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## IMPLEMENTATION & FINANCE

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### ***From Planning to Implementation***

Tillamook County will implement the CCMP through the Tillamook County Performance Partnership (TCPP). This new county department will coordinate a consortium of federal, state, county, city, special district, non-profit, business, and citizen members to implement the CCMP. The TCPP will provide a results-driven, outcome-based approach to meeting stated goals and objectives of the CCMP. To strengthen citizen support for CCMP implementation, the strategy includes new institutions and mechanisms for participation, education, and community-based decision-making. See Chapter 9, Citizen Involvement. This chapter provides an overview of the Tillamook Performance Partnership and lays out a financial strategy to fund CCMP implementation.

### ***Tillamook County Performance Partnership***

In early 1998 the Financial Strategy Advisory Committee began working with community stakeholders, county officials, and state and federal agency representatives to develop a Performance Partnership to succeed the *existing structure* of the TBNEP. The FSAC developed the concept and the Policy Committee accepted organization by-laws in October of 1998. See TCPP By-laws in Appendix L.

The primary objectives of the TCPP will be to:

- implement the TBNEP Comprehensive Conservation and Management Plan,
- prioritize environmental problems and projects county-wide,
- secure funding and coordinate existing programs to improve watershed health,
- assure implementation of projects,
- monitor, evaluate, and account for projects, and
- share information, transferring as much as possible to Geographical Information System (GIS) and WEB-available formats.

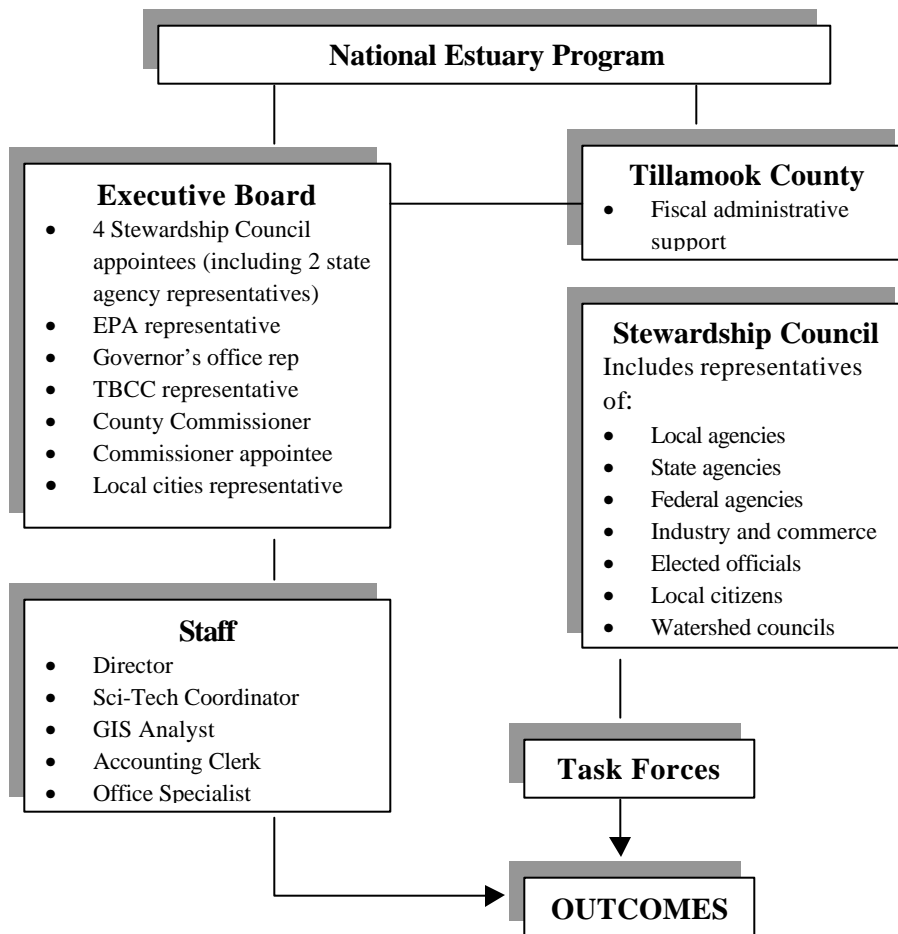
In broader terms, the TCPP focuses on reinvention of government to streamline services and better coordinate resources related to environmental restoration. To improve the chances for successful CCMP implementation, the TCPP will:

- Increase the efficiency of funding for ecosystem restoration and monitoring projects (reduce consumption of funds to multi-agency overhead) and
- Use existing funds more effectively through local decision making and prioritized project implementation (direct funding to highest priority projects).

