Water Act (33 U.S.C. 1330). The state law called for a comprehensive water quality management plan prescribing the needed actions for maintaining and enhancing Puget Sound's water quality. The federal Clean Water Act calls for a comprehensive conservation and management plan that recommends priority corrective actions and compliance schedules addressing point and nonpoint sources of pollution. The purpose of the plan is to restore and maintain the chemical, physical and biological integrity of the estuary, including restoration and maintenance of water quality, a balanced indigenous population of shellfish, fish and wildlife, and rec-

🗝 INDICATES ACTIVITIES INCLUDED IN THE KEY ACTIONS CHAPTER

Agency activities described in this chapter are followed by a budget action code. Refer to Table 2 on page 102 to find out how much funding was requested by the agency to complete each action and how much funding was appropriated by the legislature (with a proviso) for that purpose. The codes are printed in different type styles to indicate whether the budget proviso for this activity represents the full amount, a partial amount, or none of the funds that the agency requested to implement the work plan. For example:

"DOT-01"
means full proviso funding

"DOT-01"
means partial proviso funding

~~"DOT-01"~~
means no proviso funding

reational activities in the estuary. The plan must also assure that the designated uses of the estuary are protected.

MANAGEMENT PLAN COST ESTIMATES

The *1994 Puget Sound Water Quality Management Plan* includes estimates of fully funding all its elements. These projections include the costs of activities by federal and state agencies and by local and tribal governments. Staff of the former Puget Sound Water Quality Authority developed the estimates, working closely with representatives of the various parties called on to perform tasks in the management plan.

The cost estimates from the management plan are included in this work plan for information only. Three limitations should be kept in mind when considering these estimates. First, the management plan estimates were made in early 1994 and have not been updated. Second, they are based in part on assumptions about activities over the past two years. These assumptions may be inaccurate. Third, the estimates are for fully funding the federal, state and local and tribal activities called for in the management plan. In comparison, the *1997-99 Puget Sound Water Quality Work Plan* budget only includes funding for state activities contained in the work plan.

The 1994 management plan estimated that it would cost $291 million to fully implement its recommendations during the 1997-99 Biennium. It was estimated that the local government share of this cost would be $157 million. Tribal activities were estimated at $2 million, federal activities at $6 million and state activities at $125 million. Non-government actions make up the remainder.

The 1997-99 work plan includes requests for a total of $128.4 million for state agencies to protect Puget Sound. This budget request is only for state agencies, although $11.8 million of the request is to be used by state agencies for grants to local and tribal governments to carry out actions called for in this work plan.

MANAGEMENT PLAN GOAL

The goal of the management plan is to restore and protect the biological health and diversity of Puget Sound, by preserving and restoring wetlands and aquatic habitats, preventing increases in the introduction of pollutants to the Sound and its watersheds, and reducing and ultimately eliminating harm from the entry of pollutants to the waters, sediments, and shorelines of Puget Sound. In seeking to achieve this goal, federal and state agencies and local and tribal governments shall take into consideration the net environmental effect of their decisions in order to minimize the transfer of pollutants from one environmental medium to another.

The management plan's emphasis on prevention recognizes the simple truth that it will cost far more to clean up pollution later than to prevent it now. The Plan is based on a premise of shared responsibility among all of us in the Puget Sound region and recognizes that fish, wildlife, water and pollutants cross jurisdictional lines. It establishes a framework based on a partnership among levels of government, each having a defined set of responsibilities in different program areas. The management plan recognizes and includes actions by federal, state, local and tribal governments, the private sector and citizens.

WASHINGTON/BRITISH COLUMBIA ENVIRONMENTAL COOPERATION INITIATIVE

The Puget Sound/Georgia Basin International Task Force was created by the Environmental Cooperation Council which was established by the governor of Washington and premier of British Columbia. The council and task force are co-chaired by the Washington Department of Ecology and the B.C. Ministry of Environment, Lands and Parks.

The task force promotes and coordinates mutual efforts to ensure the protection, conservation and enhancement of the shared inland marine waters. Agencies from the U.S. and Washington State participating in the task force and its work groups include: the Environmental Protection Agency, the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, the U.S. Geological Service, the Northwest Indian Fisheries Commission, the Puget Sound Water Quality Action Team, the State Parks and Recreation Commission, and the Washington departments of Ecology, Fish and Wildlife, Natural Resources, and Transportation. The task force is addressing seven priority issues in the shared waters through interagency work groups.

The 1994 management plan did not include these activities so there is no cost estimate for fully implementing it during the 1997-99 Biennium.

The original 1997-99 work plan budget request was for $316,880, mostly for the Puget Sound Action Team support staff. The final 1997-99 Puget Sound Water Quality Work Plan budget contains no funds specifically for these activities.

SOUNDWIDE ACTIONS

The following actions will occur throughout the Puget Sound basin.

Work Group on Minimizing Nearshore Habitat Loss

- The Department of Ecology will continue to lead the work group. (Budget code: DOE-10, no funding requested)
- This work group is assessing the regulatory effectiveness of programs affecting nearshore habitat and will make recommendations for their improvement.
- Agencies participating on this work group include: the **U.S. Environmental Protection Agency,** the **National Marine Fisheries Service**, the **Northwest Indian Fisheries Commission**, the **Action Team**, and the state **departments of Ecology, Fish and Wildlife, Natural Resources**, and **Transportation**. (Budget codes: ~~DFW-08~~, ~~PSAT-06~~)

Work Group on Establishing Marine Protected Areas

- The Department of Fish and Wildlife will chair this work group. The State Parks and Recreation Commission will serve as co-chair if funding becomes available for additional staff. (Budget code: ~~DFW-07~~)
- This work group is initiating a program to establish marine protected areas (MPAs), which involves surveying existing and new MPAs and developing the basis for MPAs as a management tool to enhance the health, diversity and productivity of fish and wildlife populations.
- This work group is also exploring with British Columbia the joint establishment of a transboundary marine protected area.

Work Group on Establishing Marine Protected Areas, continued

- Agencies participating on this work group include: the **U.S. Fish and Wildlife Service,** the **National Oceanic and Atmospheric Administration,** the **Northwest Indian Fisheries Commission,** the **Action Team,** the **State Parks and Recreation Commission,** and the state **departments of Ecology, Fish and Wildlife,** and **Natural Resources.** (Budget codes: PSAT-04, ~~06~~)

Work Group on Protecting Marine Life

- The Department of Fish and Wildlife will chair or co-chair the work group. (Budget code: ~~DFW-08~~)
- This work group will develop management recommendations to achieve and maintain healthy populations of plants and animals indigenous to the shared waters.
- Agencies participating on this work group include: the **Environmental Protection Agency,** the **U.S. Fish and Wildlife Service,** the **National Marine Fisheries Service,** the **Northwest Indian Fisheries Commission,** the **Action Team,** and state **departments of Fish and Wildlife,** and **Natural Resources.** (Budget codes: PSAT-04, ~~06~~)

Work Group on Minimizing Introductions of Exotic Species

- The Environmental Protection Agency (EPA) and Action Team will continue to lead the work group. (Budget codes: PSAT-04, ~~06~~)
- This work group will implement recommendations to ensure adequate protection of native marine life and habitats by minimizing the introduction of species which are not indigenous to the shared waters.
- Agencies participating on this work group include: the **U.S. Coast Guard,** the **Environmental Protection Agency,** the **U.S. Fish and Wildlife Service,** the **Noxious Weed Control Board,** the **Action Team,** and state **departments of Agriculture, Ecology, Fish and Wildlife,** and **Natural Resources.**

Work Group on Minimizing Toxic Contamination

- The Department of Ecology will continue to lead the work group. (Budget code: DOE-10, no funding requested)
- This work group is identifying how to better protect living marine resources from the effects of toxic contamination in the Puget Sound/Georgia Basin ecosystem.
- Agencies participating on this work group include: the **U.S. Environmental Protection Agency,** the **U.S. Geological Survey,** the **U.S. Fish and Wildlife Service,** the **National Marine Fisheries Service,** the **Action Team,** state **departments of Ecology** and **Fish and Wildlife,** and the **King County Department of Natural Resources.**

Work Group on Creating a Joint Monitoring and Research Framework

- The Action Team support staff will continue to lead this work group. (Budget code: *PSAT-02*)
- This work group will share monitoring program information and protocols with counterparts in British Columbia.
- This work group will also identify and conduct appropriate sampling projects in the shared waters.

- Agencies participating on this work group include: the **Environmental Protection Agency**, the **U.S. Fish and Wildlife Service**, the **Action Team**, state **departments of Ecology, Fish and Wildlife, Health**, and **Natural Resources**, and the **King County Department of Natural Resources.**

Work Group on Strategic Opportunities

- The Action Team support staff will continue to lead the work group. (Budget codes: *PSAT-03*, ~~06~~)
- This work group is identifying strategic opportunities for cross-border collaboration and will develop a joint framework for managing the shared waters.
- Agencies participating on this work group include: the **Action Team**, the **Environmental Protection Agency**, and the **Department of Ecology**.

The **Action Team support staff** will:

- Support the Puget Sound/Georgia Basin International Task Force. (Budget code: ~~PSAT-06~~)
- Staff the work groups formed by the task force and support implementation of their recommendations and continued collaboration between Washington and British Columbia on marine resource issues. (Budget code: ~~PSAT-06~~)
- Provide an information clearinghouse on the work being done by the task force. (Budget code: ~~PSAT-06~~)
- Seek additional participation by local and tribal government representatives. (Budget code: ~~PSAT-06~~)

ACTIONS IN AREA 1

In addition to the Soundwide actions, the following actions will occur in Area 1.

San Juan County intends to:

- Develop a working relationship on cross-border issues with its Canadian neighbors.

THE ESTUARY MANAGEMENT AND PLAN IMPLEMENTATION PROGRAM

Managing and protecting Puget Sound is a complex undertaking. Federal, state, local and tribal governments, businesses, individuals, and organizations all have individual roles, responsibilities, interests and mandates. Because of the tribes' broad authorities affecting Puget Sound, tribal governments are full partners with the state and federal agencies in management decisions. In 1983 Washington established a Puget Sound Water Quality Authority to review conditions in Puget Sound and recommend how to protect the Sound. The recommendation was to establish an entity to prepare a comprehensive management plan to coordinate protection of Puget Sound.

In 1985 a new Puget Sound Water Quality Authority (Authority) was established and directed to develop a management plan for Puget Sound. Their efforts resulted in the *1987 Puget Sound Water Quality Management Plan.* At about the same time, the Environmental Protection Agency and the state of Washington

entered into an agreement under the agency's National Estuary Program to establish the Puget Sound Estuary Program, co-managed by the Department of Ecology, the Authority and Region 10 of the Environmental Protection Agency. The Authority periodically updated the Puget Sound Management Plan. The current version is the *1994 Puget Sound Water Quality Management Plan*, referred to in this work plan as the management plan. The Estuary Management and Plan Implementation Program contains elements providing coordination, oversight and funding of the management plan.

On July 1, 1996, the Puget Sound Water Quality Authority was replaced by the Puget Sound Water Quality Action Team and the Puget Sound Council. Their role is to develop biennial work plans to coordinate efforts to implement the management plan and protect Puget Sound.

The 1994 management plan estimated that the cost to fully implement the Estuary Management and Plan Implementation Program would be $4,267,520 for the 1997-99 Biennium. A total of $2.7 million was estimated for state grants to counties to enhance local enforcement programs. State agency actions were estimated to cost $1.5 million. Federal and local activities were estimated to cost $40,000.

The original 1997-99 work plan budget request was for $3.2 million to pay for activities associated with the goals and strategy of this program. All but $87,000 of this request is for the Action Team support staff to coordinate technical assistance and other activities.

The final 1997-99 Puget Sound work plan budget contains about $2.8 million dedicated for activities related to the goals and strategy of this program. All of these funds are to pay for the work of the Action Team support staff.

PUGET SOUND MANAGEMENT PLAN PROGRAM GOAL. To provide adequate management, funding, enforcement and federal consistency during the implementation of the *Puget Sound Water Quality Management Plan*, the Comprehensive Conservation and Management Plan for Puget Sound.

PUGET SOUND MANAGEMENT PLAN PROGRAM STRATEGY. The strategy for achieving this goal is to: (1) formalize and continue the existing Puget Sound Estuary Program management structure; (2) obtain adequate funding for the program, including new sources of state and federal revenue; (3) require accountability by implementing agencies; (4) provide strong enforcement at all levels of government; and (5) ensure that federal activities, including the operation of large federal facilities, are consistent with the management plan.

SOUNDWIDE ACTIONS - COORDINATION, OVERSIGHT AND PROBLEM-SOLVING

The following actions will occur throughout the Puget Sound basin.

The **Action Team support staff** will:

- Coordinate implementation of this work plan and the Puget Sound Water Quality Protection Act. (Implements management plan program strategy 1 and element EM-8) (Budget code: *PSAT-01*)
- Collect information and report values for performance measures adopted by the Action Team and collect and compile information on work plan implementation as requested by the Puget Sound Council. (Implements management plan program strategy 3 and element EM-8) (Budget code: *PSAT-01*)
- Prepare a biennial report on work plan successes and shortcomings by December 1998. (Implements management plan program strategy 3 and element EM-8) (Budget code: *PSAT-01*)
- Prepare the 1999-2001 Biennium Work Plan. (Implements management plan program strategy 1 and element EM-8) (Budget code: *PSAT-01*)

	■ Facilitate negotiated solutions among federal, state, local and tribal governments regarding disagreements involving Puget Sound water quality issues. This role should include coordinating the exchange of information among different branches of government. (Implements management plan program strategy 1) (Budget code: *PSAT-01*)
The **Puget Sound Council** will:	⊶ Track the progress of federal, state and local jurisdictions in implementing the work plan. (Implements management plan program strategy 3 and element EM-8) (Budget code: *PSAT-01*)
The **Action Team agencies** will:	■ While working with local governments, recognize and coordinate with the water quality protection programs, commitments and priorities which local governments have established through the growth management process. (Implements management plan program strategy 1)
The **Environmental Protection Agency** will:	■ Participate on the Action Team and continue to co-manage the Puget Sound Estuary Program under the National Estuary Program. (Implements management plan program strategy 1 and element EM-1)
The **Department of Fish and Wildlife** will:	■ Participate in the coordinating activities of the Puget Sound Action Team and work plan. Provide a staff contact or lead to support administration, reporting, budget, planning, and agency coordination. (Implements management plan program strategy 1) (Budget code: ~~DFW-01~~)

SOUNDWIDE ACTIONS - FUNDING

The **Action Team finds** that full funding of the Water Quality Account is necessary for the protection of Puget Sound and other water bodies statewide. (Implements management plan program strategy 2 and element EM-4)

The **Action Team finds** that local jurisdictions need additional funding to pay for their actions to protect Puget Sound water quality. Existing federal and state grant and loan programs should be fully funded and the authority of local jurisdictions to raise their own funds should be maintained. (Implements management plan program strategy 2 and element EM-4)

The following actions will occur throughout the Puget Sound basin.

The Action Team calls on **agencies which administer grant and loan programs** to:	⊶ Give priority, to the extent possible under statutory requirements, to the actions identified in this work plan, especially the key actions, and give special consideration to local governments for additional funding to implement actions in the work plan. (Implements management plan program strategy 2 and element EM-4)
The **Department of Community, Trade and Economic Development** will:	■ Use the Public Works Trust Fund to finance appropriate local government infrastructure projects that benefit Puget Sound water quality. (Implements management plan program strategy 2 and element EM-4)

The **Department of Ecology** will:

- Continue providing financial and technical assistance from the Centennial Clean Water Fund, the State Revolving Fund and other fund sources to finance solutions for controlling water pollution, including large-scale sewerage projects, alternative treatment systems, the repair and replacement of failing on-site sewage systems, and efforts to control stormwater runoff, agricultural waste and other nonpoint sources of pollution. (Implements management plan program strategy 2 and element EM-4) (Budget code: DOE-04)
- Implement a single funding process that combines several existing funding sources (Centennial Clean Water Fund, 319 funds and the State Revolving Fund) to address nonpoint source pollution and which includes both long-term program funding and specific project funding. (Implements management plan program strategy 2) (Budget code: DOE-04)
- Continue to work with its Financial Advisory Committee, the Environmental Protection Agency, local and tribal governments, and other stakeholders to develop an integrated priority rating system for projects that address pollution from point and nonpoint sources. (Budget code: DOE-04)
- Following the success realized by the towns of Edison and Blanchard and other areas in providing improved wastewater treatment to protect shellfish beds, seek out willing communities and continue to implement the Small Towns Environmental Program. The STEP helps communities reduce costs as an alternative to traditional funding programs. The program encourages self-help and community involvement to accomplish infrastructure improvements. (Implements management plan program strategy 2) (Budget code: DOE-04)

The **Conservation Commission** will:

- Continue to work with the legislature to provide basic funding for conservation districts at the maximum amount authorized by statute and increase grants to Puget Sound districts; dedicate a percentage of the Centennial Clean Water Fund to conservation districts for planning and implementing best management practices; and continue the implementation and competitive grants programs. (Implements management plan program strategy 2 and element AG-3) (Budget code: *CC-01*)
- Provide increased technical assistance and program support to conservation districts and allocate funds directly to Puget Sound conservation districts for their activities. (Implements management plan program strategy 2 and element AG-3) (Budget code: *CC-01*)

The **Action Team** will:

- Seek continued funding for the Jobs for the Environment program. (Implements management plan program strategy 2 and element EM-4)

The **Action Team support staff** will:

- Collect, maintain and distribute information on funding sources which could support implementation of local actions called for in this work plan. (Implements management plan program strategy 2) (Budget code: *PSAT-01*)

- Provide information to local governments on the availability of technical assistance. (Implements management plan program strategy 2) (Budget code: *PSAT-01*)
- 🗝 Coordinate an interagency discussion of ways to consolidate funding programs and create a new funding vehicle(s) for local government activities. This effort will be coordinated with Ecology's effort to explore opportunities to develop and implement a single funding process for several sources of funds. (Implements management plan program strategy 2) (Budget code: *PSAT-01*)

The **Environmental Protection Agency** will:

- Pursue funding for implementation of the work plan and related activities. (Implements management plan program strategy 1 and element EM-4)

AREA 5 ACTIONS - FUNDING

In addition to the Soundwide actions, the following actions will occur in Area 5.

Kitsap County intends to:

- Continue its surface water management utility to support the Storm and Surface Water Management Program. (Implements management plan program strategy 2)

SOUNDWIDE ACTIONS - STATE TECHNICAL ASSISTANCE

🗝 **State and federal agencies** will provide technical assistance on work plan issues to local governments. Technical assistance will be coordinated by Action Team support staff. Action Team support staff will determine which agencies should participate on each team, depending on the type of problem or the issue, and assemble a team to address the problem. The Action Team support staff will seek to use local sources of assistance such as community colleges, local technical and research institutions, conservation districts and/or cooperative extension agencies and field agents. Teams will be formed from representatives of the departments of Agriculture, Community, Trade and Economic Development, Ecology, Fish and Wildlife, Health, Natural Resources, and Transportation; the Conservation Commission; the State Parks and Recreation Commission; the University of Washington; Washington State University; the Environmental Protection Agency; the U.S. Fish and Wildlife Service; and the Action Team support staff. (Implements management plan program strategies 1 and 3) (Budget code: *PSAT-03*)

The following actions will occur throughout the Puget Sound basin.

At a minimum, the **state agencies** will provide technical assistance on the following issues:

- Organizing processes for local watershed planning, characterizing watersheds, identifying problems and solutions related to nonpoint sources of pollution, and implementing measures to improve water quality and habitat through the development and implementation of watershed action plans. (Implements management plan program strategy 1 and 3) (Budget codes: DOA-01; DOE-04; DOH-07; ~~P&RC-05~~; *PSAT-03*, 04; *DFW-12*)
- Stormwater management. (Implements management plan program strategies 1 and 3) (Budget codes: DOE-08; *DFW-12*; ~~DOT-02, 03, 05~~; *PSAT-03*, 04)

State agencies, continued

- Sewage and septage treatment and management issues. (Implements management plan program strategies 1 and 3) (Budget codes: *DOE-02*; DOH-07, 08, 10, 11; *PSAT-03*, 04)
- Wetlands and habitat characterization, protection, restoration and mitigation, including mitigation banking and non-regulatory approaches. (Implements management plan program strategy 1 and 3) (Budget codes: DOE-09; *DFW-12*, ~~17~~; ~~P&RC-05~~; *PSAT-03*, 04; WSU-01; UW-01)
- Protection and restoration of shellfish growing areas. (Implements management plan program strategy 1 and 3) (Budget codes: DOE-06; DOH-02, 05, 06; *PSAT-03*, 04; WSU-01; UW-01)
- Funding sources which could support implementation of local actions called for in this work plan. (Implements management plan program strategy 2) (Budget codes: *PSAT-01, 03*)
- Technical assistance in support of the key actions. (Implements the management plan habitat program strategies 1 and 2) (Budget codes: DFW-12-15)

TECHNICAL ASSISTANCE IN AREA 1

Local governments in Area 1 requested the following additional technical assistance:

Action Team support staff will:

- Coordinate state technical assistance to San Juan County for developing a local marine resource plan. (Implements management plan program strategies 1 and 3) (Budget code: *PSAT-03*)

TECHNICAL ASSISTANCE IN AREA 2

Local governments in Area 2 requested the following additional technical assistance:

The **Department of Ecology** will:

- Assist the Swinomish Tribe by providing guidance and assistance to scope a total maximum daily load for nonpoint pollutants in the Swinomish Channel. If the assistance coincides with the Ecology five-year water management cycle, it may be possible to provide other agreed-to assistance. (Budget codes: DOE-04, 09)

The **Department of Fish and Wildlife** will:

- Continue to provide technical assistance to Skagit County for implementing prioritized fish passage projects, within available resources and agreements.

TECHNICAL ASSISTANCE IN AREA 3

Local governments in Area 3 requested the following additional technical assistance:

The **departments of Ecology** and **Fish and Wildlife** will:

- Provide information on use, removal and disposal of creosoted pilings. (Budget code: DOE-08)

The **Department of Ecology** will:

- Provide technical assistance on shoreline development projects. (Budget code: DOE-08)

The **Action Team support staff** will:

- Assist Sequim in implementing its outfall extension and water reuse strategies by providing help with outreach and education strategies in order to conserve fresh water and allow important shellfish growing areas to reopen in Sequim Bay. (Budget code: *PSAT-03*)
- Provide technical assistance for local volunteer monitoring programs including information on funding options. (Budget code: *PSAT-03*)
- Maintain and publish a directory of monitoring data and research information. (Budget code: *PSAT-02*)
- Assist Sequim in the "Sequim 2000" project related to the highway bypass of the downtown area. (Budget code: *PSAT-03*)

TECHNICAL ASSISTANCE IN AREA 4

Local governments in Area 4 requested the following additional technical assistance:

Action Team support staff will:

- Assist Pierce County in improving the coordination of water quality programs.
- Continue to provide support and technical assistance for the Snohomish River Basin Work Group. (Budget code: *PSAT-03*)
- Work with other state agencies to seek funding for fisheries studies in Lake Washington. (Budget code: *PSAT-03*)

HABITAT AND WETLANDS PROTECTION

The management plan programs for wetlands and habitats are combined in this work plan in recognition of the overlap among many of the implementing actions.

WETLANDS PROTECTION PROGRAM

Wetlands have been increasingly recognized for their functions and values in the last several years. Despite this recognition, rapid growth and development in the Puget Sound basin continues to pose a formidable threat to our remaining wetlands. Even protected wetlands are often damaged by adjacent incompatible land uses.

Much headway has been made in protecting wetlands by administering local critical areas ordinances and improving the U.S. Army Corps of Engineers' nationwide wetlands permits, although some regulatory challenges remain. New regulatory approaches have been adopted, such as mitigation banking and provision for off-site and out-of-kind mitigation. Local governments are increasingly adopting non-regulatory approaches to offer incentives to landowners for long-term stewardship of wetlands. State, federal and local agencies have cooperatively demonstrated techniques for restoring wetlands and made strides in understanding the function of wetlands at the watershed level. There is a strong need for better wetland inventories, particularly in rural counties.

The 1994 management plan estimated that fully implementing the Wetlands Protection Program would cost $26.4 million during the 1997-99 Biennium. This estimate included $20 million of capital funds to acquire priority wetlands. The total estimate included costs to federal agencies of $563,000. Costs to local and tribal governments were estimated at $953,000. Contributions from local groups participating in wetlands protection efforts were estimated at about $163,000. Funding for state agencies was estimated at $3.2 million.

The original 1997-99 work plan budget request was for $10.1 million for actions associated with the goals and strategies of this program. There is no money requested for state acquisition of wetlands. The $8.9 million requested for the Washington Department of Transportation to conduct wetlands mitigation, maintenance and monitoring was not included in the management plan estimate.

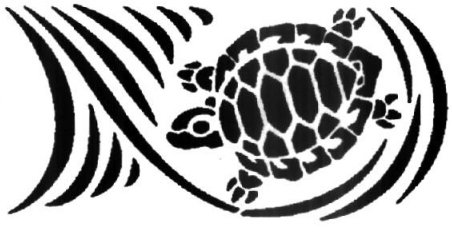
The final 1997-99 Puget Sound work plan contains approximately $1.2 million dedicated to implementing the goals and strategies of this program. Much of this is for technical assistance activities to be conducted by the Washington Department of Fish & Wildlife.

PUGET SOUND MANAGEMENT PLAN WETLAND PROGRAM GOAL. To ensure that: (1) federal and state agencies and local and tribal governments establish and coordinate programs to protect wetlands, and (2) in the short term there is no net loss of wetlands function and acreage, and in the long term there is a measurable net gain of wetlands function and acreage in the Puget Sound planning area.

PUGET SOUND MANAGEMENT PLAN WETLAND PROGRAM STRATEGY. The strategy for achieving this goal is to: (1) preserve wetlands, either through purchase or some other mechanism; (2) develop and implement local government programs that meet the Action Team's standards for protecting wetlands; (3) develop and implement a program for protecting wetlands on state-owned uplands and aquatic lands, including nearshore habitats; (4) develop and implement a long-range wetlands education strategy; (5) inventory wetlands to measure whether the goal of no net loss of wetlands (and, in the future, a net gain) is being met; (6) encourage interagency coordination and assign specific actions to federal agencies; and (7) restore wetlands.

FISH AND WILDLIFE HABITAT PROTECTION PROGRAM

The fish and wildlife we associate with Puget Sound are dependent on the amount and quality of their habitats. Habitats are degraded and lost through dredging, filling, paving, blockage of fish passage, and other human activities. Many state and federal agencies are addressing different aspects of habitat protection, however, these efforts are generally not well coordinated and leave some problems untouched.



A study by the Puget Sound/Georgia Basin Marine Science Panel identified the ongoing loss of nearshore habitat as one of the top threats to water quality and natural resources in Puget Sound and the shared waters of Washington and British Columbia. In some urban bays, virtually all of the nearshore habitat has been built on over the past 100 years. Although few large fill projects are occurring today, nearshore habitats are still being lost to shoreline bulkheading and other activities. There is an urgent need to consider impacts to Puget Sound nearshore on a cumulative basis and to provide new strategies for the long-term protection of the nearshore and its resources.

Approximately 3,000 miles of salmonid spawning and rearing areas in Washington State are blocked by poorly maintained or designed road crossings. This involves 25 percent of the road crossings in the state, of which, 40 percent are within city and county jurisdictions. The Washington Department of Fish and Wildlife is currently addressing fish passage problems caused by road crossings by conducting inventories, prioritizing projects, providing technical assistance to cities and counties to adopt local programs to protect passage, and providing training to volunteer groups. To date, inventories have only been completed in Skagit, Thurston and Kitsap

counties. With current resources, existing fish passage problems at road crossings will take more than a hundred years to correct. The Department of Fish and Wildlife is seeking funding to optimize its technical assistance and fish passage correction capabilities as part of its Salmon Resource Initiative and capital budget request packages.

The 1994 management plan estimated the cost to fully implement the Habitat Protection Program at $4.4 million for the 1997-99 Biennium. Of this estimate, $3.6 million was for state agencies to conduct field investigations and habitat inventories and to maintain a geographic information system (GIS). The total estimate also included $400,000 for state grants and $367,000 for local and federal costs.

The original 1997-99 work plan budget request was for $8.3 million for state agency activities. This included $6.7 million for the Department of Transportation to carry out activities not called out in the 1994 management plan. The remainder of the request was for Department of Fish and Wildlife activities.

The final 1997-99 work plan budget contains no dedicated funds for implementing habitat program activities.

PUGET SOUND MANAGEMENT PLAN HABITAT PROGRAM GOAL. To ensure that federal, state, local and tribal agencies coordinate fish and wildlife habitat protection programs so there is no net loss in the short term and, in the long term there is a net gain of aquatic and riparian habitat and other habitat important to water quality protection in the Puget Sound basin.

PUGET SOUND MANAGEMENT PLAN HABITAT PROGRAM STRATEGY. The strategy for achieving the goal is to: (1) encourage and support efforts by state and federal resource agencies, local governments, tribes, and private organizations to act aggressively and actively use existing mandates and authorities, including the Growth Management Act, to protect rapidly disappearing aquatic systems and related habitat in the near term; and (2) coordinate among existing agencies and governments in order to effectively protect and manage Puget Sound fish and wildlife habitat over the long term by providing integrated solutions for habitat protection at the watershed or sub-watershed level.

SOUNDWIDE ACTIONS

🗝 The **Action Team** supports local and state programs which enable critical wetland habitats to be protected through acquisition and recognizes that there is a large unmet need for funding to protect additional high-quality wetlands and lands contributing to water quality improvement. These programs use a variety of methods such as fee-simple purchase, purchase of development rights, public benefit rating systems and conservation easements. In the administration of funds for existing programs, the Action Team recommends that the criteria for awards include habitat value for threatened and endangered species, water quality protection, flood storage benefits and capacity for long-term stewardship of the land. (Implements management plan wetlands program strategy 1 and element W-1)

The following actions will occur throughout the Puget Sound basin.

The Action Team recommends that **all local jurisdictions**:

- 🗝 Protect wetlands and aquatic habitats by administering critical areas ordinances and shoreline master programs. Protecting these critical areas can be improved through non-regulatory means as well. (Implements management plan wetlands program strategy 2, habitat program strategy 1 and element W-2)
- Develop, strengthen and implement comprehensive programs for protecting wetlands as called for by the management plan. (Implements management plan wetlands program strategy 2 and element W-2)

	■ Provide incentives for landowners to protect wetlands, stream corridors and nearshore habitat. (Implements management plan wetlands program strategy 2, habitat program strategy 1 and element W-2)
	■ Continue improving wetland inventories and stream classifications to more clearly recognize the functions and values of these areas and protect them from incompatible activities. (Implements management plan wetlands program strategy 2, habitat program strategy 1 and element W-2)
The Action Team recommends that local **conservation districts**:	■ Continue to provide services addressing a wide range of environmental issues, including habitat and wetlands.
The **Department of Community, Trade and Economic Development** will:	■ Provide technical assistance to local governments planning under the Growth Management Act on land-use practices to mitigate or cleanse drainage, flooding and stormwater runoff that could pollute Puget Sound. (Implements management plan wetlands program strategy 2 and element W-2) (Budget code: DCTED-01)
The **Department of Ecology** will:	■ Assist local communities in planning and administering wetlands protection programs. (Implements management plan wetlands program strategy 2 and element W-2) (Budget code: DOE-09)
	■ Assist local communities with conducting wetlands inventories and modeling and provide digital wetlands data upon request. Provide technical assistance and training on how to conduct wetland inventories and to use the wetlands stewardship guidebook. (Implements management plan wetlands program strategy 2 and element W-2) (Budget code: DOE-09)
	■ Provide training to agency field staff, Natural Resources Conservation Service staff, conservation districts, cooperative extension field agents and local planners on wetlands stewardship techniques. (Implements management plan wetlands program strategy 1 and element W-1) (Budget code: DOE-09)
	■ Continue to provide staff assistance to the Interagency Wetlands Review Board. (Implements management plan wetlands program strategy 6 and element W-3) (Budget code: DOE-09)
	■ Provide technical assistance and comments to agencies, tribes and local governments as they prepare planning, regulatory and non-regulatory documents and other wetland protection measures. (Implements management plan wetlands program strategies 1 and 2 and elements W-1 and W-2) (Budget code: DOE-09)
	⊶ Facilitate the restoration of degraded wetlands through implementation of a watershed-based wetland restoration initiative for Puget Sound. This includes methods and procedures for implementing the Puget Sound Wetland Restoration Program as performed in the Stillaguamish basin. Continue to work to maximize restoration efforts in the Stillaguamish. Implement and refine the program in the Nooksack basin. Continue to work with other entities to identify where the program can be applied. Use enhancement funds if approved by the legislature to apply the program to two to three

Department of Ecology continued

additional Puget Sound watersheds. The Department of Transportation and other interested parties will be asked to participate in this effort. (Implements management plan wetlands program strategy 7 and element W-8) (Budget code: DOE-09)

- Continue working with and assisting Snohomish County on their non-compensatory wetlands restoration work on Spencer Island and the Drainage District 6 Project. Spencer Island assistance consists of annual monitoring commitments to track project success and design and implementation of the restoration and enhancement activities. Drainage District 6 project is just getting started and work plan elements will be identified in the coming year. (Implements management plan wetlands program strategy 7 and element W-8) (Budget code: DOE-09)
- Continue to search for new wetland restoration projects with sponsors that have access to sufficient funding and are committed to undertake long-term projects. (Implements management plan wetlands program strategy 7 and element W-8) (Budget code: DOE-09)

The **Department of Fish and Wildlife** will:

- Design, develop and implement a pilot database of comprehensive aquatic habitat information. Coordinate, document and collate critical fish and wildlife habitat information into a GIS format. Target: Complete design and pilot during 1997-1999 Biennium. (Implements management plan habitat program strategy 2 and element H-3) (Budget code: ~~DFW-02~~)
- Initiate tracking, mapping and monitoring of Hydraulic Project Approval (HPA) projects and mitigation. Track success of mitigation and assess cumulative fish and wildlife resource impacts. develop a pilot study to assess performance and provide early feedback. Complement and build on the aquatic habitat database. Target: Start-up, design and initial reporting will be completed and pilot field work begun during the 1997-1999 Biennium. Scale-up of this work is designed to occur over two biennia. Initial cumulative impact assessments will be completed during the second biennia. (Implements management plan habitat program strategy 1 and element H-6) (Budget code: ~~DFW-05~~)
- Develop a programmatic environmental impact statement for the several hundred bulkheading projects which occur in Puget Sound biennially. Complement coastal erosion study results and local inventory programs. Compile existing information and assess regulations, mitigation effectiveness, trends and cumulative impacts to fish and other aquatic resources. Provide for interagency and public review and comment. Develop recommended alternatives to bulkheading. Target: One-time expenditure. Complete during Fiscal Year 1998. (Implements management plan habitat program strategy 1) (Budget code: ~~DFW-06~~)
- As lead for the Puget Sound/Georgia Basin Task Force's Work Group on Establishing Marine Protected Areas, initiate a program to develop marine protected areas (MPAs) as a management tool to enhance the health, diversity and productivity of marine fish and

Department of Fish and Wildlife, continued

wildlife populations. Survey existing and new MPAs. Develop plans for recovery of depressed stocks and integration of management plans with interjurisdictional strategies. Emphasize ecosystem benefits, individual species recoveries, education, non-consumptive recreations, etc. Provide technical assistance to local jurisdictions. Target: Initiate program, survey existing MPAs, develop two to three management plans, and develop recommendations for potential new MPAs during the 1997-99 Biennium. (Implements management plan habitat program strategy 2) (Budget code: ~~DFW-07~~)

- Provide public information listing of HPAs and pending applications. More than 8,000 individual HPAs are issued statewide annually. Target: Begin monthly or bi-monthly reporting by December 1997. (Implements management plan element H-5) (Budget code: ~~DFW-04~~)
- Provide agency liaison for major marine projects with public ports, local jurisdictions and other development groups. Provide advance planning, technical support and consistent application of the State Hydraulics Code. Encourage integration of development proposals with baywide, watershed, growth management and other comprehensive planning actions. Ensure early and adequate protection and mitigation for salmon, critical habitats and other fish and wildlife species and marine resources. Target: Ongoing. (Implements management plan habitat program strategy 2) (Budget code: ~~DFW-13~~)
- Integrate and emphasize salmon and other fish and wildlife concerns into other processes. Expand technical support to local jurisdictions and agencies for non-regulatory wetlands preservation, restoration and management. Support the regional technical assistance team. Target: Ongoing. (Implements management plan wetlands program strategy 1 and element W-1) (Budget code: *DFW-14*)
- Provide interagency assistance to develop and test standards for wetland inventories and functional analyses. Provide technical support and training opportunities for delineation, restoration and preservation site identification. Expand technical support to local, state and federal agencies; integrate fish and wildlife concerns into programs; and develop and test standards for wetland inventories and functional analyses. (Implements management plan wetlands program strategy 5 and elements W-4 and W-5) (Budget code: *DFW-15*)
- Improve protection for wetlands on department-owned lands by: providing technical assistance to initiate an inventory, classification, mapping and database development program for WDFW-owned wetlands; developing comprehensive management plans for these wetlands in relation to salmon and other policies; developing priorities for restoration, acquisition and preservation; seeking grant funding; coordinating with other agencies and local jurisdictions; and initiating a pilot restoration project to enhance salmon habitat. Target: Initial classification and mapping will be completed and two pilot restoration projects initiated during the biennium. (Implements

management plan wetlands program strategy 3) (Budget code: ~~DFW-16~~)

- Provide technical assistance in support of the key actions. (Implements management plan habitat program strategies 1 and 2. (Budget codes: *DFW-12, ~~13~~, 14, 15*)

The **Department of Natural Resources** will:

- Develop watershed boundary maps for four Puget Trough wetland sites. Based on hydrologic monitoring protocols established for each site, monitoring gauges (water level gauges and/or test wells/piezometer) will be installed at the four sites. Monthly site visits for all Puget Trough wetland preserves will continue during the next biennium. Site visits will include identification of potential problems, garbage dumping, signs of human intrusion, weedy species and any other changes in site characteristics that may alter or degrade the sites. (Implements management plan wetlands program strategy 3 and element W-1) (Budget code: DNR-02)

The **Washington Department of Transportation** will:

- Fix priority fish passage barriers identified through the Department of Fish and Wildlife and Department of Transportation inventory project. (Budget code: ~~DOT-12~~)
- Continue to host the Marine Board which provides coordination of environmental protection, natural resource management and mobility needs of the Washington ferry system. The Board includes representatives of the departments of Transportation, Natural Resources, Fish and Wildlife and Ecology, and the Action Team support staff.
- Manage a revolving loan fund of $10 million to support development of mitigation projects independent of the construction-based funding system. One of the primary barriers to WSDOT partnering with others to implement watershed and/or multi-organizational mitigation projects is that funding for WSDOT's mitigation work may not be available until the transportation project is developed enough to finance the work. These restrictions often result in missed windows of opportunity to work with others on watershed restoration priorities. This fund will allow greater flexibility for beginning mitigation work independent of construction timelines, enhancing WSDOT's ability to participate and/or facilitate cost-effective mitigation practices on a watershed basis. Expenditures from the revolving fund will be repaid from the construction funds when development of the transportation project takes place. WSDOT will work to establish the fund during the 1997 legislative session. (Budget code: ~~DOT-09~~)
- Continue to refine and implement wetland mitigation techniques to reduce the environmental impact associated with the development of highway, rail and marine transportation systems. Mitigation will be provided for all permitted projects. Continued funding estimates represents mitigation construction costs and long-term monitoring of the resource. WSDOT will develop a strategic plan for the long-term monitoring and maintenance of department-owned wetlands in accordance with SSB 5894. The plan will be presented to the state legislature in 1997. (Budget codes: ~~DOT-08 and DOT-14~~)

Washington Department of Transportation, continued

- Work to improve project scoping and the development process to enable environmental issues to be identified and addressed earlier in the planning and the design phase. These funds would enable WSDOT to dedicate more effort to planning how to address the environmental effects of projects and to improve related mitigation decisions associated with project design. WSDOT will seek a substantial increase in funding to support this initiative ($17 million statewide). WSDOT estimates that approximately $2 million of these funds would directly benefit environmental components of projects affecting the Puget Sound basin. WSDOT will continue develop strategies to improve the environmental permitting process. (Budget code: ~~DOT-17~~)
- Continue the Snohomish basin watershed pilot project. Grant-funded project work to develop GIS maps of priority restoration sites within the Snohomish basin will be completed in late 1998. Funded 1997-1999 construction projects within the Snohomish basin will be reviewed with local stakeholders to evaluate partnering opportunities. Work will continue to develop strategies for advanced mitigation and/or implementation of a mitigation bank in the basin. (Budget code: ~~DOT-10~~)
- Work to enhance its GIS services to improve environmental impact analyses and to link watershed management efforts to transportation planning. (Implements management plan habitat program strategy 2) (Budget code: ~~DOT-18~~)

Action Team support staff, with the **departments of Transportation, Ecology**, and **Fish and Wildlife** and other interested parties will:

- Coordinate a discussion of how to provide for watershed-based decisions to restore, enhance and protect the health of Puget Sound watersheds. Participants will address the need to integrate watershed-based mitigation and wetlands mitigation banking projects into the overall objectives of watershed management efforts. Elements to be considered include, but are not limited to, wetlands, habitat protection, water quality, flood control, stormwater management, fish passage, contaminated sediments and hazardous waste management. These discussions will focus on and use the Washington Department of Transportation's Snohomish Pilot Project to test this process. The goals are to characterize watershed needs in coordination with Ecology's watershed approach, to develop a decision-making model to assist with tradeoff analyses and to use this information to increase regulatory flexibility and coordination, while increasing the ecological benefits associated with watershed restoration and mitigation actions. (Budget code: *PSAT-03*)

The **Action Team support staff** will:

- Distribute information on functions and values of wetlands and nearshore habitats and provide innovative techniques to protect critical habitat functions. (Implements management plan habitat program strategy 1) (Budget code: *PSAT-03*, 04)
- Provide training on methods, costs and application of wetlands restoration techniques. (Implements management plan wetlands program strategy 4) (Budget code: *PSAT-03*)

- Work with local, state and federal agencies to develop alternative mitigation techniques for special instances where traditional mitigation is unfeasible. (Budget code: *PSAT-03*, 04)

The **Army Corps of Engineers** will:

- 🗝 Track cumulative wetlands losses under the nationwide permit program This effort will be aimed at providing information for performance measures. (Implements management plan wetlands program strategy 6 and element W-5)
- Promote advanced planning and identification of wetlands and help to restore wetlands. (Implements management plan wetlands program strategy 6 and element W-5)

The **Environmental Protection Agency** will:

- Provide technical assistance and funding for wetland protection activities. (Implements management plan wetlands program strategy 6 and element W-5)
- Participate in advanced planning and identification of wetlands and undertake a study on mitigation banking. (Implements management plan wetlands program strategy 6 and element W-5)
- Work with Ecology and other agencies to restore specific wetland sites in Puget Sound. (Implements management plan wetlands program strategy 6 and element W-5)

The **U.S. Fish and Wildlife Service** will:

- Work to coordinate federal, state, and tribal government and private landowner and non-profit group efforts to plan and implement freshwater and coastal wetland, riparian, and other habitat protection and restoration activities. (Implements management plan wetlands program strategy 6 and element W-5)
- Share data and information on Puget Sound fish and wildlife habitats with other Puget Sound agencies. (Implements management plan wetlands program strategy 6 and element W-5)
- Provide funds for wetlands acquisition, restoration and inventory projects. (Implements management plan wetlands program strategy 6 and element W-5)
- Provide technical assistance to all levels of government and participate in advanced planning and identification of wetlands and specific restoration projects. (Implements management plan wetlands program strategy 6 and element W-5)

The **National Oceanic and Atmospheric Administration, U.S. Forest Service** and **U.S. Geological Survey** will:

- Share data and information on Puget Sound fish and wildlife habitats with other Puget Sound agencies. (Implements management plan wetlands program strategy 6 and element W-5)

With the **Department of Ecology** as lead, the **Northwest Indian Fisheries Commission; the departments of Ecology, Fish and Wildlife, Natural Resources**, and **Transportation**; the **Action Team support staff**; the **Environmental Protection Agency**; the **National Marine Fisheries Service**; and **other interested parties** will:

- 🗝 Continue to participate on the Work Group on Minimizing Nearshore Habitat Loss, formed by the Puget Sound/Georgia Basin International Task Force. This work group is assessing regulatory effectiveness of programs affecting nearshore habitat and will make

recommendations for their improvement. (Budget codes: DOE-10, ~~DFW-08~~, ~~PSAT-06~~)

With the **Department of Fish and Wildlife** as chair, the **Northwest Indian Fisheries Commission**; the **departments of Ecology, Fish and Wildlife,** and **Natural Resources**; the **State Parks and Recreation Commission**; the **Action Team support staff**; the **U.S. Fish and Wildlife Service**; the **National Oceanic and Atmospheric Administration**; and **other interested parties** will:

- Continue to participate in the Work Group on Establishing Marine Protected Areas, formed by the Puget Sound/Georgia Basin International Task Force. This work group is initiating a program to establish marine protected areas (MPAs), including surveying existing and new MPAs and developing the basis for MPAs as a management tool to enhance the health, diversity and productivity of fish and wildlife populations. This work group is also exploring the establishment of a marine protected area in the shared waters of Washington and British Columbia. The State Parks and Recreation Commission can serve as a co-chair on this committee, if funding for additional staff becomes available. (Budget codes: ~~DFW-07~~, ~~PSAT-06~~)

With the **Department of Fish and Wildlife** as chair, the **Northwest Indian Fisheries Commission**; the **departments of Fish and Wildlife**, and **Natural Resources**; the **Action Team support staff**; the **Environmental Protection Agency**; the **U.S. Fish and Wildlife Service**; the **National Marine Fisheries Service**; and **other interested parties** will:

- Continue to participate on the Work Group on Protecting Marine Life, formed by the Puget Sound/Georgia Basin International Task Force. This work group will develop management recommendations to achieve and maintain healthy populations of plants and animals indigenous to the shared waters. (Budget codes: ~~DFW-08~~, ~~PSAT-06~~)

With the **Action Team support staff** and the **Environmental Protection Agency** as leads, the **Noxious Weed Control Board**; the **departments of Agriculture, Ecology, Fish and Wildlife,** and **Natural Resources**; the **U.S. Coast Guard**; the **Environmental Protection Agency**; the **U.S. Fish and Wildlife Service**; and **other interested parties** will:

- Continue to participate on the Work Group on Minimizing Introductions of Exotic Species, formed by the Puget Sound/Georgia Basin International Task Force. This work group will implement recommendations to ensure adequate protection of native inland marine water populations and habitats by minimizing the introduction of species which are not indigenous to the shared waters. (Budget code: ~~PSAT-06~~)

ACTIONS IN AREA 1

In addition to the Soundwide actions, the following actions will occur in Area 1.