### Organizational Structure

The Performance Partnership succeeds the TBNEP Management Conference and includes four levels of organization:

- Executive Board
- Stewardship Council
- Director and Staff
- Task Forces



**The Executive Board.** The Executive Board succeeds the TBNEP Policy Advisory Committee. It includes four positions elected by the Stewardship Council, including two state agency representatives. Other positions include a county commissioner, county commission appointee, and representatives of the EPA, Governor's Natural Resource Office, local cities, and Tillamook Bay Community College. The functions of the Executive Board are to:

- establish the overall direction and policies for the TCPP,
- select necessary TCPP staff and consultants and provide direction and review, and
- review, approve, and ensure implementation of recommended projects and work plans after weighing costs, benefits, and public opinion.

**The Stewardship Council.** The Stewardship Council is a non-exclusive group composed of natural resource managers representing local, state, and federal agencies; local elected officials; and industrial, commercial, and citizen representatives. This council provides the locally led basis for CCMP implementation. The Stewardship Council is responsible for developing workplans associated with specific CCMP actions, and recommending those workplans to the Executive Board for approval. The Stewardship Council will:

- develop consensus for coordinated solutions and projects for ecosystem restoration,
- design and recommend restoration projects to the Executive Board,
- approve and monitor project budgets with a view toward leveraging new funds and consolidating funding streams,
- form task forces for project implementation/administration,
- coordinate multi-agency information transfer and reporting of outcomes,
- annually elect two representatives to serve on the Executive Board, and
- provide oversight and support for task force activities.

**Task forces.** The Stewardship Council will appoint task forces to carry out specific programmatic functions. Like the subcommittees used in the TBNEP Management Conference, task forces may be appointed to focus on specific issues or projects. They can also organize technical expertise in areas such as monitoring or scientific review. Task forces will:

- provide project level focus to elicit funding commitments from identified sources,
- ensure Partnership coordination on multi-agency projects,
- monitor and evaluate to assure outcomes achieved,
- monitor project budgets and expenditures, providing status reports, and
- develop public education components for their projects.

**Staff.** To oversee implementation and coordinate projects, Tillamook County will employ a Performance Partnership staff. Initially these will include a director, a scientific/technical coordinator, a geographic information analyst, an accounting clerk, and an office specialist. To facilitate public interaction, the TCPP will provide cash match for a Watershed Council Coordinator to help implement CCMP-related action plans and involve citizens in community-based decisions. The Executive Board will hire the Director, who will then oversee hiring of the core staff described above. The Director, in cooperation with the Stewardship Council, will submit an annual work plan to the Executive Board for approval. See TCPP Bylaws in Appendix L.

### **Implementation and Accountability**

In June 1999, the Tillamook County Performance Partnership Implementation Agreement was approved and signed by members of the Stewardship Council and the Executive Council. This agreement calls for a cooperative effort by members of the TCPP to carry out CCMP implementation. See Appendix K, Implementation Agreement for more information.

The CCMP defines specific goals and objectives to achieve by 2010. The TCPP will coordinate efforts to enhance habitat, reduce sedimentation, improve water quality and mitigate flooding. Chapter 10, Monitoring and Research Needs, describes quantitative methods to track progress in meeting each objective. Accountability for these results will rest with the TCPP and local entities that will lead implementation efforts.