San Juan County intends to:

- Develop a local plan for protecting marine resources.

ACTIONS IN AREA 2

In addition to the Soundwide actions, the following actions will occur in Area 2.

Skagit County intends to:	⊶ Improve fish passage in county streams and rivers using a prioritized list of projects.
The **City of Burlington** intends to:	⊶ Develop a Shoreline Master Program for Gages Slough and the Skagit River shorelines and to improve water quality through design and implementation of a restoration plan for wetlands and habitat.

ACTIONS IN AREA 3

In addition to the Soundwide actions, the following actions will occur in Area 3.

The **Jefferson County Conservation District** intends to:	⊶ Continue working with landowners, community groups and tribes to improve fish habitat in streams and rivers.

ACTIONS IN AREA 4

In addition to the Soundwide actions, the following actions will occur in Area 4.

The **City of Renton** intends to:	■ Continue developing the May Creek Basin Plan with King County, which may include habitat restoration.
The **City of Seattle** intends to:	■ Develop a habitat conservation plan for the upper Cedar River watershed.
King County intends to:	■ Participate in the Lake Washington fish studies.
The **cities of Everett and Renton** intend to:	■ Pursue wetland-mitigation banking projects.
The **City of Tacoma** intends to:	■ Continue habitat restoration activities in the Thea Foss and Hylebos waterways.
Snohomish County intends to:	⊶ Design or build several capital projects to rehabilitate drainage systems, improve water quality, stabilize streambanks and restore fish habitat. ■ Manage its open-space lands for water quality protection. ■ Implement its adopted critical areas ordinance to protect streams and wetlands.
The **Snohomish Conservation District** intends to:	■ Provide technical and financial assistance, in cooperation with the U.S. Fish and Wildlife Service, to implement wetland and habitat restoration projects on private lands in the Stillaguamish watershed. The district also intends to provide technical and educational assistance to landowners for habitat and wetland restoration projects.

ACTIONS IN AREA 5

In addition to the Soundwide actions, the following actions will occur in Area 5.

Kitsap County intends to:

- Continue work with the Department of Fish and Wildlife and tribes to identify, prioritize and eliminate existing barriers to fish passage in a cost-effective manner in salmon streams. The county also intends to protect wetlands through its critical areas ordinance.

SPILL PREVENTION AND RESPONSE

Our modern society depends on gasoline, motor and heating oils, solvents and other hazardous substances. These substances are routinely transported and stored in huge quantities, and can cause tremendous environmental damage when spilled or released on land or in water. Existing response capabilities would be overwhelmed by any large spill and would fail to significantly reduce environmental damage.

During the last decade, much has happened to improve Washington's capabilities to prevent and respond to spills. Several new laws have been passed and Washington has participated in the States/British Columbia Oil Spill Task Force, which has developed a range of recommendations. The current heavy ship traffic and potential for future increases requires that we maintain a strong program for preventing spills in Puget Sound.

The 1994 Management Plan estimated that fully implementing the Spill Prevention and Response Program would cost $3.2 million during the 1997-99 Biennium. The majority of these funds was expected to come from the Oil Spills Administration Account (a tax on crude oil brought into the state for refining), with an estimated $489,000 to come from local funding sources and the state General Fund.

The original 1997-99 work plan budget request was for $6.2 million. The portion of this request for the Office of Marine Safety was for more funds than included in the entire management plan cost estimate.

The final 1997-99 work plan budget contains approximately $2.2 million dedicated for implementing spill prevention and response activities. These dollars are mostly for the Department of Ecology, with a small amount for the Washington Sea Grant Program based at the University of Washington. The Office of Marine Safety was merged with Ecology and none of its funding was included in the work plan implementation proviso.

PUGET SOUND MANAGEMENT PLAN PROGRAM GOAL. To emphasize spill prevention strategies and enhance response capability in Puget Sound and its tributaries, and to ensure that the spill prevention and response actions of state agencies are coordinated among themselves and with federal, local, tribal and private efforts.

PUGET SOUND MANAGEMENT PLAN PROGRAM STRATEGY. The strategy for achieving this goal is to: (1) identify the tools and resources needed to protect Puget Sound from spills, and (2) implement a comprehensive spill prevention and response program using current regulations and enacting new legislation if necessary.

SOUNDWIDE ACTIONS

The following actions will occur throughout the Puget Sound basin.

The **Department of Ecology** will:

- Continue to run the state's spill management program, addressing prevention, preparedness, response, and restoration with a focus on prevention plans for shore facilities and on spill response. (Implements management plan program strategies 1 and 2 and element SP-1) (Budget code: DOE-07)
- Assist with training of local responders and keep local governments aware of the placement of and access to spill response and cleanup equipment. (Implements management plan program strategies 1 and 2 and element SP-1) (Budget code: DOE-07)

The **Office of Marine Safety** will: [The Office of Marine Safety (OMS) is scheduled to become a division of the Department of Ecology on July 1, 1997.

- Review and approve oil spill prevention plans for tank vessels. Approximately 90 plans covering more than 600 tank vessels should be reviewed and approved for the 1997-99 Biennium. (Implements management plan program strategies 1 and 2 and element SP-2) (Budget code: ~~OMS-01~~)
- Inspect all tank vessels annually (approximately 220 boardings per year) for compliance with prevention plans. (Implements management plan program strategies 1 and 2 and element SP-2) (Budget code: ~~OMS-01~~)
- Screen and inspect cargo, passenger and fishing vessels to determine and mitigate substantial risk. Approximately 6,000 Advanced Notices of Entry are received each year, of which nearly 3,500 will be screened for substantial risk. All U.S. flagged fishing vessels operating in Washington waters will be boarded every two years (about 170 vessels). Ten percent of the vessels screened will be boarded each year (about 600 vessels). (Implements management plan program strategies 1 and 2 and element SP-2) (Budget code: ~~OMS-01~~)
- Provide education and technical outreach. Publish a newsletter, prevention bulletins (one to two), and safety advisories (two to three) each year. OMS will continue to provide educational handouts during each boarding covering a variety of subjects, including internal oil transfers, bridge team management, pilot coordination, and other topics. (Implements management plan program strategies 1 and 2 and element SP-2) (Budget code: ~~OMS-01~~)
- Improve bunkering (vessel refueling) procedures. Distribute bunkering information packets to vessels visiting for the first time (20), bunker training videos (10), and monitor ten percent of intended bunkering per year for compliance with state requirements. (Implements management plan program strategies 1 and 2 and element SP-2) (Budget code: ~~OMS-01~~)
- Implement the Regional Marine Safety Committee plan and recommendations. Produce semi-annual reports on progress toward

	implementing recommendations. (Implements management plan program strategies 1 and 2 and element SP-2) ■ Review and approve oil spill contingency plans for vessels. Conduct at least 24 vessel notification exercises and require two-hour response deployment exercises in all critical areas of Puget Sound. [Note: This activity will be transferred to Ecology, whether or not OMS remains an independent agency.] (Implements management plan program strategies 1 and 2 and element SP-2) (Budget code: ~~OMS-02~~) ■ Defend the Intertanko lawsuit. (Implements management plan program strategies 1 and 2 and element SP-2) (Budget code: ~~OMS-03~~)
The **Department of Ecology, Environmental Protection Agency**, and the **U.S. Coast Guard** will:	■ Participate in the annual review and update of the Northwest Area Contingency Plan and related policies. (Implements management plan program strategies 1 and 2 and element SP-1) (Budget code: DOE-07)
The **Department of Fish and Wildlife** will:	■ Provide the lead for fish, wildlife and habitat issues related to spill prevention; habitat cleanup and damage assessments; restoration of fish and wildlife resources impacted by spills; and in implementation of oiled-wildlife rescue operation and volunteers. (Implements management plan program strategy 2 and element SP-1)
The **University of Washington**, through the **Washington Sea Grant Program**, will:	■ Coordinate and develop programs to educated Puget Sound ports, marinas and the commercial fishing industry about preventing spills. (Implements management plan program strategy 2 and SP-4) (Budget code: UW-02) ■ Develop solutions that are adopted by marine users. (Implements management plan program strategy 2 and SP-4) (Budget code: UW-02) ■ Promote technical and procedural changes on board vessels and among fishing vessels, ferries, cruise ships, ports and marinas to eliminate small oil spills. (Implements management plan program strategy 2 and SP-4) (Budget code: UW-02) [Note: Funding for this activity has been appropriated to the Office of Marine Safety, which contracts with the university.]
The **U.S. Coast Guard** will:	■ Continue to develop Marine Firefighting Contingencies for inclusion into the Northwest Area Contingency Plan. (Implements management plan program strategies 1 and 2 and elements SP-1 and 3) ■ Continue to assess regional marine safety needs, including emergency response and "tug-of-opportunity" issues. (Implements management plan program strategies 1 and 2 and elements SP-1 and 3) ■ Continue to identify and eliminate substandard foreign vessels (including those presenting a risk to the environment) from U.S. waters through an aggressive port/state control program. (Implements management plan program strategies 1 and 2 and elements SP-1 and 3)

MONITORING AND RESEARCH PROGRAMS

Monitoring and research form the technical foundation for the *Puget Sound Water Quality Management Plan* and this work plan. Actions on these management plan programs have been combined in this work plan.

MONITORING

To assess the effects of human activities on Puget Sound and its resources, it is necessary to collect baseline and long-term data on the Sound's water, sediments, biological populations and habitat. Population growth and associated urbanization, industrialization and waste disposal have increasingly strained area resources. Resource managers need accurate, up-to-date information on present conditions and changes over time to protect the resources from harm. The public needs accurate information to remain aware and involved in the decision-making process.

The Puget Sound Ambient Monitoring Program (PSAMP) was developed in 1988 to conduct comprehensive, Soundwide monitoring and to improve coordination among federal, state and local monitoring efforts. PSAMP monitoring is done by the Washington departments of Ecology, Fish and Wildlife, Health, and Natural Resources and the U.S. Fish and Wildlife Service (USFWS). The monitoring conducted by these agencies under PSAMP includes marine and fresh waters, fish, sediments, shellfish, marine birds, marine mammals, and nearshore habitat. Monitoring is organized so that agencies do not duplicate each others work. Citizen monitoring activities have been supported through the Public Involvement and Education Fund (PIE), the Environmental Protection Agency and other agency funds.

Following an external program review in 1995, PSAMP is currently undergoing some refinements. These will increase the use of PSAMP data by resource managers and others, promote greater involvement of non-PSAMP agency experts and public clients, and enhance integration among of PSAMP tasks. The program is coordinated by Action Team support staff and is directed by multi-agency management and steering committees.

RESEARCH

Research is essential for understanding Puget Sound and its associated watersheds and for developing management options to protect the Sound in the future. Research provides a basic understanding of conditions and processes and explores and confirms findings made through monitoring. In addition, research helps develop accurate, practical and cost-effective methods for monitoring and for analyzing samples. Since 1987, the Puget Sound Research Program has provided a regional focus for setting research priorities, research sponsorship, and the dissemination of research findings related to Puget Sound and its watersheds. Puget Sound research conferences were held in 1988, 1991 and 1995.

The 1994 Management Plan estimated the total cost to fully implement the Monitoring Program and the Research Program at $8.9 million for the 1997-99 Biennium. An estimated $8.3 million from the state General Fund was considered necessary to fund state agency actions. The cost of federal agency actions was estimated at $415,000. Local, tribal, and private costs were estimated at $216,000.

The original 1997-99 work plan budget request was for $7.8 million to pay for actions associated with the goals and strategies of these programs. This amount included $75,000 for the Washington Department of Transportation to do research on pollution prevention, an activity that was not included in the 1994 management plan cost estimate.

The final 1997-99 budget contains approximately $5.6 million dedicated to implementing monitoring and research activities.

PUGET SOUND MANAGEMENT PLAN MONITORING PROGRAM GOAL. To implement the Puget Sound Ambient Monitoring Program. This program is designed to: (1) assess the health of Puget Sound and its resources; (2) identify existing environmental problems; (3) provide data and other information to assist the Puget Sound Action Team and others in measuring the success of environmental programs; (4) document natural and human-caused changes over time in the ecological components of Puget Sound; and (5) support research activities by making available scientifically valid data.

PUGET SOUND MANAGEMENT PLAN RESEARCH PROGRAM GOAL AND STRATEGY. To establish and maintain a system of priorities and funding for, and dissemination of, research that: (1) adds to our knowledge of the physical and biological systems of Puget Sound; (2) identifies causes and solutions of pollution problems; and (3) assists decision-making activities of regulatory and management agencies while stimulating creativity and excellence in research.

The strategy for achieving the research program goal is to: (1) maintain the Puget Sound Research Program in order to promote the coordination and funding of Puget Sound research; (2) maintain a renewable list of priorities for the program; and (3) assist in making the results of research available for use in making decisions.

SOUNDWIDE ACTIONS

The following actions will occur throughout the Puget Sound basin.

The Action Team recommends that local **conservation districts**:

- Continue to provide services addressing a wide range of environmental issues, including water quality monitoring.

The **departments of Ecology, Fish and Wildlife, Health,** and **Natural Resources,** the **Action Team support staff,** the **King County Department of Natural Resources,** the **U.S. Fish and Wildlife Service,** the **National Marine Fisheries Service,** and the **Environmental Protection Agency** will:

- Coordinate Puget Sound monitoring activities and develop an integrated, comprehensive monitoring strategy through the Puget Sound Ambient Monitoring Program Steering and Management committees. (Implements management plan elements M-1 and 2) (Budget codes: *DOE-03*, *DFW-09*, DOH-01, *DNR-01*, *PSAT-02*)

With the **Action Team support staff** as lead, the **King County Department of Natural Resources**, the **departments of Ecology, Fish and Wildlife, Health,** and **Natural Resources**, the **Environmental Protection Agency**, the **U.S. Fish and Wildlife Service**, and **interested parties** will:

- As the PSAMP Steering Committee, continue to participate in the Work Group on Creating a Joint Monitoring and Research Framework, formed by the Puget Sound/Georgia Basin International Task Force. This work group will share monitoring program information and protocols with counterparts in British Columbia and will identify and conduct appropriate sampling projects in the shared waters. (Implements management plan elements M-1 and 2) (Budget codes: *PSAT-02*, *DOE-03*, ~~DFW-08~~, DOH-01, *DNR-01*)

The **Department of Ecology** will:

- Maintain long-term and intensive monitoring efforts in the marine water column, marine sediments and freshwater rivers of the Puget Sound basin. Monitoring will support the Puget Sound Ambient Monitoring Program while contributing to Ecology's focus on water quality management area. (Implements management plan elements M-1 and 2) (Budget code: *DOE-03*)
- Revise and update existing implementation plans for PSAMP monitoring components by April 1997 (marine sediments) and September 1997 (marine-water column and freshwater rivers and streams). (Implements management plan elements M-1 and 2) (Budget code: *DOE-03*)
- Maintain historic PSAMP data in long-term, archival databases. Improve public accessibility to data by advertising freshwater and marine sampling station locations on maps (with links to the most current data) on Ecology's world-wide web home page (full implementation for freshwater rivers and streams, lakes, and marine waters by February 1997). (Implements management plan elements M-1 and 2) (Budget code: *DOE-03*)
- Annually tabulate summary data for each monitoring component, and prepare annual interpretive reports (wateryear 1995 fresh- and marine-water data by February 1997; 1989-1993 five-year summary retrospective for marine sediments by March 1997). (Implements management plan elements M-1 and 2) (Budget code: *DOE-03*)
- Ecology proposes to enhance monitoring in Puget Sound to regularly assess 50 to 75 percent of the marine and fresh waters in the Puget Sound basin over a five-year cycle (only four to six percent are monitored now). This will add 25 monitoring stations annually (up to 125 stations over a five-year cycle). These stations will be rotated through one to two basins or watersheds per year in conjunction with Ecology's five-year watershed cycle. Basins scheduled for focused monitoring in the 1997-99 Biennium include the Nooksack, Kitsap, Cedar/Green, and East Olympic (Hood Canal) basins. This additional monitoring will provide far more comprehensive baseline monitoring coverage throughout Puget Sound (50 to 75 percent coverage over five years) without compromising our existing stationary network of long-term stations used to evaluate trends over time (approximately six percent coverage currently). This additional monitoring also provides a stronger and better way to coordinate monitoring activities between PSAMP, Ecology's watershed approach and local government water quality monitoring efforts. Enhancements will address the following areas: estuarine monitoring, ambient river and stream monitoring, lake monitoring, nonpoint source evaluation, groundwater monitoring, ambient bioassessment monitoring, and environmental indicators. (Implements management plan elements M-1, 2, and 3; WP-7, and EM-8) (Budget code: *DOE-03*)

The Department of Fish and Wildlife will:

- Continue annual monitoring of marine birds and mammals and chemical contaminants in fish tissues, including sampling, analysis, database maintenance and reporting. (Implements management plan elements M-1 and 2) (Budget codes: *DFW-10 and 11*)
- Expand efforts to coordinate and manage PSAMP. (Implements management plan elements M-1 and 2) (Budget code: *DFW-09*)
- Enhance marine bird and mammal monitoring, including assessing the effects of habitat loss and wetland restoration on marine birds; developing quantifiable performance measures and management connections; and expanding the analysis of marine-mammal contaminants and the sampling and analysis of distribution and abundance. (Implements management plan elements M-1 and 2) (Budget code: *DFW-10*)
- Enhance fish monitoring, including monitoring indicators of fish health, conducting pilot sampling and analyzing for dioxins and TBT in fish tissue. (Implements management plan elements M-1 and 2) (Budget code: *DFW-11*)

The **Department of Health** will:

- Monitor shellfish for paralytic shellfish poisoning to identify trends and potential impacts to public health. (Implements management plan elements M-1 and 2) (Budget code: DOH-01)
- Monitor shellfish growing areas for fecal coliforms bacteria in marine waters to identify trends and potential impacts to public health. (Implements management plan elements M-1 and 2) (Budget code: DOH-01)
- Continue to involve volunteers and citizen monitoring groups in PSAMP activities. (Implements management plan elements M-3) (Budget code: DOH-01)
- Prepare an annual report that includes a compilation of data, interpretation of results, and recommendations for changes in monitoring program design. (Implements management plan elements M-1 and 2) (Budget code: DOH-01)
- Coordinate data management through a computerized system and assure that the data meets requirements for quality-assurance. (Implements management plan elements M-1 and 2) (Budget code: DOH-01)
- Develop an integrated data system using GIS (geographic information system) technology. (Implements management plan elements M-1 and 2) (Budget code: DOH-01)

The **Department of Natural Resources** will:

- Inventory vegetated nearshore habitats along 10 percent of Puget Sound (five percent each year). (Implements management plan elements M-1 and 2) (Budget code: *DNR-01*)
- Characterize 10 percent of Puget Sound physical shoreline (five percent each year). (Implements management plan elements M-1 and 2) (Budget code: *DNR-01*)

Department of Natural Resources, continued	■ Maintain a geographic data management system and make data available upon request. (Implements management plan elements M-1 and 2) (Budget code: *DNR-01*) ■ Analyze data and produce annual monitoring reports. (Implements management plan elements M-1 and 2) (Budget code: *DNR-01*) ■ Define a protocol for surveys of special-interest areas. (Implements management plan elements M-1 and 2) (Budget code: *DNR-01*) ■ Inventory one special-interest area with provided funding. (Implements management plan elements M-1 and 2) (Budget code: *DNR-01*) ■ Begin reference-area monitoring at 30 sites and develop scientific protocols for detecting community and habitat changes for inventoried nearshore areas. (Implements management plan elements M-1 and 2) (Budget code: *DNR-01*)
The **Action Team support staff** will:	■ Continue to coordinate the Puget Sound Ambient Monitoring Program, providing overall organization, facilitating development of the monitoring design, chairing the Steering Committee, serving on and staffing the Management Committee, and coordinating PSAMP with related local, state and federal programs. (Implements management plan elements M-1 and 2) (Budget code: *PSAT-02*) ■ Analyze PSAMP data. (Implements management plan elements M-1 and 2) (Budget code: *PSAT-02*) ■ Prepare and publish reports on the ambient monitoring program and the health of Puget Sound in 1997 and 1998. (Implements management plan elements M-1 and 2) (Budget code: *PSAT-02*) ■ Convene a conference on research in Puget Sound/Georgia Basin in 1998. (Implements research program strategy 3 and Puget Sound Plan element R-4) (Budget code: *PSAT-02*) ■ Organize PSAMP science meetings in 1998 (in conjunction with a research conference) and 1999. (Implements management plan elements M-1 and 2) (Budget code: *PSAT-02*) ■ Organize a review of the monitoring program in 1999 (in conjunction with a PSAMP science meeting). (Implements management plan elements M-1 and 2) (Budget code: *PSAT-02*) ■ Publish research findings in the *Puget Sound Notes* newsletter at least once per fiscal year. (Implements research program strategy 3 and Puget Sound Plan element R-4) (Budget code: *PSAT-02*) ■ Maintain and publish a directory of monitoring data and research information. One update will be published during the biennium. (Implements management plan elements M-1 and 2 and R-5) (Budget code: *PSAT-02*)
The **Governor's Council on Environmental Education** and **other agencies** will:	■ Continue to coordinate volunteer monitoring efforts throughout Puget Sound.

The **Northwest Fisheries Science Center of the National Marine Fisheries Service** will:	■ Continue its numerous research and monitoring projects in selected waterways and embayments and will continue to share the results of these studies with state and other federal agencies.
The **U.S. Fish and Wildlife Service** will:	■ Continue to carry out field monitoring, analysis, data storage and reporting on chemical contaminants in bird tissue. (Implements management plan elements M-1 and 2)
The **U.S. Geological Survey** will:	■ Continue its science and monitoring activities in the basin, including 113 stream gaging stations, ground- and surface-water studies, stream flow modeling, and the Puget Sound Basin Water Quality Assessment Project, which is part of the National Water Quality Assessment. The study includes integrated water quality assessments of the Nooksack, Green and Skokomish River basins, and the results of the study will allow comparison of the quality of fresh water in the Puget Sound basin to other areas of the country.

ACTIONS IN AREA 4

In addition to the Soundwide actions, the following actions will occur in Area 4.

The **City of Renton** intends to:	■ Continue to periodically assess water quality to evaluate management activities and to determine water quality status.
King County, the **City of Seattle,** the **City of Bellevue,** the **City of Mercer Island,** and several other suburban communities intend to:	■ Continue supporting studies of fisheries in Lake Washington.
Snohomish County intends to:	■ Continue implementing its ambient water quality monitoring programs. ■ Continue its support for volunteers monitoring of lakes.
The **Department of Fish and Wildlife** and the **University of Washington** will:	■ Continue to coordinate with local governments and tribes to conduct studies to improve fisheries and aquatic habitat in Lake Washington.

ACTIONS IN AREA 5

In addition to the Soundwide actions, the following actions will occur in Area 5.

The **Kitsap County Surface and Stormwater Management Program** intends to:	■ Maintain the current level of funding for water quality monitoring activities conducted by Kitsap County Public Works, the Bremerton-Kitsap County Health District, and stream team volunteers.
Thurston County intends to:	■ Continue implementing its program for monitoring ambient water quality.

EDUCATION AND PUBLIC INVOLVEMENT PROGRAM

Protecting water quality requires an ongoing commitment from everyone — as individuals, businesses and community groups, as well as government. Education and public involvement are vital components of a long-term management strategy for the Sound because they inform and enable us to make choices about protecting Puget Sound. Education provides motivation and skills, and helps individuals and organizations take responsibility for Puget Sound. Public involvement is equally important for educating government officials about local issues and needs. Members of local communities — tribes, schools, businesses and industry can bring information, expertise, values, priorities and funding to the decision-making process.

In 1987 the Authority created one of the most powerful tools available for protecting and improving the region's water quality: the Public Involvement and Education (PIE) Fund. During the last decade, the PIE Fund has provided more than $4.35 million for 280 projects. These projects have spread the message of clean water to at least three million people. The legacy of 10 years of education and public involvement efforts thrives in the form of a more educated public that has been given the tools to become better stewards of Puget Sound.

The continuing commitment to education and public involvement in this work plan underscores 10 years of valuable lessons for education and inspiring caring and informed citizens who see themselves as stewards of Puget Sound who are acting on that vision.

The 1994 Management Plan estimated the cost to fully implement the Education and Public Involvement Program at approximately $7.0 million for the 1997-99 Biennium. The estimate included $6.1 million for state agencies to conduct various educational and coordination programs—including $1.1 million from the Water Quality Account for the PIE Fund program and $2.4 million from state general funds for the water-quality field agent program, conducted jointly by Washington State University's Cooperative Extension Program and the University of Washington's Washington Sea Grant Program. Water-quality field agents working for tribal governments were included in the total estimate at a cost of $910,000, to be paid for by state grants.

The original 1997-99 work plan budget request was for $1.6 million to pay for state agency activities associated with the goals and strategy of this program, including water-quality field agents and the PIE Fund program.

The final 1997-99 work plan budget contains approximately $1.4 million dedicated to implementing these activities. Fully one half of this is for the PIE Fund.

PUGET SOUND MANAGEMENT PLAN PROGRAM GOAL. To support, improve and sustain education and public involvement in the region over the long term, in order to: (1) inform, educate and involve individuals, groups, businesses, industry and government in the cleanup and protection of Puget Sound; (2) increase understanding of the Sound's ecosystem; and, (3) create the kind of commitment that will be necessary to sustain efforts to improve and protect water quality over the long term.

PUGET SOUND MANAGEMENT PLAN STRATEGY. The strategies for achieving this goal include: (1) a public involvement policy to be followed by agencies and local governments; (2) increased resources to state agencies and tribal governments for coordinated interagency/intergovernmental education programs on marine and freshwater habitats, on water-quality policy issues, and on volunteer action; (3) field agents to coordinate among local and regional education and public involvement programs; and (4) a Public Involvement and Education Fund (PIE Fund) to support short-term public involvement and education efforts of both the private and public sectors.

SOUNDWIDE ACTIONS

The following actions will occur throughout the Puget Sound basin.

The Action Team recommends that **all jurisdictions**:	■ Coordinate outreach activities, including local stream teams, among jurisdictions sharing watersheds. (Implements management plan program strategy 1)
Each Action Team agency will:	■ Identify and carry out at least one water-quality education effort each year and participate in the Action Team's multi-media project by providing information or materials linking promotion of stewardship with each agency's mission. (Implements management plan program strategy 2 and element EPI-1)
The **Department of Fish and Wildlife** will:	■ Develop and implement a coordinated program of public education emphasizing the importance of wetlands and habitat to fish and wildlife. The program will build on existing aquatic education programs and complement current salmon recovery and watershed initiatives. Target: Ongoing (Implements management plan program strategy 2 and element EPI-3) (Budget codes: ~~DFW-03, 17~~)
The **Department of Transportation** will:	■ Develop and implement programs to educate passengers on state ferries about the Puget Sound environment and protection measures associated with marine-dependent uses. Work to secure funding for these activities during the 1997-1999 Biennium. (Implements management plan strategy 2 and element EPI-3.2) (Budget code: ~~DOT-06~~) ■ Continue to develop and implement environmental training courses for contractors WSDOT staff, and federal, state and local agencies. Current curriculum includes 50 courses. (Implements management plan program strategy 2) (Budget code: ~~DOT-16~~)
The **University of Washington** and **Washington State University** will:	■ Restructure assignments to existing extension educators to ensure water quality programs are part of all Puget Sound basin Cooperative Extension and Washington Sea Grant programs. (Implements management plan program strategy 3 and element EPI-2.1) (Budget codes:UW-01, WSU-01)
The **Action Team support staff** will:	■ Use the PIE Fund to support local projects that educate and involve the public in issues related work plan priorities. (Implements management plan program strategy 4 and element EPI-8) (Budget code: *PSAT-03, 05*) ■ Coordinate education about Puget Sound so organizations that provide education work together effectively and efficiently. (Implements management plan program strategy 2 and element EPI-9) (Budget codes: *PSAT-03, 05*) ■ Educate local elected officials and staff about Puget Sound water quality issues, the Puget Sound management plan and the work plan. (Implements management plan strategy 2 and element EPI-9) (Budget code: *PSAT-03*)

Action Team support staff, continued

- Educate the public about Puget Sound. (Implements management plan strategy 2 and element EPI-9) (Budget code: *PSAT-03*)
- Assist state and local agencies on involving the public in water quality issues. (Implements management plan program strategy 1 and element EPI-9) (Budget code: *PSAT-03*)
- Publish the *Sound Waves* newsletter. (Implements management plan strategy 2 and element EPI-9) (Budget code: *PSAT-03*)
- Develop and distribute prototypes of easily replicable/adaptable multi-media information materials about personal stewardship for use Soundwide as well as in local communities. (Implements management plan strategy 2 and element EPI-9) (Budget code: *PSAT-03*)
- Coordinate state agency education programs about Puget Sound. (Implements management plan program strategy 2 and plan element EPI-9) (Budget code: *PSAT-03*)

ACTIONS IN AREA 1

In addition to the Soundwide actions, the following actions will occur in Area 1.

Island County intends to:

- Continue public involvement and education programs on nonpoint source pollution. (Implements management plan program strategy 1 and elements PI-1, EPI-1)

ACTIONS IN AREA 2

Local governments should undertake the Soundwide actions.

ACTIONS IN AREA 3

In addition to the Soundwide actions, the following actions will occur in Area 3.

Clallam County intends to:

- Continue public education and involvement efforts. (Implements management plan program strategy 1 and element PI-1, EPI-1)

The **University of Washington** and **Washington State University** will provide regional extension educators to:

- Assist local governments, schools and community groups in developing, implementing and evaluating public education and involvement programs related to Puget Sound water quality. (Implements management plan program strategy 3 and element EPI-2.1) (Budget codes: UW-01, WSU-01)
- Provide public education on on-site sewage systems, boater wastes, and water quality. (Implements management plan program strategy 3 and element EPI-2.1) (Budget codes: UW-01, WSU-01)

The **University of Washington** and **Washington State University,** continued

- Coordinate local education programs with regional, state and national efforts. (Implements management plan program strategy 3 and element EPI-2.1) (Budget codes: UW-01, WSU-01)
- Provide technical assistance to local governments on a variety of water quality programs, including shellfish protection districts, clean water districts and watershed committees. (Implements management plan program strategy 3 and element EPI-2.1) (Budget codes: UW-01, WSU-01)
- Promote water quality monitoring by volunteers. (Implements management plan program strategy 3 and element EPI-2.1) (Budget codes: UW-01, WSU-01)
- Facilitate citizen participation in water quality issues. (Implements management plan program strategy 3 and element EPI-2.1) (Budget codes: UW-01, WSU-01)
- Provide assistance to Action Team outreach efforts. (Implements management plan program strategy 3 and element EPI-2.1) (Budget codes: UW-01, WSU-01)
- Facilitate the transfer of university-based research and other appropriate information and technology to local communities and facilitate communication of community research needs to appropriate university programs. (Implements management plan program strategy 3 and element EPI-2.1) (Budget codes: UW-01, WSU-01)
- Restructure assignments to existing extension educators to ensure water quality programs are part of all Puget Sound basin Cooperative Extension and Washington Sea Grant programs. (Implements management plan program strategy 3 and element EPI-2.1) (Budget codes: UW-01, WSU-01)

ACTIONS IN AREA 4

In addition to the Soundwide actions, the following actions will occur in Area 4.

The **King Conservation District** intends to:

- Continue public involvement and education programs on nonpoint source pollution, best management practices for urban streams, wetland enhancements, and other issues related to natural-resource protection and enhancement in urban areas. (Implements management plan elements PI-1, EPI-1)

Snohomish County intends to:

- Continue providing technical assistance and educational workshops for citizens, teachers, school children and waterside landowners. (Implements management plan elements PI-1, EPI-1)

ACTIONS IN AREA 5

In addition to the Soundwide actions, the following actions will occur in Area 5.

Kitsap County intends to:	■ Continue its stream team education programs. (Implements management plan elements PI-1, EPI-1)
The **University of Washington** and **Washington State University** will:	■ Provide regional extension educators to conduct the same water quality field agent activities described on page 63 for Area 3.

NONPOINT SOURCE POLLUTION PROGRAM

The Nonpoint Source Pollution Program addresses a variety of pollution sources at both Soundwide and local levels. The activities causing nonpoint pollution aren't new, but rapid growth and development in the Puget Sound basin have greatly increased the severity of pollution problems. This program is divided into seven major sections: the local watershed action program; on-site sewage systems; commercial and noncommercial agricultural practices; pest management; forest management practices; marinas and recreational boating; and household hazardous waste.

The Nonpoint Source Pollution Program is divided into seven distinct sections: the local watershed action program, on-site sewage systems, commercial and noncommercial agricultural practices, pest management, forest management practices, marinas and recreational boating, and household hazardous waste.

The 1994 Management Plan estimated that fully implementing this program would cost approximately $76 million during the 1997-99 Biennium. The total estimate included $53.2 million for local governments with about 40 percent of this amount coming from state and federal grants, and the other 60 percent from local sources. The total estimate also assumed a small amount of grant funds for tribal governments. State agencies' costs were estimated at $8.2 million and federal agencies' costs were estimated at $1.5 million.

The original 1997-99 work plan budget request was for $18.3 million for state agency activities. Of this, $10.3 million was requested for the Washington Department of Transportation for actions not included in the management plan.

The final 1997-99 work plan budget contains approximately $5.3 million dedicated to implementing all aspects of this program.

PUGET SOUND MANAGEMENT PLAN PROGRAM GOAL. To reduce and ultimately eliminate harm from nonpoint sources of pollution to Puget Sound, including pathogens, toxic contaminants, sediment and nutrients.

PUGET SOUND MANAGEMENT PLAN PROGRAM STRATEGY. The strategy for achieving this goal is to: (1) target state, federal and local resources on priority watersheds through a cooperative process of local watershed planning and implementation; (2) provide technical and financial assistance and incentives to local governments for controlling and preventing nonpoint pollution; and (3) develop or enhance state programs or regulations for those nonpoint sources that are most effectively controlled at the state level.

LOCAL WATERSHED ACTION PROGRAM

The 1987 Management Plan launched a cooperative watershed action planning process that involves local governments and communities, tribes, state and federal agencies and other interested and affected parties. Over the past decade, many people and entities in the Puget Sound basin have participated in developing and implementing local watershed action plans to reduce and prevent nonpoint pollution. Guided by the Nonpoint Rule (Chapter 400-12 WAC), adopted by the Puget Sound Water Quality Authority, all 12 counties surrounding Puget Sound ranked their watersheds and initiated watershed planning with the assistance of locally appointed watershed committees. Currently, watershed action plans are being developed or implemented in 41 of the 131 ranked watersheds in Puget Sound. Watershed action plans have succeeded due to the involvement of the local community and action commitments from local agencies, businesses and citizens. However, while many completed plans have started creating new local programs and projects for restoring and protecting watersheds, a number have stalled due to lack of funding and technical assistance. Most local jurisdictions also need assistance with monitoring.

PUGET SOUND MANAGEMENT PLAN PROGRAM GOAL. All ranked watersheds within the Puget Sound basin counties shall implement local watershed action plans which result in reduction and prevention of nonpoint pollution to Puget Sound.

PUGET SOUND MANAGEMENT PLAN PROGRAM STRATEGY. The strategy for achieving this goal is to provide technical and financial assistance and incentives for local communities and governments both to convene watershed management committees in the ranked watersheds which do not yet have watershed action plans, and to support the implementation of completed watershed action plans.

SOUNDWIDE ACTIONS

The following actions will occur throughout the Puget Sound basin.

The Action Team recommends that **all counties**:	■ Develop prioritized lists of watershed improvement projects, as defined under the Nonpoint Rule, Chapter 400-12 WAC, and as required by the Puget Sound Water Quality Protection Act of 1996, Chapter 138 of the Laws of 1996. ■ Use watershed report cards or other methods to report on the progress made in implementing their local watershed action plans developed under the Nonpoint Rule, Chapter 400-12 WAC. (Implements management plan program strategy and element WP-7.1)
The Action Team recommends that **all jurisdictions** and other entities as appropriate:	■ Implement priority actions from existing local watershed action plans as developed under the Nonpoint Rule, Chapter 400-12 WAC. (Implements management plan program strategy and element WP-4)
The Action Team recommends that local **conservation districts**:	■ Continue to provide services addressing a wide range of environmental issues, including best management practices for preventing nonpoint pollution.

Action Team support staff will:

- Develop a process for coordinating other state and federal watershed activities with local watershed action plans under Chapter 400-12 WAC. (Implements the management plan program strategy) (Budget code: PSAT-04)
- Support coordination of state agency activities in local watersheds and encourage coordination of local efforts to protect water quality. (Implements the management plan program strategy and element WP-6) (Budget code: *PSAT-03*)
- Update and publish watershed planning guidance and status reports. (Implements the management plan program strategy and elements WP-2, 4) (Budget code: PSAT-04)
- In conducting watershed assessments and evaluating issues and needs, review water quality and resource-protection actions called out in local government comprehensive plans for inconsistencies. (Implements the management plan program strategy and elements WP-6, NP-2) (Budget code: PSAT-04)

The **Department of Agriculture** will:

- Provide technical assistance to local watershed planning projects. (Implements the management plan program strategy and element WP-6) (Budget code: DOA-01; Agriculture's budget proviso reads "provided solely for technical assistance on pesticide management including the implementation of the Puget Sound work plan agency item DOA-1.")

The **Department of Ecology** will:

- Continue to administer the local watershed action program, including assisting lead agencies and local watershed committees, reviewing and approving watershed plans, and assisting with implementation. Funding and technical assistance will be focused on efforts that reflect, to the extent possible, locally driven priorities as well as those of the state. (Implements management plan program strategy and elements WP-5, 6 and 7.4) (Budget code: DOE-04)
- Assist lead watershed planning or implementing agencies with water quality monitoring and evaluation in watersheds covered by the process described in Chapter 400-12 WAC. (Implements management plan program strategy and element WP-7.2) (Budget codes: *DOE-03*, DOE-04)
- Revise the guidance for conducting water quality assessments and watershed characterizations under The Nonpoint Rule. (Implements management plan program strategy and element WP-7.2) (Budget codes: *DOE-03*, DOE-04)
- Review watershed plans developed using the Nonpoint Rule, stormwater plans and other plans to identify opportunities and/or needs for enhancement; and opportunities which allow local communities to satisfy current or anticipated EPA regulations, and to allow consideration for use of local watershed action plans as narrative total maximum daily load assessments (TMDLs). (Budget codes: DOE-04, DOE-08)
- Assist local governments in identifying broad water quality needs and in developing plans (local watershed action plans developed

Department of Ecology, continued

using Chapter 400-12 WAC, stormwater plans and others) and implementation measures which address multiple issues. (Budget codes: DOE-04, DOE-08)

- Continue to implement and broaden the five-year cycle watershed approach to address nonpoint sources and to more fully embrace local watershed action plans developed using Chapter 400-12 WAC as valuable components of the overall water quality program. (Budget code: DOE-04)
- Coordinate its activities and development of reports and recommendations with each county in the appropriate water quality management areas according to its five-year cycle watershed approach. (Budget code: DOE-04) Specifically, Ecology will:
  a) Use information from the local watershed action plans, characterizations and results in King, Clallam, Jefferson, Mason, and Thurston counties when conducting the scoping of the Cedar and Green and Eastern Olympic-Hood Canal water-quality management areas (water-resource inventory areas (WRIAs) 8, 9, 13, 14, 16, 17, 18, and 19). Products are assessment reports, with watershed characterization and plan information included.
  b) Use information from the local watershed action plans, characterizations and results in Skagit and Snohomish counties when revisiting the scoping of the Skagit and Stillaguamish water-quality management areas (WRIAs 3, 4 and 5). Products are updated assessment reports, with watershed characterization and plan information included.
  c) Coordinate with King, Clallam, Jefferson, Mason, Thurston and Kitsap counties during the data collection step for the Cedar and Green, Eastern Olympic-Hood Canal and Kitsap water-quality management areas (WRIAs 8, 9, 13, 14, 15, 16, 17, 18 and 19). Products are data reports, with watershed characterization, plan and monitoring information included.
  d) Coordinate with Whatcom, San Juan, and Kitsap counties during the data analysis step for the Nooksack, San Juan, and Kitsap water-quality management areas (WRIAs, 1, 2 and 15). Products are data analysis reports, with watershed characterization, plan and monitoring information included.
  e) Coordinate with Whatcom, San Juan, Island, Snohomish and Pierce counties during the technical report step for the Nooksack, San Juan, Island, Snohomish and South Puget Sound water-quality management areas (WRIAs 1, 2, 6, 7, 10, 11 and 12) under the five-year water quality planning schedule. Products are technical reports with watershed characterization, plan and monitoring information included.
  f) Support implementation of watershed action plans in Skagit, Snohomish, Island, and Pierce counties as part of the implementation step for the Skagit and Stillaguamish, Island, Snohomish, and South Puget Sound water-quality management areas (WRIAs 3, 4, 5, 6, 7, 10, 11 and 12).

The **Department of Fish and Wildlife** will:	■ Provide support for local watershed action plans. (Implements management plan program strategy and element WP-6) (Budget code: *DFW-12*)
The **Department of Health** will:	■ Assist local governments, watershed committees and others in developing and implementing watershed action plans. (Implements management plan program strategy and element WP-6) (Budget code: DOH-07)
The **State Parks and Recreation Commission** will:	■ Provide technical assistance to watershed management committees, councils and local jurisdictions. (Implements management plan program strategy and element WP-6) (Budget code: ~~P&RC-05~~)
Washington State University and **University of Washington field agents** will:	■ Continue to assist shellfish protection districts, clean water districts and watershed committees, especially in Areas 3 and 5. (Implements management plan program strategy and element WP-6) (Budget codes: WSU-01, UW-01)

ACTIONS IN AREA 1

In addition to the Soundwide actions, the following actions will occur in Area 1.

Island County intends to:	■ Conduct watershed restoration projects.
San Juan County intends to:	🗝 Develop and adopt a local watershed action plan using the process described in The Nonpoint Rule (Chapter 400-12 WAC). (Implements management plan program strategy and elements WP-3, 4)
The Action Team recommends that **Island County**:	🗝 Implement priority actions from the North Whidbey Island watershed action plan and develop and adopt the South Whidbey Island watershed action plan. (Implements management plan program strategy and elements WP-3, 4)

ACTIONS IN AREA 2

In addition to the Soundwide actions, the following actions will occur in Area 2.

Skagit County intends to:	🗝 Continue implementing priority actions from the Nookachamps, Padilla Bay and Samish Bay watershed action plans. (Implements management plan program strategy and element WP-4) ■ Use watershed implementation committees to prioritize watershed action plan tasks and to evaluate watershed action plan progress. (Implements management plan program strategy and element WP-4 and 7.1) 🗝 Implement the Fidalgo Bay plan when it is completed and approved by the participating agencies.

The **Skagit Conservation District** intends to:	🗝 Work cooperatively to implement priority actions from the Nookachamps, Samish and Padilla Bay/Bayview watershed action plans. (Implements management plan program strategy and elements WP-4).
The Action Team recommends that **Whatcom County**:	🗝 Implement priority actions from the Drayton Harbor watershed action plan. (Implements management plan program strategy and elements WP-4)

ACTIONS IN AREA 3

In addition to the Soundwide actions, the following actions will occur in Area 3.

Clallam County intends to:	🗝 Continue implementing priority actions from the Port Angeles, Dungeness River and Sequim Bay watershed action plans, and participating on the Dungeness River Management Team. (Implements management plan program strategy and elements WP-4) 🗝 Begin developing a watershed action plan for the West End Watershed. (Implements management plan program strategy and element WP-3, 4)
The **Jamestown S'Klallam Tribe** intends to:	🗝 Continue coordinating the Dungeness River Management Team in cooperation with Clallam County. (Implements management plan program strategy and elements WP-4).
Clallam County and the **Jamestown S'Klallam Tribe** intend to:	🗝 Continue implementing priority actions from the Dungeness Water Resources management plan.
The **City of Port Townsend** intends to:	■ Continue its support for the Jefferson County Water Resources Council, the implementing body in Jefferson County for the Dungeness/Quilcene Pilot Project.
The Action Team recommends that **Jefferson County**:	🗝 Implement priority actions from the Port Ludlow watershed action plan. (Implements management plan program strategy and elements WP-4)

ACTIONS IN AREA 4

In addition to the Soundwide actions, the following actions will occur in Area 4.