### **High Priority Goals and Actions**

Based on Citizen and Management Committee ranking (See pages 1-14 and 1-15, and Appendices B and C), as well as responses to the TBNEP public opinion survey (Autumn 1995) and the Tillamook Futures Council survey (1998), TBNEP identified six high priority goals and related actions, including:

#### **Goal: Implement Pollution Control Measures**

- WAQ-01: Define, Implement, and Enforce Pollution Prevention and Control Measures on Agricultural Lands
- WAQ-02: Implement Voluntary Farm Management Plans
- WAQ-03: Implement Revised CAFO Inspection Procedure
- WAQ-04: Use Farm-Specific Agronomic Rates for Nutrient Management
- WAQ-05: Provide Farm/Livestock Management Training Programs
- WAQ-09: Ensure Properly Functioning On-Site Sewage Disposal Systems
- WAQ-10: Implement Temperature Management Strategies

**Goal: Improve Roads**

- SED-01: Implement Road Erosion and Risk Reduction Projects
- SED-04: Ensure Sufficient Resources to Enforce Forest Practices Act

**Goal: Enhance Riparian Areas**

- HAB-05: Protect and Enhance Upland Riparian Areas
- HAB-06: Protect and Enhance Lowland Riparian Areas
- HAB-09: Control Livestock Access to Streams
- HAB-10: Stabilize Streambanks Using Alternatives to Riprap
- HAB-11: Encourage Protection and Enhancement on Private Lands
- HAB-13: Increase Incentive Program Payments

**Goal: Enhance Instream Conditions**

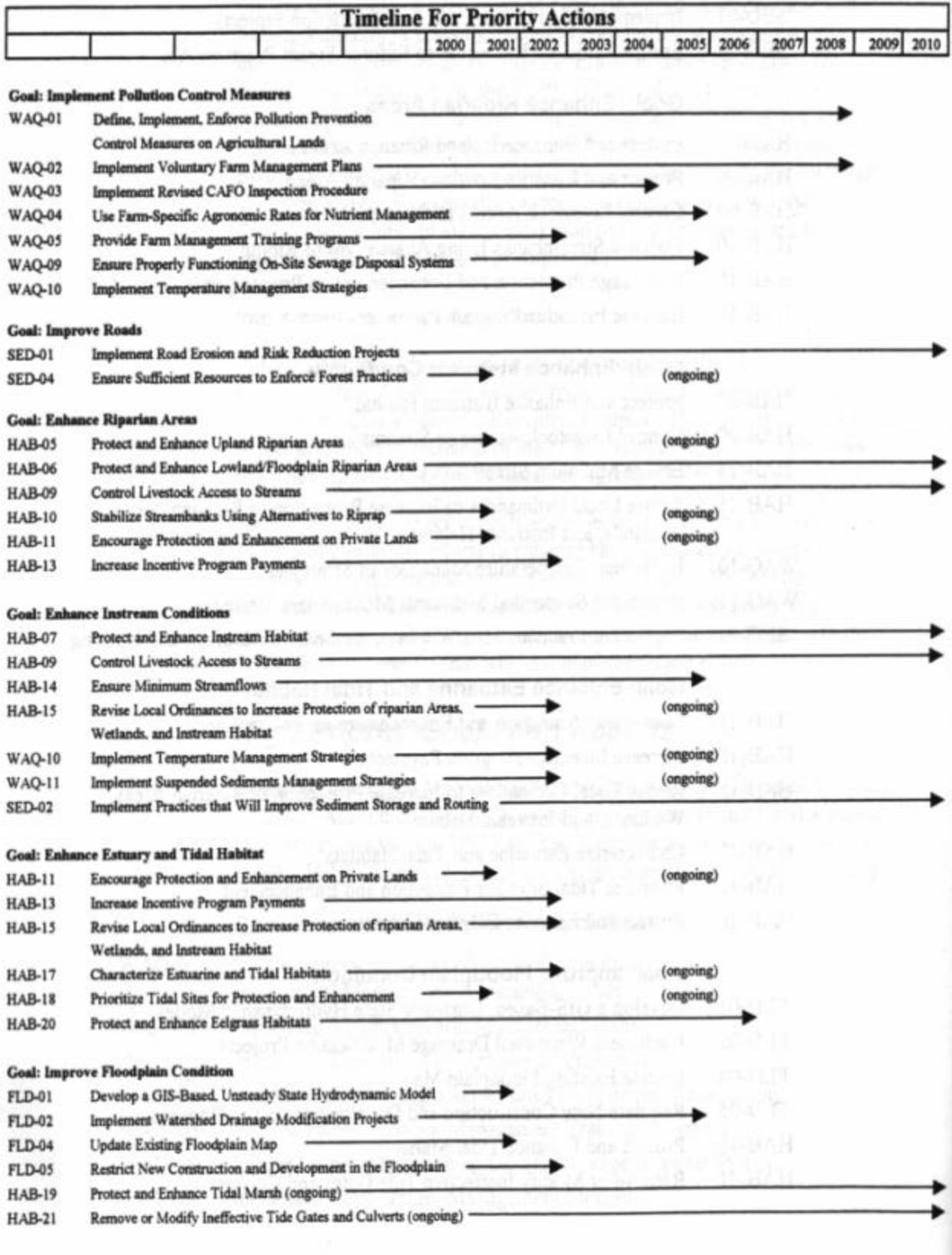
- HAB-07: Protect and Enhance Instream Habitat
- HAB-09: Control Livestock Access to Streams
- HAB-14: Ensure Minimum Streamflows
- HAB-15: Revise Local Ordinances to Increase Protection of Riparian Areas, Wetlands, and Instream Habitat
- WAQ-10: Implement Temperature Management Strategies
- WAQ-11: Implement Suspended Sediments Management Strategies
- SED-02: Implement Practices That Will Improve Sediment Storage and Routing