The **City of Renton** intends to:	🗝 Implement priority actions from the Cedar River Watershed Management and Basin Plan following adoption, subject to the availability of resources and according to priorities determined by the city. (Implements management plan program strategy and element WP-4)
The **City of Seattle** intends to:	🗝 Continue implementing priority actions from the Pipers Creek and Longfellow Creek watershed action plans. (Implements management plan program strategy and element WP-4)

	🗝 Develop a watershed plan for Thornton Creek following the Chapter 400-12 WAC process. (Implements management plan program strategy and elements WP-3, 4)
King County intends to:	🗝 Establish and fund the Regional Needs Assessment Program. 🗝 Coordinate regional prioritization of clean water projects through the watershed forums.
King County, the **City of Bellevue**, the **City of Renton**, and the **City of Seattle** intend to:	■ Continue support for and involvement in local watershed forums. (Implements management plan program strategy and elements WP-4)
Pierce County intends to:	🗝 Continue developing a watershed action plan for the Key Peninsula, Gig Harbor and Islands watersheds following the process described in Chapter 400-12 WAC. (Implements management plan program strategy and elements WP-3, 4) 🗝 Develop a watershed action plan for the Upper Puyallup River following the process described in Chapter 400-12 WAC. (Implements management plan program strategy and elements WP-3, 4) 🗝 Continue implementing priority actions from the Lower Puyallup River watershed action plan. (Implements management plan program strategy and element WP-4)
Snohomish County intends to:	🗝 Develop a local watershed action plan in the French Creek watershed and develop a master drainage plan for the Lake Stevens area. (Implements management plan program strategy and elements WP-3, 4)
The **Snohomish Conservation District** intends to:	🗝 Implement agricultural recommendations in the local watershed action plans for the Stillaguamish River, Quilceda/Allen Creeks, North Creek and Swamp Creek. (Implements management plan program strategy and element WP-4) ■ Work cooperatively with Snohomish County to develop a watershed action plan for French Creek. (Implements management plan program strategy and elements WP-3, 4)
Snohomish County and the **City of Everett** intend to:	🗝 Continue support for and involvement in the Snohomish River Basin Work Group.
The Action Team recommends that **King County**:	🗝 Continue the Cedar River Watershed Council and continue to implement priority actions from the Cedar River Watershed Management and Basin Plan. (Implements management plan program strategy and elements WP-4)
The Action Team recommends that **Pierce County**:	🗝 Continue the Puyallup Watershed Council. (Implements management plan program strategy and element WP-4)

ACTIONS IN AREA 5

In addition to the Soundwide actions, the following actions will occur in Area 5.

Kitsap County intends to:	⊶ Continue implementing priority actions from the Dyes Inlet and Sinclair Inlet watershed action plans. (Implements management plan program strategy and element WP-4)
Mason County intends to:	⊶ Update the Oakland Bay watershed action plan. (Implements management plan program strategy and elements WP-3, 4) ⊶ Continue implementing priority actions from the Lower Hood Canal and Totten-Little Skookum watershed action plans. (Implements management plan program strategy and element WP-4)
Thurston County intends to:	⊶ Continue implementing priority actions from the Henderson Inlet, Eld Inlet, Totten-Little Skookum Inlet, and Budd-Deschutes watershed action plans. (Implements management plan program strategy and element WP-4)
Kitsap and Mason counties intend to:	■ Continue involvement in the Hood Canal Coordinating Council. (Implements management plan program strategy and elements WP-1, 3, 4)
The Action Team recommends that **Kitsap County**:	⊶ Begin implementing priority actions from either the Upper Hood Canal watershed action plan or the Liberty-Miller Bay watershed action plan. (Implements management plan program strategy and element WP-4)
The Action Team recommends that **Thurston County**:	⊶ Update the Totten-Little Skookum watershed action plan. (Implements management plan program strategy and elements WP-3, 4)
The Action Team recommends that **Mason County**:	⊶ Begin watershed planning for the west-shore Hood Canal drainages. (Implements management plan program strategy and elements WP-3, 4)

ON-SITE SEWAGE MANAGEMENT PROGRAM

There are nearly one-half million on-site sewage systems in the Puget Sound basin. These systems complement the basin's municipal treatment plants as an important and permanent part of the region's sewage treatment infrastructure. In recent years, much work has gone into updating the state on-site sewage regulations, improving the use and availability of alternative technologies, and training and certifying on-site sewage professionals. These, and a number of other activities, have all been aimed at improving the performance and management of on-site sewage systems. Current efforts are focused on local programs for ensuring that on-site systems are properly operated and maintained, alternative technologies, training and certification programs, and projects to correct failing on-site systems in priority areas, especially shoreline areas with valuable shellfish resources.

PUGET SOUND MANAGEMENT PLAN PROGRAM GOAL. To reduce and ultimately eliminate harm from wastes generated by existing and future on-site sewage systems.

PUGET SOUND MANAGEMENT PLAN PROGRAM STRATEGY. The strategy for achieving this goal is to: (1) establish comprehensive programs at the local level for the appropriate application of on-site sewage treatment and disposal technology, for effective operation, maintenance and inspection of systems, and for education, financial and technical assistance regarding on-site sewage systems; (2) provide effective state oversight, regulation and financial and technical assistance; and (3) investigate, review, approve, promote and apply, as appropriate, alternative on-site sewage treatment technologies.

SOUNDWIDE ACTIONS

The following actions will occur throughout the Puget Sound basin.

The Action Team recommends that **conservation districts**:	■ Continue to provide services addressing a wide range of environmental issues, including on-site sewage systems.
The Action Team recommends that **local health jurisdictions**:	🗝 Implement the state on-site sewage regulations and collaborate with other local governments to establish effective, comprehensive on-site sewage programs to protect public health and environmental quality. These programs should include: a. Activities to assure the proper siting, design, installation, operation, monitoring and maintenance of all on-site sewage systems. (Implements management plan program strategy 1 and element OS-2) b. Activities associated with public education, professional certification and training, land-use planning, enforcement, and outreach to residents and communities to support the repair and replacement of failing systems. (Implements management plan program strategy 1)
Local health jurisdictions and the **state Department of Health** will:	🗝 Take enforcement actions in support of this program when technical assistance and the opportunity for voluntary compliance fail to produce results. (Implements management plan program strategies 1 and 2)
The **Action Team support staff** will:	■ Coordinate an interagency review of issues related to the authority of local health jurisdictions to enter private property to investigate or correct on-site sewage system problems. (Budget code: *PSAT-03*, 04)
The **Department of Ecology** will:	■ Provide technical assistance on sewage treatment options, National Pollutant Discharge Elimination System (NPDES) permitting, and biosolids management. (Implements management plan program strategy 2) (Budget code: *DOE-02*) ■ Continue to implement the Small Towns Environment Program as a tool to meet infrastructure needs of smaller communities.

Department of Ecology continued

(Implements management plan program strategy 2) (Budget code: DOE-04)

- Take enforcement actions in support of this program when technical assistance and the opportunity for voluntary compliance fail to produce results. (Implements management plan program strategy 2) (Budget code: *DOE-02*)
- Provide grants to local governments for on-site sewage system projects and programs. (Implements management plan program strategy 2) (Budget code: DOE-11)

The **Department of Health** will:

- Provide assistance on local issues related to sewage-management. (Implements management plan program strategy 2 and element OS-1) (Budget code: DOH-08 and enhancement)
- Provide technical assistance on conventional, alternative, experimental, and large on-site sewage systems and the use and disposal of septage. (Implements management plan program strategies 2 and 3 and element OS-1, 4 and 5) (Budget codes: DOH-8, 10 and 11)
- Issue contracts to research and demonstrate alternative and experimental on-site sewage systems. (Implements management plan program strategy 3 and element OS-5) (Budget code: DOH-11)
- Oversee the state on-site sewage regulations and assist local health jurisdictions with ongoing implementation of the regulations, including the creation of operation and maintenance programs. (Implements management plan program strategy 2 and element OS-1) (Budget code: DOH-08)
- Implement sewage-system tank standards (septic tanks, pump chambers, etc.) and list those tanks which comply with the standards. (Implements management plan program strategy 2 and element OS-1) (Budget code: DOH-08)
- Collaborate with local health jurisdictions to develop and implement standards for local on-site wastewater programs. (Implements management plan program strategies 1 and 2 and element OS-1) (Budget code: DOH-08)
- Collaborate with local health jurisdictions, the Board of Registration for Professional Engineers and Land Surveyors, the Washington On-Site Sewage Association, the Northwest On-Site Wastewater Training Center and others to develop a pilot project demonstrating competency certification for sewage system designers based on statewide standards delivered through a regional network of locally implemented certification programs. (Implements management plan program strategy 2 and element OS-3) (Budget code: DOH-09)
- Promote the continued development of a permanent, comprehensive on-site training facility and curriculum at the Northwest On-Site Wastewater Training Center at Washington State University in Puyallup. (Implements management plan program strategy 2 and element OS-3) (Budget code: DOH-09)

Department of Health, continued

- Review and approve new project plans and operation and maintenance manuals, inspect installations, and issue permits for large on-site sewage systems. (Implements management plan program strategy 2 and element OS-4) (Budget code: DOH-10)
- Maintain a database to track the operation and maintenance of large on-site sewage systems. (Implements management plan program strategy 2 and element OS-4) (Budget code: DOH-10)
- Develop cooperative agreements with interested local governments on program activities related to large on-site sewage systems. (Implements management plan program strategies 1 and 2 and element OS-4) (Budget code: DOH-10)
- Evaluate experimental and alternative technologies and maintain a list of approved systems and products. Develop and revise technical standards and guidance on alternative systems according to the following estimated schedule: (Implements management plan program strategy 3 and element OS-5) (Budget code: DOH-11)

July 1997	Greywater/Water Reuse Systems; Sand Filters
October 1997	Individual Lagoon Systems; Peat Filter Systems
January 1998	Gravelless Drainfield Systems; Subsurface Drainfield Systems
April 1998	Aerobic Treatment Units; Vault and Pit Privies
July 1998	Artificial Gravel-Media Systems; Mound Systems
October 1998	Constructed Wetland Systems; Pressure Distribution Systems
January 1999	High-Strength Wastewater Systems; Holding Tank Systems
April 1999	Composting Toilets; Incineration Toilets

- Encourage pilot projects to evaluate and demonstrate on-site sewage technologies, materials, equipment and products which are suited to the climate, soils and other conditions of the Puget Sound basin. (Implements management plan program strategy 3 and element OS-5) (Budget code: DOH-11)

Washington State University and **University of Washington field agents** will:

- Assist local health jurisdictions in Areas 3 and 5, including Clallam and Mason counties, in educating the public about the proper operation and maintenance of on-site sewage systems. (Implements management plan program strategy 2) (Budget codes: WSU-01; UW-01)

ACTIONS IN AREA 1

Local governments should undertake the Soundwide actions.

ACTIONS IN AREA 2

In addition to the Soundwide actions, the following actions will occur in Area 2.

Skagit County intends to:

- 🔑 Identify potential problem areas (e.g., failing on-site sewage systems) and to seek grants to fix failing on-site sewage systems in high-risk areas. (Implements management plan program strategy 1)
- ■ Continue the Blanchard-Edison approach towards on-site sewage system problems in other areas. (Implements management plan program strategy 1)

ACTIONS IN AREA 3

In addition to the Soundwide actions, the following actions will occur in Area 3.

Clallam County intends to:

- ■ Continue educating residents about the proper use and care of on-site sewage systems. (Implements management plan program strategy 1 and element OS-2)

ACTIONS IN AREA 4

Local governments should undertake the Soundwide actions.

ACTIONS IN AREA 5

In addition to the Soundwide actions, the following actions will occur in Area 5.

Kitsap County intends to:

- 🔑 Identify and help correct failing on-site sewage systems in Gorst and in other priority areas of the county. (Implements management plan program strategy 1)
- 🔑 Collaborate with Mason County to develop a regional solution for sewage treatment in lower Hood Canal. (Implements management plan program strategy 1)

Mason County intends to:

- 🔑 Complete sewer feasibility studies and implement sewerage plans for North Bay and lower Hood Canal. (Implements management plan program strategy 1)
- 🔑 Conduct a small-community sewage treatment study for the Finch Creek community. (Implements management plan program strategy 1)

Mason, Thurston and **Kitsap counties** intend to:

- ■ Continue to develop and implement their on-site sewage operation and maintenance programs. (Implements management plan program strategy 1 and element OS-2)

AGRICULTURE PRACTICES

Agriculture involves a wide range of commercial and noncommercial farming activities. Although urbanization has encroached on many agricultural lands, the agricultural industry is an important part of the basin's economy and culture. Efforts to control pollution from agricultural lands have been largely voluntary with an emphasis on education. Key partners in this work are the local conservation districts, Washington State University Cooperative Extension, Natural Resource Conservation Service and Conservation Commission. The Department of Ecology plays an important supporting role overseeing the state's dairy-waste permit program and providing enforcement against water quality violations. In recent years, much attention has focused on adopting more effective practices for managing dairy waste and educating noncommercial landowners. Protection and restoration of the basin's valuable shellfish beds and salmon streams are two important reasons for continuing to improve the region's agricultural practices.

PUGET SOUND MANAGEMENT PLAN PROGRAM GOAL. To reduce and ultimately eliminate harm from pollution stemming from agricultural practices on both commercial and noncommercial farms, including animal waste pathogens, pesticides, sediments and nutrients.

PUGET SOUND MANAGEMENT PLAN PROGRAM STRATEGY. The strategy for achieving this goal is to implement comprehensive programs through state and local agencies involving education, financial and technical assistance, and, as necessary, regulation and enforcement, to effectively implement farm management plans and management practices and measures.

SOUNDWIDE ACTIONS

The following actions will occur throughout the Puget Sound basin.

The Action Team recommends that **conservation districts**:	■ Continue to provide services addressing a wide range of environmental issues, including assisting landowners with the development and implementation of farm plans and other resource conservation activities to restore water quality and aquatic habitats. (Implements management plan program strategy and element AG-1)
The Action Team recommends that **conservation districts, local governments** and **Washington State University Cooperative Extension**:	■ Collaborate to provide comprehensive education and assistance to commercial and noncommercial farmers and other landowners. (Implements management plan program strategy and element AG-1)
Local health jurisdictions and the **state Department of Health** will:	⊶ Take enforcement actions in support of the agriculture program when technical assistance and the opportunity for voluntary compliance fail to produce results. (Implements management plan program strategy)
The **Department of Ecology, Conservation Commission** and **conservation districts** will:	⊶ Continue to work with other members of the Compliance Review Committee to improve documentation, communication and tracking procedures for handling complaints about dairy waste and other agricultural issues under the Agricultural Compliance Memorandum of Agreement (Chapter 90.64 RCW) and agreements reached at the "Dairy Summit." Under these agreements, Ecology will receive complaints, verify water quality problems, and refer parties to

	conservation districts for technical assistance. If parties do not cooperate with the districts and correct the problems, then the conservation districts will refer the parties back to Ecology for enforcement or permitting actions. Ecology will issue quarterly reports on referrals and follow-up actions beginning in Fiscal Year 1998. (Implements management plan program strategy and elements AG-1 and 2) (Budget codes: *DOE-02*; *CC-01*)
The **Conservation Commission** will:	■ Provide increased technical assistance and program support to conservation districts and allocate funds directly to Puget Sound conservation districts for their activities. (Implements management plan program strategy and element AG-1) (Budget code: *CC-01*)
The **Department of Ecology** will:	■ Provide continued technical assistance, permitting and enforcement to conservation districts and individual operators on water quality problems resulting from poor agriculture practices in accordance with the Agricultural Compliance Memorandum of Agreement (Chapter 90.64 RCW). (Implements management plan program strategy and element AG-2) (Budget code: *DOE-02*)

ACTIONS IN AREA 1

Conservation districts, local governments and the Washington State University Cooperative Extension should undertake the Soundwide actions.

ACTIONS IN AREA 2

In addition to the Soundwide actions, the following actions will occur in Area 2.

The **Whatcom Conservation District** intends to:	■ Work with landowners installing best management practices (BMPs), developing farm plans, doing stream restoration projects, providing education and information when requested, and publishing the *Whatcom Conservation News* newsletter. (Implements management plan program strategy and element AG-1)

ACTIONS IN AREA 3

In addition to the Soundwide actions, the following actions will occur in Area 3.

The **Jefferson County Conservation District** intends to:	■ Assist landowners with the installation of best management practices and conduct other conservation activities. (Implements management plan program strategy and element AG-1)

ACTIONS IN AREA 4

In addition to the Soundwide actions, the following actions will occur in Area 4.

The **King Conservation District** intends to:	■ Continue to work with landowners to develop and implement farm plans, improve water quality and wildlife habitat through stream and wetland enhancement, continue the small-farm education program in urban and rural communities, provide education and assistance to commercial and noncommercial landowners and publishing the *Conservation Connection* newsletter. (Implements management plan program strategy and element AG-1)
The **Snohomish Conservation District** intends to:	■ Assist landowners with the installation of best management practices and conduct other conservation activities. (Implements management plan program strategy and element AG-1)

ACTIONS IN AREA 5

In addition to the Soundwide actions, the following actions will occur in Area 5.

The **Mason, Thurston and Kitsap conservation districts** intend to:	■ Assist the agricultural community in developing and implementing farm plans, with an emphasis on small farms and noncommercial farms. (Implements management plan program strategy and element AG-1)
Kitsap County intends to:	■ Continue current level funding for activities of the Kitsap Conservation District from the Kitsap County Surface and Stormwater Management Program. (Implements management plan program strategy and element AG-1)

FOREST PRACTICES

A large portion of the land in the Puget Sound basin is dedicated to forests, particula in the upper watersheds. Some of the practices used in growing and harvesting forests can cause environmental harm. For example, sedimentation resulting from improper timber harvesting and poor road construction has contributed significantly over the years to the loss of fish habitat. Forest practices are regulated by Washington's Forest Practices Act, RCW 76.09, as administered by the Department of Natural Resources (DNR). For the past decade the Timber/Fish/Wildlife Agreement (TFW) has served as the primary forum for improved coordination among all the key entities. In addition to supporting the TFW process, the Puget Sound Management Plan calls for DNR and local governments to address forestland conversions and for Washington State University to lead technical assistance to owners of small forestlands on best management practices. Meanwhile, federal and state governments, in partnership with industry and non-profit organizations are investing millions of dollars in watershed restoration programs, which have also created many jobs for displaced timber workers.

PUGET SOUND MANAGEMENT PLAN PROGRAM GOAL. To restore and protect water quality and fish habitat from effects connected with improper forest practices on federal, state and private lands and to restore water bodies and fish habitat already degraded by improper forest practices.

PUGET SOUND MANAGEMENT PLAN PROGRAM STRATEGY. The strategy for achieving this goal is to: (1) continue using the Timber/Fish/Wildlife Agreement approach for reaching consensus on forestry management issues; (2) implement the new forest practices rules; and (3) develop and implement local programs addressing the effects of private forestland conversions and small forestry operations.

SOUNDWIDE ACTIONS

The following actions will occur throughout the Puget Sound basin.

The Action Team recommends that **conservation districts**:

- Continue to provide services addressing a wide range of environmental issues, including forestry, especially by helping small landowners with forest practices. (Implements management plan program strategy 3 and element FP-3).

ACTIONS IN AREA 4

In addition to the Soundwide actions, the following actions will occur in Area 4.

The **Snohomish Conservation District** intends to:

- Work with WSU Cooperative Extension and private foresters to ensure the public has both incentives and knowledge about properly managing private forestlands. (Implements management plan program strategy 3 and element FP-3)

ACTIONS IN AREA 5

In addition to the Soundwide actions, the following actions will occur in Area 5.

Thurston County intends to:

- Develop, review and adopt a local forest-practices ordinance for conversions of forestlands and an interagency agreement with the Department of Natural Resources. (Implements management plan program strategy 3 and element FP-2)

The Action Team recommends that **Kitsap** and **Mason counties**:

- Work with the Department of Natural Resources to clarify each party's jurisdiction over processing, approving and administering forest-practices permits and that they implement the agreed-upon permit system. (Implements management plan program strategy 3 and element FP-2)

MARINAS AND BOATERS

Without proper disposal, wastes generated by the use, repair and maintenance of boats pose human-health and environmental risks. The potential contribution of a single boat or boater to marine pollution is comparatively small when compared to other nonpoint sources. However, recreational boat ownership in Puget Sound is increasing faster than the growth rate of the general population. As a group, boaters can have noticeable effects on water quality. Moreover, when focused in a poorly flushed area such as a marina, the effects of boat waste may become even more serious. Since the first Puget Sound Management Plan, efforts to protect Puget Sound from the impacts of boating-related pollution have focussed on making it possible for boaters to dispose of their wastes properly. The primary tools have been educating stakeholders in the boating community; developing best management practices (BMPs) for marina operation and boat repair and maintenance; providing grant programs for sewage disposal facilities at marinas and other boating destination sites; and, as a last resort, developing regulatory mechanisms to ensure protection for specific areas.

PUGET SOUND MANAGEMENT PLAN PROGRAM GOAL. To reduce and ultimately eliminate harm from wastes generated by recreational boating activities, including sewage, petroleum products and other pollutants stemming from boat maintenance and repair.

PUGET SOUND MANAGEMENT PLAN PROGRAM STRATEGY. The strategy for achieving this goal is to: (1) coordinate implementation of the program by state agencies and local governments; (2) simultaneously address the needs for waste disposal facilities and processes, education for appropriate constituencies, financial and technical assistance, and regulation and enforcement of boating-related activities which affect water quality; and (3) evaluate changes in both behavior and water quality that result from applying strategies, and evaluate the need for more extreme protective measures (no-discharge and no-anchorage areas).

SOUNDWIDE ACTIONS

The following actions will occur throughout the Puget Sound basin.