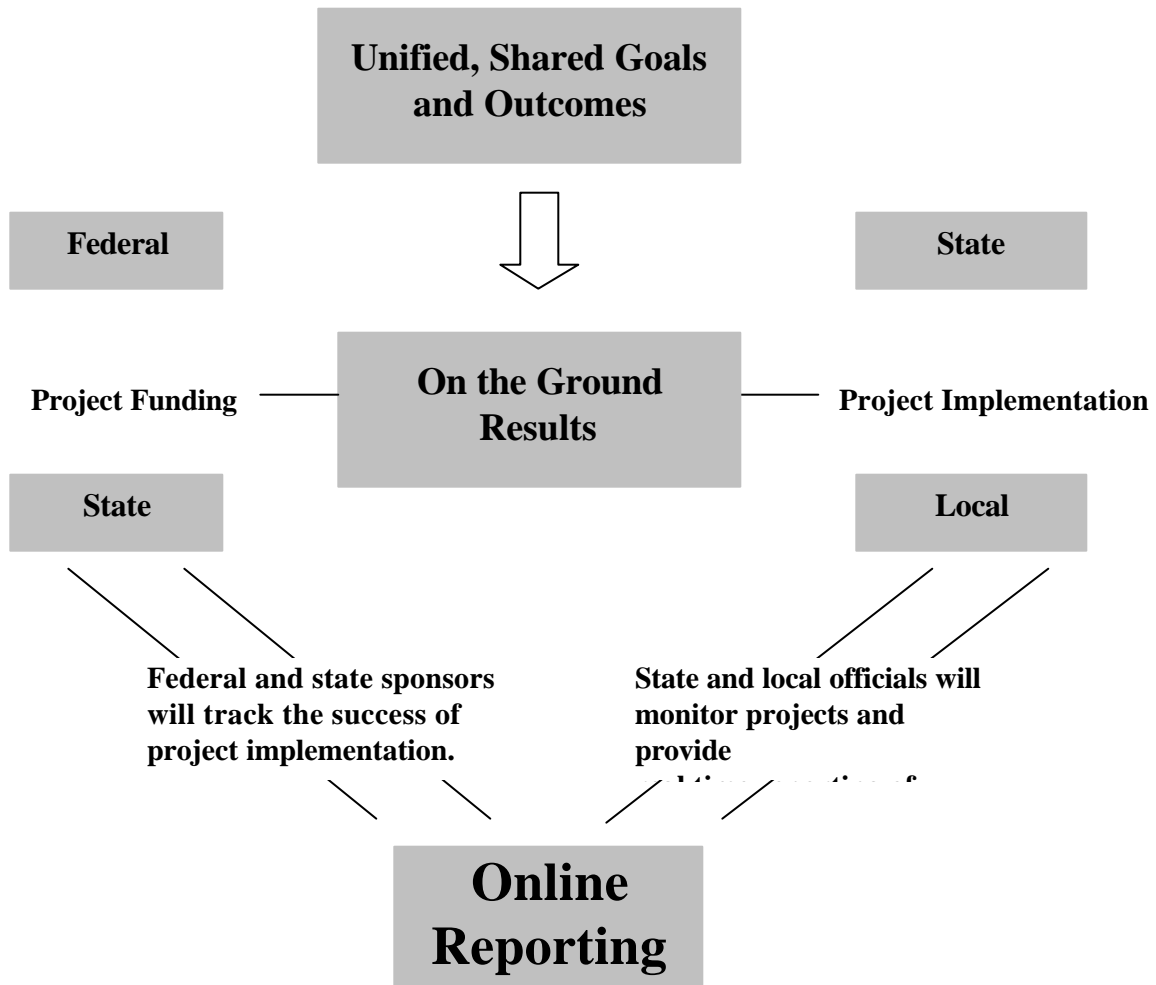
**Goal: Enhance Estuarine and Tidal Habitat**