The **State Parks and Recreation Commission**, the **Department of Health**, and the **Action Team support staff**, participating on the State Agency Marina/Boater Task Force will:

- Promote and coordinate the installation of waste disposal facilities at new and existing, public and private marinas, launch ramps and other boating facilities. (Implements management plan program strategies 1 and 2 and elements MB-1 and 3) (Budget codes: *P&RC-01*, DOH-12, PSAT-04)
- Develop and implement a strategy that promotes acceptance of pumpouts and identifies operational issues, maintenance procedures and system improvements for operating and maintaining marine sewage disposal facilities. (Implements management plan program strategies 1 and 2 and elements MB-1 and 3) (Budget codes: *P&RC-01*, DOH-12, PSAT-04)
- Coordinate implementation of the Marina/Boater Program. (Implements management plan program strategies 1 and element MB-1) (Budget codes: *P&RC-01*, DOH-12, PSAT-04)
- Seek greater involvement of the U.S. Coast Guard in support of boating programs. (Implements management plan program

	strategies 1 and 2 and elements MB-1 and 3) (Budget codes: *P&RC-01*, DOH-12, PSAT-04)
The **Department of Health** will:	■ Update documentation of sewage disposal options for marinas as needed. (Implements management plan program strategy 2 and element MB-3) (Budget code: DOH-12)
The **State Parks and Recreation Commission** will:	■ Install four pumpout stations at selected state parks. (Implements management plan program strategy 2 and element MB-5) (Budget code: ~~P&RC-04~~) ■ Continue promoting and providing state and federal grants for the construction and/or renovation of as many as 26 boat-sewage disposal facilities, allowing public and private marinas receiving funding from the Clean Vessel Act grant program to recover operation and maintenance costs through user fees. (Implements management plan program strategy 2 and elements MB-3, 4, 5) (Budget code: ~~P&RC-02~~) ■ If federal Clean Vessel Act funding is not reauthorized after Fiscal Year 1997, submit a budget request to fund the state grant program for the Fiscal Years 2000 and 2001. (Implements management plan program strategies 1 and 2 and elements MB-3, 5) ■ With funds from the state and federal boat-sewage grant programs encourage, support and assist local governments and boating groups in developing environmental education programs for boaters using public education materials provided by the state. (Implements management plan program strategy 2 and element MB- 4) (Budget code: *P&RC-03*) ■ Provide educational materials to schools and the general boating public. (Implements management plan program strategy 2 and element MB-4) (Budget codes: ~~P&RC-02~~, *03*) ■ Provide interpretive signs to marine state parks and marinas that install pumpouts. (Implements management plan program strategy 2 and elements MB-3, 4, 5) (Budget code: *P&RC-03*)

ACTIONS IN AREA 5

In addition to the Soundwide actions, the following actions will occur in Area 5.

The **Kitsap County Surface and Stormwater Management Program** intends to:	■ Continue to provide the existing level of funding for the Bremerton-Kitsap County Health District's Boat Waste Control Program. (Implements management plan program strategies 1, 2 and 3).

SHELLFISH PROTECTION PROGRAM

Over the past decade, much effort has gone into protecting and restoring water quality in shellfish tidelands. Several commercial shellfish growing areas have been upgraded since 1990 because coordinated local and state action led to water quality improvements. In addition, safeguards associated with the recreational harvest of shellfish have been strengthened by expanded water quality monitoring and, for the first time, formal classification of the region's most popular public shellfish sites. However, these successes have been offset by a number of downgrades in growing areas. A majority of the region's remaining shellfish areas are still threatened by urban development and by nonpoint pollution from a variety of existing sources, including failing on-site sewage systems and improperly managed waste from farm animals. Actions must focus on these threats in order to prevent more pollution and growing area downgrades.

The 1994 Management Plan estimated the cost to fully implement the shellfish protection program at approximately $11.1 million during the 1997-99 Biennium. Of the total, local government costs were estimated at $4.3 million. Most of the remaining estimated cost was for state agencies' activities—primarily the Department of Health's work monitoring shellfish growing areas, helping local governments respond to shellfish harvest downgrades, and providing grants to local governments.

The original 1997-99 work plan budget request was for $1.6 million for actions associated with the goals and strategy of this program.

The final 1997-99 work plan budget includes approximately $1.6 million dedicated to implementing this program.

PUGET SOUND MANAGEMENT PLAN PROGRAM GOAL. To protect water quality and prevent contamination of commercial and recreational shellfish beds so that shellfish are safe for human consumption; to reduce contamination of shellfish beds sufficiently to allow reopening of at least one contaminated shellfish bed each year; and to prevent human consumption of shellfish from contaminated beds until such time as the contamination is corrected.

PUGET SOUND MANAGEMENT PLAN PROGRAM STRATEGY. The strategy for achieving this goal is to: (1) adopt shellfish policies which will ensure that programs which control pollution sources protect shellfish; (2) respond to existing and potential shellfish contamination with aggressive restoration and protection programs; (3) monitor commercial and recreational shellfish areas for toxic contaminants and indicators of pathogenic organisms; and (4) increase public involvement and education in shellfish protection.

SOUNDWIDE ACTIONS

The following actions will occur throughout the Puget Sound basin.

The Action Team recommends that **local governments** and other affected **local jurisdictions**:

- Undertake measures to control pollution and manage land uses to protect and restore water quality in commercial and recreational shellfish areas. Attention should focus primarily on development patterns and densities, and nonpoint pollution from such sources as individual and community on-site sewage systems, wastes from boaters and marinas, farm animal wastes from commercial and noncommercial farms, and stormwater runoff. (Implements

local governments continued:	management plan program strategies 1 and 2 and elements SF-1 and SF-2) 🗝 Assist with developing and implementing shellfish closure-response strategies if shellfish beds are downgraded because of water quality degradation. (Counties are required to establish shellfish protection districts under Chapter 90.72 RCW in the event of shellfish downgrades.) (Implements management plan program strategy 2 and element SF-7) ■ Work with the state Department of Health to strengthen monitoring, classification, and public notification and education associated with the proper management and safe harvest of shellfish from public recreational beaches. (Implements management plan program strategy 4 and element SF-4)
Local health jurisdictions and the **state Department of Health** will:	🗝 Take enforcement actions in support of the shellfish protection program when technical assistance and the opportunity for voluntary compliance fail to produce results. (Implements management plan program strategy 2)
The **Action Team support staff** will:	■ Coordinate an assessment of the shellfish closure-response process by December 1997. (Budget code: PSAT-04)
The **Department of Ecology** will:	■ Assess shellfish protection needs through the watershed approach to water quality. Prioritize issues and agency activities and direct appropriate staff, funding (grants and loans) and other resources (e.g., the Small Towns Environment Program) toward shellfish protection. (Budget code: DOE-06) ■ Assist with the development and implementation of closure response plans as the Department of Health proposes that a downgrade occur. (Implements management plan program strategy 2 and element SF-7) (Budget code: DOE-06) ■ Review and revise the Shellfish Interagency Memorandum of Agreement, as appropriate, by June 1998. (Implements management plan program strategy 2 and element SF-7) (Budget code: DOE-06) ■ Work with the Department of Health, local agencies and others to determine the status of shellfish beds and to identify priority areas where protective or remedial actions are necessary and incorporate into watershed planning activities. (Implements element SF- 2) (Budget code: DOE-06) ■ Assess needs associated with staff training and interagency coordination, and sponsor an interagency training workshop for shellfish staff in Fiscal Year 1998. (Budget code: DOE-06) ■ Provide technical assistance on shellfish protection issues. (Implements element SF-2) (Budget code: DOE-06) ■ Take enforcement actions to protect water quality in shellfish areas when technical assistance and voluntary compliance fail to produce results. Enforcement actions involving agricultural practices will be coordinated under the Agricultural Compliance Memorandum of

Department of Ecology, continued

Agreement. (Implements management plan program strategy 2 and element SF-2) (Budget code: DOE-06)

- Participate on an interagency committee to coordinate programs and activities associated with the protection and management of shellfish resources. (Implements element SF-2) (Budget code: DOE-06)
- Work with San Juan County to help local officials obtain more information on priority embayments with limited flushing characteristics. (Budget code: DOE-04)

The **Department of Health** will:

- Establish procedures to identify and address water quality declines in shellfish growing areas prior to downgrades in classification by January 1998. Continue to distribute data and information on growing area conditions to inform state agencies, local and tribal governments, shellfish growers and other interests. (Implements management plan program strategy 2 and element SF-2) (Budget code: DOH-02)
- Continue to monitor water quality, assess pollution sources, identify corrective actions, and classify commercial and recreational shellfish growing areas. (Implements management plan program strategies 2 and 3 and element SF-2) (Budget code: DOH- 02)
- Plan, conduct and coordinate supplemental water quality monitoring, pollution source investigations, and hydrographic assessments in threatened and downgraded shellfish areas, including Eld Inlet, Totten-Little Skookum Inlets, Oakland Bay, Lower Hood Canal, Case Inlet, Carr Inlet, Portage Bay (near Bellingham) and Samish Bay to protect and restore water quality. (Implements management plan program strategies 2 and 3 and element SF-2) (Budget code: DOH-02)
- Identify point and nonpoint pollution problems in shellfish growing areas and inform those agencies with regulatory authority. Monitor the status of corrective actions. (Implements management plan program strategies 2 and 3 and element SF-2) (Budget code: DOH-02)
- Provide technical assistance on shellfish sanitation and contamination source issues. (Implements element SF-2) (Budget code: DOH-02)
- Participate on an interagency committee to coordinate programs and activities associated with the protection and management of shellfish resources. (Implements element SF-2) (Budget code: DOH-02)
- Assist in the development and implementation of watershed action plans. (Implements management plan program strategy 2 and element SF-2) (Budget code: DOH-02)
- Implement the DOH portions of the recreational shellfish plan. Assist local health jurisdictions to develop and implement recreational shellfish plans under the recreational shellfish beach regulations, Chapter 246-280 WAC. Provide funding to local health jurisdictions to conduct recreational shellfish activities.

Department of Health, continued	(Implements element SF-4) (Budget code: DOH-03 and enhancement) ■ Continue to publish and distribute an annual inventory of commercial and recreational shellfish beds in the first quarter of each calendar year. (Implements element SF-5) (Budget code: DOH-04) ■ Continue to work with local health jurisdictions, state agencies and others to inform and educate the public. (Implements management plan program strategy 4 and element SF-6) (Budget code: DOH-05) ■ Continue to collaborate with Ecology in accordance with the interagency memorandum of agreement to support the development and implementation of shellfish closure-response strategies. (Implements management plan program strategy 2 and element SF-7) (Budget code: DOH-06)
The **departments of Natural Resources** and **Fish and Wildlife**, and the **State Parks and Recreation Commission** will:	■ Work to protect and restore water quality, shellfish habitat, and shellfish-harvest opportunities on aquatic lands owned or managed by the state. (Implements element SF-2) ■ Provide technical assistance on shellfish protection issues. (Implements element SF-2) ■ Participate on an interagency committee to coordinate programs and activities associated with the protection and management of shellfish resources. (Implements element SF-2)
Washington State University and **University of Washington** field agents will:	■ Provide technical assistance on shellfish protection issues in areas 3 and 5. (Implements element SF-2) (Budget codes: WSU-01, UW-01)
The **departments of Health, Ecology, Natural Resources** and **Fish and Wildlife**, the **State Parks and Recreation Commission** and the **Action Team support staff** will:	■ Run a coordinated shellfish protection program, which includes classifying growing areas, assessing shellfish protection needs, developing closure response plans, undertaking water quality restoration and shellfish enhancement activities, and assisting in the development and implementation of watershed action plans. The Action Team support staff will convene an interagency committee to coordinate these activities. (Implements elements SF-2) (Budget codes: DOE-06; DOH-02; PSAT-04)

ACTIONS IN AREA 1

Local governments should undertake the Soundwide actions.

ACTIONS IN AREA 2

In addition to the Soundwide actions, the following actions will occur in Area 2.

The Action Team recommends that **Skagit County**:	⊶Continue assisting with implementation of the shellfish closure-response strategy for Samish Bay. (Implements management plan program strategy 2 and element SF-7)

The Action Team recommends that **Whatcom County**:	🗝 Continue assisting with implementation of the shellfish closure-response strategy for Drayton Harbor. (Implements management plan program strategy 2 and element SF-7)

ACTIONS IN AREA 3

In addition to the Soundwide actions, the following actions will occur in Area 3.

Jefferson County Conservation District intends to:	🗝 Work with commercial shellfish growers to protect shellfish habitat. (Implements management plan program strategies 2) 🗝 Provide owners of shoreline bluff property with assistance and information on vegetation management and pre-development planning to prevent the destabilization of bluffs. (Implements management plan program strategy 2)

ACTIONS IN AREA 4

In addition to the Soundwide actions, the following actions will occur in Area 4.

King County intends to:	■ Participate in efforts to restore or protect shellfish in Puget Sound. (Implements management plan program strategy 2)
The **Snohomish Conservation District** intends to:	■ Work with Snohomish County Surface Water Management to correct and prevent water quality problems within the Stillaguamish Clean Water District, giving priority assistance to landowners in the areas of Church Creek, Warm Beach, Tributary 30, Grandview, Portage Creek and Skagit Bay. (Implements management plan program strategy 2 and element SF-7)
The Action Team recommends that **Pierce County**:	🗝 Continue assisting with implementation of the shellfish closure-response strategy for Rocky Bay. (Implements management plan program strategy 2 and element SF-7)

ACTIONS IN AREA 5

In addition to the Soundwide actions, the following actions will occur in Area 5.

Kitsap County intends to:	🗝 Create a shellfish protection district and assist with implementation of the shellfish closure-response strategy for Port Gamble Bay. (Implements management plan program strategy 2 and element SF-7)
The Action Team recommends that **Mason County**:	🗝 Continue assisting with implementation of the shellfish closure-response strategy for lower Hood Canal. (Implements management plan program strategy 2 and element SF-7)
The Action Team recommends that **Thurston County**:	🗝 Continue assisting with implementation of the shellfish closure-response strategy for Nisqually Reach. (Implements management plan program strategy 2 and element SF-7)

MUNICIPAL AND INDUSTRIAL DISCHARGES PROGRAM

This program emphasizes controlling toxic discharges from municipal and industrial facilities through permits which require that wastewater be treated before discharge. The wastewater from these facilities, if completely untreated, would cause serious damage to Puget Sound, contaminating the water and sediments. Over the years, industrial facilities have installed sophisticated treatment systems and municipal plants have been built to treat sewage. During the past decade, substantial progress has been made to decrease the discharge of toxic chemicals by enhancing the levels of treatment called for in permits, providing better support and training to permit writer's, providing technical assistance to dischargers, controlling sources and eliminating toxicant discharges to urban bays, and improving pollution prevention programs.

The 1994 Management Plan estimated the cost of fully implementing the Municipal and Industrial Discharges Program at $12.5 million for the 1997-99 Biennium. Approximately $8.6 million of this estimate was for Department of Ecology activities funded by water quality permit fees. The estimated funding from the state General Fund was $3.4 million. The estimated cost to federal and local agencies was $406,000.

The original 1997-99 work plan budget request was for $3.7 million for Ecology to implement this program.

The final 1997-99 work plan budget contains approximately $3.7 million dedicated for Ecology to implement this program.

PUGET SOUND MANAGEMENT PLAN PROGRAM GOAL. To achieve comprehensive improvement in the control of toxic and other pollutants discharged into Puget Sound by industrial and municipal dischargers, thus reducing and eventually eliminating harm from such contaminants entering or accumulating in the Sound.

PUGET SOUND MANAGEMENT PLAN PROGRAM STRATEGY. The strategy for achieving this goal is to (1) require that all waste discharge permits include appropriate monitoring requirements and limitations on toxicants and other pollutants of concern; (2) develop the tools needed to make these permit improvements, including the permit writer's manual, data management, lab support, quality assurance, and technical assistance and training; (3) allocate substantially increased resources to urban-bay action teams and pretreatment; (4) devote substantially increased resources to the inspection and enforcement of waste discharge permits for industrial and municipal discharges; and (5) discover and control unpermitted discharges.

SOUNDWIDE ACTIONS

The following actions will occur throughout the Puget Sound basin.

The **Department of Ecology** will:

- Continue to administer the state and federal wastewater-discharge permit programs, bringing appropriate dischargers under permit and updating permits as appropriate based on the Ecology five-year permitting cycle. (Implements management plan program strategies 1, 2, 3, 4, and 5 and elements P-3, 5, 6, 7, 8, 9, 10, 14, 17, 19, 20, and 27) (Budget code: *DOE-02*)
- Continue and expand the ongoing five-year watershed process for issuance of NPDES (National Pollutant Discharge Elimination System) permits and establishment of TMDLs (total maximum daily loads). This consists of scheduling water-quality management activities in watersheds. Each year of the five-year cycle consists of specific and scheduled activities in each watershed. Table 1

Department of Ecology, continued

portrays the steps in the water quality program's five-year planning cycle. This table shows the activities that will be carried out in each Puget Sound watershed over six years. Activities proposed for implementation in each watershed are based on information contained in the scoping document for that watershed. (Implements management plan program strategies 1, 2 and 5 and elements P-3, 6, 7, 8, 17, 20, and 27) (Budget code: *DOE-02*)

- In Fiscal Year 1998, conduct the water-quality scoping process for the Cedar and Green and Eastern Olympic-Hood Canal water-quality management areas. Scoping documents will be prepared. (Budget code: *DOE-02*)
- In Fiscal Year 1998, implement the Fiscal Year 1997 water-quality management technical reports, including community outreach for proposed TMDLs for the Skagit and Stillaguamish water-quality management areas. (Budget code: *DOE-02*)
- In Fiscal Year 1999, conduct the second round of the five-year water-quality management scoping process for the Skagit and Stillaguamish water-quality management areas. Scoping documents will be prepared. (Budget code: *DOE-02*)
- In Fiscal Year 1999, implement the Fiscal Year 1998 water-quality management technical reports for the Island-Snohomish and South Puget Sound water-quality management areas. (Implements management plan program strategies 1 and elements P-6, 7, 8, 26, and 27) (Budget code: *DOE-02*)
- In Fiscal Year 1998, prepare a TMDL for the lower Skagit River. (Budget code: *DOE-02*)
- Continue to increase the involvement of local governments, tribal governments, and other state and federal agencies in the water-quality permitting process, including reviewing water quality standards, selecting use-based standards which relate to beneficial uses for specific water bodies, setting wastewater-discharge permit requirements, and in establishing a priority list for addressing 303(d) listed water bodies. (Implements management plan strategy 2 and elements P-1, 10, 26) (Budget code: *DOE-02*)
- Continue to work under the EPA Performance Partnership Agreement to develop a series of environmental indicators which will reflect the overall health the waters of Washington state. (Budget code: *DOE-02*)
- Continue to review activities and make changes as appropriate to identify and promote efficiencies, improve effectiveness and reduce costs. (Implements management plan program strategies 1 and 2 and elements P-4, 5, 27) (Budget code: *DOE-02*)
- Continue work with the Permit Partnership Committee on waste-discharge permit program and fee-related issues. (Implements management plan program strategies 1 and 2 and element P-4) (Budget code: *DOE-02*)
- Continue periodic updates to program reflecting changes in environmental needs, technology, legal requirements and

TABLE 1
Department of Ecology 1997 - 2002 Water Quality Planning Schedule for Puget Sound
(The Water Quality planning cycle for Washington state is a 5 year repeating schedule consisting of year 1-Scoping, year 2-Data Collection, year 3-Data Analysis, year 4-Preparation of Technical Reports, and year 5-Implementation)

Watershed Area	*FY - 1997*	*FY - 1998*	*FY - 1999*	*FY - 2000*	*FY - 2001*	*FY - 2002*
WRIA 1 - 2	Data Collection	Data Analysis	Preparation of Technical Reports	Implementation	Scoping	Data Collection
WRIA 3 - 4 - 5	Preparation of Technical Reports	Implementation 60 NPDES Permits	Scoping	Data Collection	Data Analysis	Preparation of Technical Reports
WRIA 6 - 7	Data Analysis	Preparation of Technical Reports	Implementation 49 NPDES Permits	Scoping	Data Collection	Data Analysis
WRIA 8 - 9	Planning starts in 1998	Scoping	Data Collection	Data Analysis	Preparation of Technical Reports	Implementation
WRIA 10 - 11 - 12	Data Analysis	Preparation of Technical Reports	Implementation 68 NPDES Permits	Scoping	Data Collection	Data Analysis
WRIA 15	Scoping	Data Collection	Data Analysis	Preparation of Technical Reports	Implementation	Scoping
WRIA 13 -14 - 16 - 17- 18 - 19	Planning starts in 1998	Scoping	Data Collection	Data Analysis	Preparation of Technical Reports	Implementation

Shown above are the number of permits in that basin as of 12-7-96. The actual number of permit decisions will depend on a number of things, including the specifics of each permit, current EPA guidance, and unanticipated requests to amend or issue new permits in other water quality management areas.

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management techniques contributing to the efficiency and effectiveness. (Implements management plan program strategies 1 and 2 and elements P-4, 5, 27) (Budget code: *DOE-02*)

- Continue technical outreach to reduce waste discharges by permittees and increase the number of permittees going to zero discharge. (Implements management plan program element P-27) (Budget code: *DOE-02*)
- Continue priority compliance activities, including inspections, technical assistance and, as needed, appropriate levels of enforcement when technical assistance and the opportunity for voluntary compliance have failed to produce results. (Implements management plan program strategy 4 and elements P-14, 18, 21 and 27) (Budget code: *DOE-02*)
- Review the state Water Quality Standards and evaluate needs to change or incorporate anti-degradation, use-based standards, and compliance flexibility for stormwater runoff and combined sewer overflows. (Implements management plan elements P-1 and SW-9) (Budget code: *DOE-02*)
- Evaluate use-based water quality standards considered as proposed rules in Fiscal Year 1998. Implementation will depend on the final standards regulation update and will be implemented as appropriate commencing with the 1999 water-quality management scoping year. (Implements management plan program element P-1) (Budget code: *DOE-02*)
- Maintain priority data in the Wastewater Permit Life-Cycle System (WPLCS) and maintain the ability to generate reports for internal management and external requests. (Implements management plan program strategy 2 and element P-17) (Budget code: DOE-02)
- Continue to integrate the WPLCS into the agency information system. (Implements management plan program strategy 2 and element P-17) (DOE-02)
- Provide technical assistance on sewage treatment options, NPDES permitting, and biosolids management. (Implements management plan program element P-27) (Budget code: DOE- 02)
- Continue to implement the Small Towns Environment Program as a tool to meet infrastructure needs of smaller communities. (Budget code: DOE-04)

The **Environmental Protection Agency** will:

- Continue to issue National Pollutant Discharge Elimination System (NPDES) permits for federal facilities and tribes, until this authority is delegated to the state, incorporating appropriate requirements comparable to those included in permits issued by Ecology. (Implements management plan program element P-11)

ACTIONS IN AREA 4

In addition to the Soundwide actions, the following actions will occur in Area 4.

The **City of Seattle** intends to:	■ Continue participating in a process led by King County to plan for anticipated shortfalls in sewage conveyance and treatment throughout the metropolitan area.
King County intends to:	■ Complete and adopt a wastewater management plan.

CONTAMINATED SEDIMENTS AND DREDGING

Aquatic sediments can be contaminated with a variety of toxic chemicals from municipal and industrial discharges and nonpoint sources. Certain chemicals tend to concentrate in the sediments. Worms, snails and other small aquatic animals that live in or on the sediments are exposed to these chemicals, as are the fish and birds that eat them. This harms aquatic life (fish, shellfish and birds), produces human-health risks, and creates obstacles for shoreline and port development. The Department of Ecology has identified approximately 13 million cubic yards of contaminated sediments in Puget Sound, predominately in major urban bays. Since 1987, a number of actions have addressed the *Puget Sound Water Quality Management Plan* goal of reducing and eliminating adverse effects from sediment contamination. These include: development of Sediment Management Standards (SMS) that provide criteria for chemicals of concern (Chapter 173-204 WAC); development of unconfined sites for dredged-disposal and standards for sediments with low levels of contamination; listing and ranking contaminated sediment sites in Puget Sound; and continuing a review of the sediment standards. Puget Sound is a national leader in sediment management, due mainly to the high level of cooperation and coordination among federal and state agencies over the past ten years. However, many sediment hot spots still exist.

The 1994 Management Plan estimated the cost to fully implement the Contaminated Sediments and Dredging Program at approximately $4.5 million for the 1997-99 Biennium. Eighty percent of the estimated cost was for state agencies to participate in the investigation and cleanup of contaminated sediment sites. The cost to federal agencies and local and tribal governments was estimated to be about $710,000.

The original 1997-99 work plan budget request was for $6.3 million directly linked to the goals and strategies of this program. The request included $1.9 million from state and local toxic account funds. Two million dollars were fees collected by the Department of Natural Resources for open-water, unconfined disposal of sediments. Another $1.2 million of the total request is for research and activities by the Department of Transportation not called out in the management plan.

The final 1997-99 work plan budget contains approximately $1.8 million dedicated to implementing activities associated with this program.

PUGET SOUND MANAGEMENT PLAN PROGRAM GOAL. To reduce and eventually eliminate adverse effects on biological resources and humans from sediment contamination throughout the Sound by reducing or eliminating discharges of toxic contaminants and by capping, treating or removing contaminated sediments.

PUGET SOUND MANAGEMENT PLAN PROGRAM STRATEGY. The strategy for achieving this goal is to: (1) classify sediments that cause adverse biological effects and significant human-health risks; (2) implement

Soundwide controls on sources of contaminants causing sediments to fail the sediment standards; (3) provide rules and sites for disposal of dredged material; and (4) expand the urban bay program to provide for additional source control and consideration of cleanup actions for existing areas of high sediment contamination levels. (Classification of contaminated sediments and source control are included in the Municipal and Industrial Discharges and the Stormwater and Combined Sewer Overflows programs).

SOUNDWIDE ACTIONS

The following actions will occur throughout the Puget Sound basin.

The **Washington departments of Ecology, Transportation** and **Natural Resources** and the **Action Team support staff**, in cooperation with the **Environmental Protection Agency**, the **Army Corps of Engineers**, and local and **tribal governments** will:

- Carry out the Bellingham Bay Pilot Demonstration Project (this pilot project is inclusive and springs from the Bellingham Bay Urban-Bay Action Team) to clean up contaminated sediments and restore and enhance other aquatic habitat without resorting to litigation. (Implements management plan program strategy 1, 2, 3 and 4 and elements S-1, S-4, S-7 and S-8) (Budget codes: DOE-05, ~~DNR-05~~, PSAT-04)
- Continue to coordinate sediment cleanup policies, (e.g., the development and provision of incentives for voluntary cleanup of contaminated sediment sites.) Details of the Contaminated Sediment Management Program (CSMP) are contained in the *Sediment Cleanup Strategy: An Interagency Overview*, prepared by the CSMP agencies dated August 1995. (Implements management plan program strategy 1, 2, 3 and 4 and elements S-1, S-4, S-7 and S-8) (Budget codes: DOE-05, ~~DNR-05~~, ~~DOT-07~~, PSAT-04)
- Support other pilot cleanup projects if requested in other locations, if funding is available. (Implements management plan program strategy 1, 2, 3 and 4 and elements S-1, S-4, S-7 and S-8) (Budget codes: DOE-05, ~~DNR-05~~, ~~DOT-07~~, *PSAT-03*)

The **Department of Ecology** will:

- Develop and update technical policy guidance in support of sediment cleanup, source control, and dredging activities. (Implements management plan program strategies 1, 3 and 4 and elements S-1, S-3, S-4, S-6, S-8 and S-9) (Budget code: DOE-05)
- Continue work to update and adopt in Fiscal Years 1997 and 1998 sediment quality criteria which address environmental as well as human-health concerns. New scientific information will be incorporated during annual reviews. The standards will be updated during triennial reviews. (Implements management plan program strategy 1 and elements S-1, S-7 and P-2) (Budget code: DOE-05)
- Maintain and update the inventory of locations with contaminated sediments in the SEDQUAL database and make information available to the Action Team in GIS form upon request. (Implements management plan program strategies 1 and 4 and elements S-1, S-8.1, S-8.2 and S-8.3) (Budget code: DOE-05)
- Maintain and annually publish an updated list of sites with contaminated sediments and track their status in the Site Information System. This information will be made available upon

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request. (Implements management plan program strategies 1 and 4 and elements S-1, S-8.1 and S-8.2) (Budget code: DOE-05)

- Investigate reports of contaminated sediments as they become available, and work to identify parties responsible for sediment contamination and pursue appropriate cost recovery. (Implements management plan program strategies 1 and 4 and elements S-8.3 and S-8.7) (Budget code: DOE-05)
- Place an increased emphasis on sediment cleanup actions and the evaluation, siting, and construction of a multi-user disposal site(s). Funding will be partially shifted from other sediment tasks for these increased activities. (Implements management plan program strategies 3 and 4 and elements S-1, S-6, S-7, S-8.3 and S-8.6) (Budget code: DOE-05)
- Provide technical assistance, sediment-site investigation training, and oversight of cleanup efforts to parties (private, local, federal) responsible for clean up of sites with contaminated sediments. (Implements management plan program strategy 4 and elements S-1, S-8.3, S-8.6 and P-13) (Budget code: DOE-05)
- Continue to support urban bay action teams (UBAT) (funded by the state Toxics Control Account) focused on the cleanup of contaminated sites in Bellingham Bay and Commencement Bay and carry out cleanup activities throughout Puget Sound including sites in Everett, Lake Union, Anacortes and central Puget Sound. By the end of the biennium, Ecology (UBAT) will complete source control work needed prior to EPA-directed sediment cleanup work in Commencement Bay and a comprehensive baywide action plan for Bellingham Bay will be completed. Ecology will complete source control work in Fiscal Year 1998 and sediment cleanup in Fiscal Year 1999 at the Cascade Pole site in Budd Inlet. (Implements management plan program strategies 2 and 4 and elements S-1, S-8.4 and P-13) (Budget code: DOE-05)
- Provide laboratory support for source control investigations and cleanup of contaminated sediment sites and UBAT activities in Puget Sound. (Implements management plan program strategy 4 and elements S-1, S-8.4 and P-13) (Budget code: DOE-05)
- Conduct fieldwork and studies as requested to support sediment and source control investigations and cleanup for contaminated sediment sites and UBAT activities in Puget Sound. These include the continued use of sediment traps in Commencement Bay storm drain lines to monitor the success of source control after sediment cleanup is done. (Implements management plan program strategy 4 and elements S-1, S-8.4, and P-13) (Budget code: DOE-05)

The **Army Corps of Engineers**, the **Environmental Protection Agency**, the **departments of Ecology** and **Natural Resources**, and the **Action Team support staff** will:

- Continue to manage open-water disposal of dredged material, including making permit decisions, and managing and monitoring disposal sites through the Puget Sound Dredged Disposal Analysis program. (Implements management plan program strategy 3 and elements S-1, S-3, S-4 and S-7) (Budget codes: DOE-05, ~~DNR-03~~, PSAT-04)

With the **Army Corps of Engineers** as lead, the **Corps,** the **Environmental Protection Agency,** the **U.S. Fish and Wildlife Service, departments of Ecology** and **Natural Resources** and the **Action Team support staff** will:

- Continue the study effort to develop a multi-user disposal site for contaminated sediments. (Implements management plan program strategy 3 and 4 and elements S-1, S-6 and S-7) (Budget codes: DOE-05, DNR-04, PSAT-04)

STORMWATER AND COMBINED SEWER OVERFLOWS PROGRAM

Stormwater is a serious threat to Puget Sound. The sediments and contaminants it carries pollute and degrade rivers, streams and Puget Sound. High flows during storms can flood or wash away important habitat. In addition, combined sewers, which carry sewage and stormwater to a treatment plant, often overflow during heavy rainfall, releasing raw sewage and stormwater into our surface waters and Puget Sound. During the past decade, local governments, businesses and state agencies have expended resources to manage stormwater runoff and reduce combined sewer overflows (CSOs) in the Puget Sound basin. As a result, many cities and counties now have stormwater programs in place and the volume of untreated sewage and stormwater from CSOs has decreased. Area businesses implement a range of best management practices (BMPs) to minimize and treat runoff from their properties. A program to manage and monitor highway runoff is ongoing. Technical guidance and model ordinances exist to help local governments develop their programs. But because stormwater problems are so pervasive and because the basin has come under intense development pressures, much remains to be done. Many cities and counties still need to complete their basic stormwater programs. Rapidly urbanizing areas need to develop comprehensive stormwater programs. A number of cities continue work on minimizing CSO volumes.

The 1994 Management Plan estimated the cost to fully implement the Stormwater and Combined Sewer Overflows Program at $130.8 million for the 1997-99 Biennium. The total included costs of $86 million for local governments, with $61 million of that figure coming from local sources. Costs to the Washington Department of Transportation were estimated at $41.4 million. The estimated cost of federal and tribal activities was $88,000.

The original 1997-99 work plan budget request was for $60.6 million for actions associated with the goals and strategies of this program. The funding request for the Department of Transportation's activities was $59.2 million; the remainder of the requested funding was for the Department of Ecology.

The final 1997-99 work plan budget contained approximately $1.4 million dedicated to implementing this program.

PUGET SOUND MANAGEMENT PLAN PROGRAM GOAL. To protect shellfish beds, fish habitat and other resources; to prevent the contamination of sediments from urban runoff and combined sewer overflows; and to achieve standards for water and sediment quality by reducing and eventually eliminating harm from pollutant discharges from stormwater and CSOs throughout Puget Sound.

PUGET SOUND MANAGEMENT PLAN PROGRAM STRATEGY. The **pollution control strategy** for achieving the program goal is to implement the most appropriate best management practices first, assess their effectiveness, and as necessary, require further water quality controls. The **implementation strategy** for achieving this goal is to: (1) require that all cities and counties meet minimum requirements for a basic stormwater program; (2) develop stormwater programs in urbanized areas of Puget Sound in a phased program starting with the largest cities; (3)

develop National Pollutant Discharge Elimination System (NPDES) permits for municipal stormwater that incorporate the management plan's stormwater requirements and federal requirements, and phase in additional NPDES permits for municipal stormwater for smaller jurisdictions as further U.S. Environmental Protection Agency (EPA) regulations are promulgated; (4) schedule the development of additional Puget Sound stormwater programs on a priority basis; (5) provide technical assistance to both local governments and businesses; and (6) require all cities with CSOs in the Puget Sound basin to develop and implement plans which provide the greatest reasonable reduction of CSO events.

SOUNDWIDE ACTIONS

The following actions will occur throughout the Puget Sound basin.

The Action Team recommends that all **cities and counties**:

- 🗝 Complete all elements of their basic stormwater programs by June 30, 1999. (Implements management plan program strategy 1 and element SW-1)

  A basic stormwater program should include the following elements:

  a) Ordinances that address off-site impacts; the use of best management practices (BMPs); effective treatment of the storm size and frequency specified in the manual for new development; infiltration, with appropriate safeguards, as a first consideration; protection of aquatic resources; erosion and sediment control; and enforcement.

  b) An operation and maintenance program.

  c) An approved stormwater management manual containing BMPs.

  d) An education program.

  e) Incorporation of stormwater controls in comprehensive land-use plans and intergovernmental coordination within shared watersheds.

- 🗝 Develop comprehensive stormwater programs, as appropriate. Comprehensive stormwater programs are recommended for urbanized cities and counties and should include all the elements of a basic program, plus identification and ranking of significant pollutant sources, investigation and correction of problem storm drains, a water quality response program, stable funding, regular inspections, and enforcement. Local governments that currently have stormwater National Pollutant Discharge Elimination System (NPDES) permits should continue to implement the requirements of those permits. (Implements management plan program strategies 2 and 3 and element SW-2)

The **Department of Ecology** will:

- 🗝 Complete the update of the stormwater technical manual and work with local governments to have them adopt Ecology's stormwater manual or an equivalent manual. (Implements management plan program strategy 5 and element SW-3) (Budget code: DOE-08)
- ■ Work with municipalities that have NPDES-permits for stormwater and the state Department of Transportation (WSDOT) to develop stormwater program requirements for the next permit cycle.

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(Implements management plan program strategy 3 and elements SW-2 and 5) (Budget code: DOE-08)

- Provide technical assistance to non-NPDES local governments that are implementing basic and comprehensive stormwater programs. (Implements management plan program strategies 5 and element SW-3) (Budget code: DOE-08)
- Develop stormwater educational and implementation guidance materials suitable to the requests of local government and the needs of the stormwater program. (Implements management plan program strategy 5 and element SW-4) (Budget code: DOE-08)
- Continue to use the Model Toxics Control Act and Comprehensive Environmental Recovery Compensation Liabilities Act to address combined sewer overflows and their resulting impacts on water quality by focusing on source control to minimize impacts on aquatic life and to prevent costly sediment cleanups. (Implements management plan program strategy 6 and element SW-9) (Budget code: DOE-08)
- Take formal and informal enforcement actions, using available resources, in support of the work plan when technical assistance and the opportunity for voluntary compliance fail to produce results. (Implements management plan program element SW-1) (Budget code: DOE-08)

The **departments of Ecology** and **Transportation** will:

- Assess the need for revisions to the Highway Stormwater Runoff Rule and make necessary changes. (Implements management plan program element SW-5) (Budget codes: DOE-08, ~~WSDOT-02~~))

The **Department of Transportation** will:

- Provide grant funds to local communities for retrofitting priority stormwater outfalls. WSDOT will work to secure funding to continue the grant program during the 1997 legislative session. If funding is secured, a list of funded projects will be developed. (Budget code: ~~DOT-01~~)
- Continue to develop design-and-maintenance procedures that improve the long-term pollutant removal efficiency of WSDOT's best management practices for stormwater. A final report will be developed and outreach efforts will be undertaken to implement recommendations identified in the study. (Implements management plan program element SW-5 (Budget code: ~~DOT-03~~)
- Continue to provide instruction in erosion and sediment control practices to contractors and construction staff statewide. Erosion control certification requirements for all WSDOT contractors will be implemented, and *Standard Specifications for Road, Bridge, and Municipal Construction* will be changed to reflect the new certification requirements. (Implements management plan program element SW-5) (Budget code: ~~DOT-16~~)
- Continue the stormwater BMP monitoring program to support NPDES permit requirements. WSDOT's Stormwater management plan will be implemented within the NPDES-permit water-quality management areas. (Implements management plan program element SW-5) (Budget code: ~~DOT-05~~)

Department of Transportation continued:

- Continue to perform maintenance on stormwater BMPs and highway drainage pathways, and to implement roadside vegetation management policies. (Implements management plan program element SW-5) (Budget code: ~~DOT-15~~)
- Continue to provide stormwater treatment for all new impervious surfaces. All transportation projects adding more than 5,000 square feet of new impervious surface will provide both water quality and water quantity treatment. Enhanced funding is requested to retrofit priority stormwater outfalls not associated with a current construction project. If funding is secured, the highest priority outfalls will be addressed. (Implements management plan program element SW-5) (Budget code: ~~DOT-11~~)

The **Action Team support staff** will:

- Coordinate an interagency discussion of options for regional management of vactor waste. (Implements portions of management plan program element SW-3) (Budget code: *PSAT-03*)

ACTIONS IN AREA 1

Cities and counties should complete their basic stormwater programs as described in Soundwide actions. In addition to this Soundwide action, the following actions will occur in Area 1.

Island County intends to:

- Work toward solving flooding and stormwater problems by developing a flood control plan, a drainage inventory, a manual and workshops on maintaining water quality BMPs and constructing small projects, and natural resource reference documents for county staff. (Implements portions of management plan program strategy 1 and element SW-1)

ACTIONS IN AREA 2

Cities and counties should complete their basic stormwater programs as described in Soundwide actions. In addition to this Soundwide action, the following actions will occur in Area 2.

The Action Team recommends that the **City of Bellingham:**

- Generate a strategy for developing a comprehensive stormwater program by December 1997 and develop a comprehensive program by June 1999. (Implements management plan program strategy 2 and element SW-2)

The Action Team recommends that **Whatcom County:**

- Generate a strategy for developing a comprehensive stormwater program by June 1998 and develop a comprehensive program by December 1999. (Implements management plan program strategy 2 and element SW-2)

ACTIONS IN AREA 3

Cities and counties should complete their basic stormwater programs as described in Soundwide actions.

ACTIONS IN AREA 4

Cities and counties should complete their basic stormwater programs as described in Soundwide actions. In addition to this Soundwide action, the following actions will occur in Area 4.

The **City of Bellevue** intends to:	■ Continue operating a stormwater utility in order to provide flood control, protect water quality, and preserve and enhance stream habitat. (Implements portions of management plan program strategy 2 and element SW-2)
The **City of Renton** intends to:	■ Continue implementing its stormwater program and maintaining its stormwater utility. (Implements portions of management plan program strategy 2 and element SW-2)
The **City of Seattle** intends to:	■ Implement its stormwater management program in compliance with its NPDES permit for municipal stormwater discharges. (Implements management plan program strategy 3 and element SW-2)
King County intends to:	■ Support water supply initiatives which support clean water objectives and incorporate water quality considerations in its flood control plans and capital projects. ■ Implement flood control plans and capital projects which also protect water quality.
Pierce County intends to:	■ Implement its NPDES permit for stormwater, as well as its program for mitigating stormwater-related flooding. (Implements management plan program strategy 3 and element SW-2)
Snohomish County intends to:	■ Maintain its stormwater programs including maintenance of stormwater conveyances, stormwater ponds and other surface-water facilities. (Implements portions of management plan program strategy 1 and element SW-1) ■ Continue implementing its vactor-waste disposal program. (Implements management plan program element SW-3)
The Action Team recommends that **King, Pierce** and **Snohomish counties**, and the **cities of Seattle** and **Tacoma**:	■ Continue to implement the requirements of their stormwater NPDES permits. (Implements management plan program strategy 3 and element SW-2)
The Action Team recommends that **Auburn, Bellevue, Bothell, Des Moines, Everett, Federal Way, Kent, Kirkland** and **Redmond**:	🗝 Generate strategies for developing comprehensive stormwater programs by June 1997 and develop comprehensive programs by December 1998. (Implements management plan program strategy 2 and element SW-2)
The Action Team recommends that **Bonney Lake, Burien, Edmonds, Lynnwood, Mountlake Terrace, Mukilteo, Puyallup, Renton, Seatac** and **Tukwila**:	🗝 Generate strategies for developing comprehensive stormwater programs by December 1997 and develop comprehensive programs by June 1999. (Implements management plan program strategy 2 and element SW-2)

The Action Team recommends that **Brier, Fife, Issaquah, Lake Forest Park, Marysville, Mercer Island, Mill Creek, Milton, Normandy Park, Pacific, Sumner** and **Woodinville**:	🗝 Generate strategies for developing comprehensive stormwater programs by June 1998 and develop comprehensive programs by December 1999. (Implements management plan program strategy 2 and element SW-2)
The Action Team recommends that **Algona, Beaux Arts, Clyde Hill, Du Pont, Edgewood, Fircrest, Gig Harbor, Hunts Point, Lakewood, Medina, Newcastle, Ruston, Shoreline, Steilacoom, University Place, Woodway** and **Yarrow Point**:	🗝 Generate strategies for developing comprehensive stormwater programs by December 1998 and develop comprehensive programs by June 2000. (Implements management plan program strategy 2 and element SW-2)

ACTIONS IN AREA 5

Cities and counties should complete their basic stormwater programs as described in Soundwide actions. In addition to this Soundwide action, the following actions will occur in Area 5.

The **City of Bremerton** intends to:	🗝 Continue its current stormwater program and develop a comprehensive stormwater program. (Implements management plan program strategy 2 and element SW-2) ■ Continue its combined sewer overflow compliance project, including related water quality monitoring. (Implements management plan program strategy 6 and element SW-9)
Kitsap County intends to:	■ Continue its Surface and Stormwater Management Program and leverage local funding by applying for available grant funds; accelerate stormwater maintenance practices including the construction and operation of a street waste handling facility to serve unincorporated Kitsap County; and carry out regional stormwater infrastructure planning and land acquisition. (Implements management plan program strategy 2 and element SW-2)
Thurston County intends to:	■ Establish a stormwater maintenance program. (Implements portions of management plan program strategy 1 and element SW-1)
The Action Team recommends that the **cities of Bremerton, Lacey, Olympia, Port Orchard** and **Tumwater**, and **Kitsap** and **Thurston counties**:	🗝 Generate strategies for developing comprehensive stormwater programs by December 1997 and develop comprehensive programs by June 1999. (Implements management plan program strategy 2 and element SW-2)

LABORATORY SUPPORT

Water quality information is an essential management tool for protecting the human and biological health of Puget Sound. Managers use data to evaluate changes in the environment, assess pollution threats, monitor for compliance, carry out enforcement actions and carry out human-health protection measures such as shellfish harvest restrictions and fishing advisories. Over the past decade, the state has implemented a laboratory accreditation program that certifies laboratories which analyze environmental samples. In addition, the *Puget Sound Estuary Program Protocols and Guidelines* were developed to standardize sample collection and analysis within the Sound so that data from different studies can be compared and long-term environmental trends determined. Standardized quality assurance and quality control (QA/QC) procedures have also been developed for many types of analyses. Although agencies are increasingly using the protocols and guidelines, data are still collected that are not comparable. There is a continuing need to update protocols and to promote their use. There is also a need to encourage uniform application of quality assurance and quality control procedures.

The 1994 Management Plan estimated the cost to fully implement the Laboratory Support Program at $1.9 million for the 1997-99 Biennium. The estimate included $1.6 million of state General Fund money for state agencies to participate in this program, including $1.5 million for the Department of Ecology to conduct lab accreditation and capacity studies. The cost to federal agencies and local and tribal governments was estimated at $283,000.

The original 1997-99 work plan budget request was for $406,000 for the Department of Ecology to implement this program.

The final 1997-99 work plan budget contains approximately $406,000 for Ecology to implement this program.

PUGET SOUND MANAGEMENT PLAN PROGRAM GOAL. To assure the quality and timeliness of physical, chemical and biological laboratory tests necessary to support the protection and enhancement of the waters of Puget Sound.

PUGET SOUND MANAGEMENT PLAN PROGRAM STRATEGY. The strategy for achieving this goal is to: (1) establish a laboratory certification program administered by Ecology that will review the capability of environmental laboratories to generate data of known quality; (2) assure that adequate laboratory support exists for agency and other sampling programs; (3) develop and update protocols and guidelines to standardize data collection, analysis and transfer within Puget Sound, and to encourage their use uniformly for all data collected in Puget Sound; and (4) develop and encourage the use of uniform quality assurance guidelines for data collected under all Puget Sound programs.

SOUNDWIDE ACTIONS

The following activities will occur throughout the Puget Sound basin.

The **Department of Ecology** will:

- Continue to provide laboratory accreditation services, including laboratory audits, in support of both new accreditation applications and accreditation renewals for private, tribal, state and federal laboratories.
- Continue to provide technical assistance on the application of quality assurance and quality control principles to those responsible for collecting environmental data in Puget Sound.
- Continue to review agency Quality Assurance Project Plans, and offer guidance and assistance in defining, evaluating and meeting

	appropriate data quality objectives and goals to agency staff and others who request assistance. (Implements program strategy 1, 2 and 4 and elements L-1 and 4) (Budget code: DOE-01)
The **Action Team support staff** will:	■ Publish, distribute and coordinate updates of the *Puget Sound Estuary Program Protocols and Guidelines*. (Implements program strategy 3 and element L-3) (Budget code: *PSAT-02*)

INTRODUCTION TO THE BUDGET TABLE

Table 2 presents the budget appropriations for state agencies to implement the 1997-99 Puget Sound Water Quality Work Plan. The table is arranged according to work plan actions sorted by agency. The first column (shaded) shows the full amount of funding requested by state agencies to implement the action. The other three columns show the money dedicated by the legislature, through budget provisos, for implementing the work plan: funds continued from 1995-97, enhancements for 1997-99 and the total amount of proviso funding for each of the agency actions. Enhancements also include brief descriptions of the new actions to be undertaken.

Agencies receive appropriations from different funds. The funding source codes used in Table 2 and their definitions are listed at the end of the budget table.

FUND SOURCE CODES

GFS	General Fund - State
GFF	General Fund - Federal
ALEA	Aquatic Lands Enhancement Account
CAP	Capital Account
FHWA	Federal Highway Administration
LTCA	Local Toxic Control Account
MVF	Motor Vehicle Fund
OSAA	Oil Spill Administration Account
RMCA	Resource Management Cost Account
STCA	State Toxic Control Account
WQA	Water Quality Account
WQPF	Water Quality Permit Fees

Table 2. Budget for the 1997-99 Puget Sound Water Quality Work Plan

(Budget figures will be revised to reflect adjustments in employee compensation.)

Code	Action	Original Work Plan Request	Legislative Budget Provisos			Fund Source (see codes below)
			Continued From 1995-97	Enhancement for 1997-99	Total 1997-99	
DEPARTMENT OF AGRICULTURE						
DOA-01	Watershed Technical Assistance	$71,000	$71,000		$71,000	GF-S
	Total Department of Agriculture	$71,000	$71,000		$71,000	
CONSERVATION COMMISSION						
CC-01	Technical Assistance	$587,932	$362,000		$362,000	GF-S
		$130,000	$130,000		$130,000	WQA
	Enhancement: Provide funds to Puget Sound conservation districts for water quality projects	$830,000		$830,000	$830,000	WQA(cap.)
	Total Conservation Commission	$1,547,932	$492,000	$830,000	$1,322,000	
DEPARTMENT OF ECOLOGY						
DOE-01	Laboratory certification and quality assurance/quality control	$406,000	$406,000		$406,000	GF-S
DOE-02	Waste water discharge permits, compliance	$79,000	$70,000		$70,000	GF-S
	activities and data management	$3,591,000	$3,591,000		$3,591,000	WQPF
DOE-03	Ambient monitoring and additional monitoring	$2,725,000	$1,975,000		$1,975,000	GF-S
		$244,000	$244,000		$244,000	GF-F
	Enhancement: Expand water quality monitoring activities to increase coverage of the Puget Sound basin and to better support watershed and local government water quality monitoring.			$375,000	$375,000	GF-S
DOE-04	Technical assistance for watershed action plans	$771,000	$771,000		$771,000	GF-S
DOE-05	Sediments: disposal standards, technical	$892,000	$803,000		$803,000	GF-S
	assistance, cleanup and UBATs (1)	$819,000	$819,000		$819,000	STCA
		$1,004,135				LTCA
		$180,000	$9,000		$9,000	GF-F
DOE-06	Shellfish restoration, protection and closure response	$100,000	$100,000		$100,000	GF-S
DOE-07	Oil spill policy implementation and control programs	$2,027,000	$2,017,000		$2,017,000	OSAA
DOE-08	Stormwater management, technical manuals and assistance on stormwater controls	$1,373,000	$1,373,000		$1,373,000	GF-S
DOE-09	Local government wetland protection and	$548,821	$396,000		$396,000	GF-S
	wetland restoration programs	$141,000	$141,000		$141,000	GF-F
	Enhancement: Watershed-based wetland restoration initiative for Puget Sound			$153,000	$153,000	GF-S
DOE-10	Georgia Basin Task Force					
DOE-11	Enhancement: Grants to local governments for on-site sewage system projects and programs.	$1,000,000		$1,000,000	$1,000,000	WQA (cap.)
	Subtotal	$6,894,821	$5,894,000	$528,000	$6,422,000	GF-S
	Subtotal	$565,000	$394,000		$394,000	GF-F
	Subtotal	$2,027,000	$2,017,000		$2,017,000	OSAA
	Subtotal	$1,004,135				LTCA
	Subtotal	$819,000	$819,000		$819,000	STCA
	Subtotal	$1,000,000		$1,000,000	$1,000,000	WQA (cap.)
	Subtotal	$3,591,000	$3,591,000		$3,591,000	WQPF
	Total Department of Ecology	$15,900,956	$12,715,000	$1,528,000	$14,243,000	

Ecology footnote: 1). The 1995-97 GF-S appropriation was $892,000. This was reduced to $803,000 for 1997-99.

Table 2. Budget for the 1997-99 Puget Sound Water Quality Management Plan

(Budget figures will be revised to reflect adjustments in employee compensation.)

Code	Action	Original Work Plan Request	Legislative Budget Provisos			Fund Source (see codes below)
			Continued From 1995-97	Enhancement for 1997-99	Total 1997-99	
DEPARTMENT OF FISH AND WILDLIFE						
DFW-01	Liaison, reporting, and coordination with Action Team agencies and staff	$86,600				GF-S
DFW-02, 05	Habitat database and inventory, track and analyze HPA mitigation impacts	$429,150				GF-S
DFW-03	Habitat education	$176,500				GF-S
DFW-04	Provide public information listings of Hydraulics Project Approvals	$83,700				GF-S
DFW-06	Bulkheading environmental impact statement	$250,000				GF-S
DFW-07	Marine protected areas	$599,000				GF-S
DFW-08	Puget Sound-Georgia Basin Task Force	$87,000				GF-S
DFW-09	Participate on PSAMP steering, management, and other committees	$19,900	$17,000		$17,000	GF-S
DFW-10	Marine bird and mammal monitoring	$847,000	$394,000		$394,000	GF-S
DFW-11	Continue monitoring chemical contaminants in fish tissues	$1,740,000	$865,000		$865,000	GF-S
DFW-12	Support on fish and wildlife water quality	$275,200	$231,000		$231,000	GF-S
DFW-13	Support for estuarine development	$185,300				GF-S
DFW-14	Wetland preservation	$49,300	$10,000		$10,000	GF-S
DFW-15	Inventory and track Puget sound wetlands	$65,500	$15,000		$15,000	GF-S
DFW -12-15	Enhancement: Add technical assistance for local watershed planning to protect fish/wildlife; expand non-regulatory wetlands management assistance; ensure that wetlands management protects fish/wildlife; increase agency liaison for major marine projects	$706,000		$830,000	$830,000	GF-S
DFW-16	Protect wetlands on state-owned lands	$176,500				GF-S
DFW-17	Wetlands education	$176,500				GF-S
	Total Department of Fish and Wildlife	$5,953,150	$1,532,000	$830,000	$2,362,000	
DEPARTMENT OF NATURAL RESOURCES						
DNR-01	Conduct nearshore habitat monitoring	$1,085,000	$807,000		$807,000	ALEA
DNR-02	Management of wetlands	$36,000	$36,000		$36,000	GF-S
DNR-03	PSDDA Program	$711,000				RMCA
DNR-04	MUDS Program	$150,000	$150,000		$150,000	ALEA
DNR-05	Confined disposal standards for sediments, investigation and cleanup of contaminated sediments, and Urban Bay Action Teams	$1,329,335 $13,000				RMCA ALEA
DNR-06	Participation in WA/BC Environmental Cooperation Initiative	$7,500				RMCA
	Subtotal	$1,248,000	$957,000		$957,000	ALEA
	Subtotal	$2,047,835				RMCA
	Subtotal	$36,000	$36,000		$36,000	GF-S
	Total Department of Natural Resources	$3,331,835	$993,000		$993,000	

Table 2. Budget for the 1997-99 Puget Sound Water Quality Management Plan

(Budget figures will be revised to reflect adjustments in employee compensation.)

Code	Action	Original Work Plan Request	Legislative Budget Provisos			Fund Source (see codes below)
			Continued From 1995-97	Enhancement for 1997-99	Total 1997-99	
DEPARTMENT OF HEALTH						
DOH-01	Monitoring, data management and reporting	$504,379	$384,379		$384,379	GF-S
	Enhancement: Develop an integrated shellfish data system using GIS technology to support a shellfish downgrade early warning system.			$120,000	$120,000	GF-S
DOH-02	Protection and restoration of recreational and commercial shellfish beds	$582,720	$582,720		$582,720	GF-S
DOH-03	Recreational shellfish program	$650,710	$490,710		$490,710	GF-S
	Enhancement: DOH to contract with local health jurisdictions for recreational SF activities including water qualitiy sampling, recreational beach classifications and public notification and education.			$160,000	$160,000	GF-S
DOH-04	Annual inventory and information management	$122,680	$122,680		$122,680	GF-S
DOH-05	Public involvement and education	$61,340	$61,680		$61,680	GF-S
DOH-06	Shellfish closure response	$122,680	$122,680		$122,680	GF-S
DOH-07	Technical assistance for watershed plans	$90,126	$90,126		$90,126	GF-S
DOH-08	On-site sewage regulations and programs	$310,939	$160,939		$160,939	GF-S
	Enhancement: Department of Health to support outreach and technical assistance to local health jurisdictions associated with local on-site sewage issues.			$150,000	$150,000	GF-S
DOH-09	Certification of on-site professionals	$51,500	$51,500		$51,500	GF-S
DOH-10	Large on-site sewage systems and septage	$77,251	$77,251		$77,251	GF-S
DOH-11	Alternative and experimental on-site sewage systems	$679,815	$379,815		$379,815	GF-S
	Enhancement: DOH to issue and administer contracts to research and demonstrate alternative and experimental on-site sewage systems.			$300,000	$300,000	GF-S
DOH-12	Marina/Boater Task Force and waste disposal at marinas	$12,875	$12,875		$12,875	GF-S
	Total Department of Health	$3,267,015	$2,537,355	$730,000	$3,267,355	GF-S
STATE PARKS AND RECREATION COMMISSION						
P&RC-01	State agency marina and boating task force participation	$70,000	$70,000		$70,000	ALEA
		$92,600				GF-F
P&RC-02	Sewage disposal facility grant programs	$1,540,000				GF-F
P&RC-03	Boater education	$119,900	$119,000		$119,000	ALEA
		$158,700				GF-F
P&RC-04	Sewage disposal facilities in state parks	$60,000				GF-F
		$15,000				CAP
P&RC-05	Technical assistance for watershed plans	$9,900				ALEA
		$13,300				GF-F
	Subtotal	$199,800	$189,000		$189,000	ALEA
	Subtotal	$1,864,600				GF-F
	Subtotal	$15,000				CAP
	Total State Parks and Recreation Commission	$2,078,500	$189,000		$189,000	

Table 2. Budget for the 1997-99 Puget Sound Water Quality Management Plan

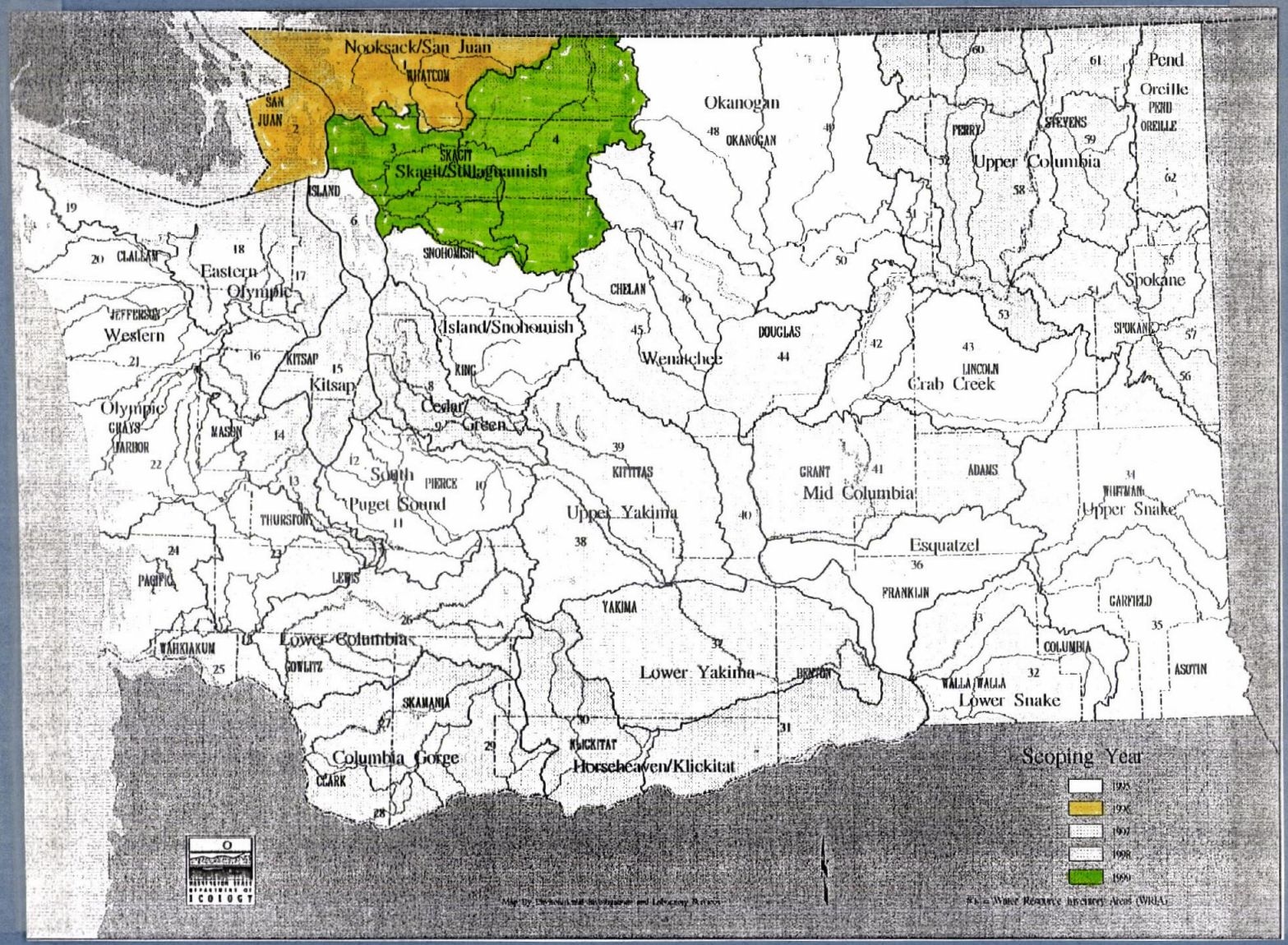
(Budget figures will be revised to reflect adjustments in employee compensation.)

Code	Action	Original Work Plan Request	Legislative Budget Provisos			Fund Source (see codes below)
			Continued From 1995-97	Enhancement for 1997-99	Total 1997-99	
DEPARTMENT OF COMMUNITY, TRADE AND ECONOMIC DEVELOPMENT						
DCTED-01	Technical assistance	$120,000	$120,000		$120,000	GF-S
	Total Dept. of Community, Trade and Econ.	$120,000	$120,000		$120,000	
DEPARTMENT OF TRANSPORTATION						
DOT-01	ESSHB 2031 Highway Stormwater Implementation	$2,200,000				MVF
DOT-02	Revision of the Highway Runoff Rule					MVF
DOT-03	Stormwater technology transfer	$275,000				MVF
DOT-04	Puget Sound/Georgia Basin Work Group					MVF
DOT-05	Stormwater monitoring & NPDES compliance	$2,412,000				MVF
DOT-06	Ferry passenger environmental education					MVF
DOT-07	Cooperative Sediment Management Program	$55,000				MVF
DOT-08	Wetlands mitigation, maintenance & management	$8,893,505				MVF
DOT-09	Revolving loan fund for mitigation	$10,000,000				MVF
DOT-10	Snohomish basin watershed pilot project.	$335,000				MVF
DOT-11	Stormwater treatment (new & retrofits)	$47,571,000				MVF
DOT-12	Fix priority fish passage barriers.	$3,700,000				MVF
DOT-13	Environmental research	$590,000				MVF/FHWA
DOT-14	Ferry Service environmental mitigation	$1,377,719				MVF
DOT-15	Roadside maintenance of water quality BMPs	$6,590,542				MVF
DOT-16	Environmental training	$250,000				MVF
DOT-17	Environmental review & project scoping	$2,154,000				MVF
DOT-18	Development of GIS program	$55,000				MVF
	Subtotal	$85,868,766				MVF
	Subtotal	$590,000				MVF/FHWA
	Total Department of Transportation	$86,458,766				
OFFICE OF MARINE SAFETY (Merged with Ecology July 1, 1997; see DOE-7)						
OMS-01	Vessel spill prevention	$3,812,000				OSAA
OMS-02	Vessel spill preparedness					STCA
OMS-03	Intertanko lawsuit	$240,000				OSAA
	Total Office of Marine Safety	$4,052,000				
UNIVERSITY OF WASHINGTON						
UW-01	Water quality agents	$259,571	$260,000		$260,000	GF-S
UW-02	Oil spill prevention education	$170,000	$170,000		$170,000	OSAA
	Total University of Washington	$429,571	$430,000		$430,000	
WASHINGTON STATE UNIVERSITY						
WSU-01	Water quality agents	$314,000	$314,000		$314,000	GF-S
	Total Washington State University	$314,000	$314,000		$314,000	

Table 2. Budget for the 1997-99 Puget Sound Water Quality Management Plan

(Budget figures will be revised to reflect adjustments in employee compensation.)

Code	Action	Original Work Plan Request	Legislative Budget Provisos			Fund Source (see codes below)
			Continued From 1995-97	Enhancement for 1997-99	Total 1997-99	
PUGET SOUND WATER QUALITY ACTION TEAM						
PSAT-01	Work plan preparation, oversight,	$920,104	$764,000		$764,000	GF-S
	implementation and reporting	$154,000	$140,000		$140,000	GF-F
	Enhancement: Lead discussion of funding for Puget Sound protection. Provide increased information on water quality and related issues. Gather information on funding needs from local governments.			$156,000	$156,000	GF-S
PSAT-02	Puget Sound ambient monitoring and research programs	$494,479	$360,000		$360,000	GF-S
		$59,000	$48,000		$48,000	GF-F
PSAT-03	Regional technical assistance and public information	$1,652,154	$1,091,000		$1,091,000	GF-S
	Enhancement: Organize, coordinate and provide interagency technical assistance to local governments and provide training to local officials and staff, businesses and private groups on water quality issues.			$323,000	$323,000	GF-S
PSAT-04	Participate in technical programs	$341,628	$340,000		$340,000	GF-S
PSAT-05	Public involvement and education (PIE) projects	$109,197	$104,000		$104,000	GF-S
	(1)	$879,000	$700,000		$700,000	WQA
PSAT-06	Washington/British Columbia Environmental Cooperation	$309,380				GF-S
	Subtotal	$3,826,942	$2,659,000	$479,000	$3,138,000	GF-S
	Subtotal	$213,000	$188,000		$188,000	GF-F
	Subtotal	$879,000	$700,000		$700,000	WQA
	Total Puget Sound Water Quality Action Team	$4,918,942	$3,547,000	$479,000	$4,026,000	
PSAT footnote:	1). The 1995-97 GF-S appropriation was $879,000. This amount was reduced to $700,000 for 1997-99.					
WORK PLAN BUDGET BY FUND, WITH FUND SOURCE CODES						
	General Fund - State	$21,330,431	$13,785,355	$2,567,000	$16,352,355	GF-S
	General Fund - Federal	$2,642,600	$582,000		$582,000	GF-F
	Aquatic Lands Enhancement Account	$1,447,800	$1,146,000		$1,146,000	ALEA
	Resource Management Cost Account	$2,047,835				RMCA
	Water Quality Permit Fees	$3,591,000	$3,591,000		$3,591,000	WQPF
	Motor Vehicle Fund	$85,868,766				MVF
	Motor Vehicle Fund/Federal Highway Administration	$590,000				MVF/FHWA
	State Toxic Control Account	$819,000	$819,000		$819,000	STCA
	Local Toxic Control Account	$1,004,135				LTCA
	Oil Spill Administration Account	$6,249,000	$2,187,000		$2,187,000	OSAA
	Capital Account	$15,000				CAP
	Water Quality Account (Capital Budget)	$1,830,000		$1,830,000	$1,830,000	WQA(cap.)
	Water Quality Account (Operating Budget)	$1,009,000	$830,000		$830,000	WQA
	Total All Funds	$128,444,567	$22,940,355	$4,397,000	$27,337,355	


Nooksack/San Juan
WHATCOM
SAN JUAN
Skagit/Stillaguamish
SKAGIT
ISLAND
SNOHOMISH
Okanogan
OKANOGAN
PERRY
STEVENS
Upper Columbia
Pend Oreille
PEND OREILLE
Spokane
SPOKANE
CLALLAM
Eastern Olympic
JEFFERSON
Western
Island/Snohomish
CHELAN
Wenatchee
DOUGLAS
Crab Creek
LINCOLN
KITSAP
Kitsap
KING
Cedar/Green
Olympic
GRAYS HARBOR
MASON
PIERCE
South Puget Sound
THURSTON
KITTITAS
Upper Yakima
GRANT
Mid Columbia
ADAMS
WHITMAN
Upper Snake
Esquatzel
PACIFIC
LEWIS
FRANKLIN
YAKIMA
GARFIELD
COLUMBIA
WAHKIAKUM
Lower Columbia
COWLITZ
Lower Yakima
BENTON
ASOTIN
WALLA WALLA
Lower Snake
SKAMANIA
KLICKITAT
Columbia Gorge
Horsehaven/Klickitat
CLARK
Scoping Year
1995
1996
1997
1998
1999

PUGET SOUND WATER QUALITY ACTION TEAM
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