- HAB-11: Encourage Protection and Enhancement on Private Lands
- HAB-13: Increase Incentive Program Payments
- HAB-15: Revise Local Ordinances to Increase Protection of Riparian Areas, Wetlands, and Instream Habitat
- HAB-17: Characterize Estuarine and Tidal Habitats
- HAB-18: Prioritize Tidal Sites for Protection and Enhancement
- HAB-20: Protect and Enhance Eelgrass Habitat

**Goal: Improve Floodplain Condition**

- FLD-01: Develop a GIS-Based, Unsteady State Hydrodynamic Model
- FLD-02: Implement Watershed Drainage Modification Projects
- FLD-04: Update Existing Floodplain Map
- FLD-05: Regulate New Construction and Development in the Floodplain
- HAB-19: Protect and Enhance Tidal Marsh
- HAB-21: Remove or Modify Ineffective Tide Gates and Culverts





**Online GIS reporting:** Through a centralized database managed by staff, the TCPP will provide online tracking of monitoring objectives, research projects, and ecosystem restoration projects in Tillamook County. The GIS-based relational database will meet or exceed standards described by the National Spatial Data Institute (NSDI) for all agencies in the Watershed. In addition, the online reporting system will account for on-the-ground implementation status through photos or status reports and it will include financial information relevant to program management requirements. TCPP staff will oversee data management activities and will maintain databases at the Tillamook Coastal Watershed Resource Center and at program headquarters.

Project sponsors will be able to log on to the TCPP internet site at any time and track the current ‘on the ground’ progress and financial status of restoration projects. Under the monitoring program, the TCPP will integrate project results into GIS to show spatial data about work planned, under way, or completed.

**Monitoring CCMP actions: Programmatic accountability.** By reporting on current project status, the TCPP will show how efficiently each organization meets its implementation goals and objectives. The table below is an example of how progress on some high priority actions will be reported.

**Table 8-1: Examples of Programmatic Accountability**

Restoration Project	Units/Date	Invested
Miles of fence installed	miles/year	fed, state, local \$\$
Wetlands restored	acres/year	\$\$
Roads upgraded	miles/year	\$\$
Fish habitat enhanced	projects/year	\$\$

**Monitoring CCMP objectives: Environmental accountability.** In addition to updating the status of specific projects, TCPP will monitor environmental progress in meeting stated goals and objectives. The table below lists some CCMP objectives, monitoring parameters, and methods of the CCMP monitoring plan. See Chapter 10, Monitoring, for a more detailed description of the TCPP Monitoring Plan.

**Table 8-2: Examples of Environmental Accountability**

CCMP Objective	Monitoring Parameters	Method
Achieve at least a 25% reduction in bacteria loads to rivers	Fecal coliform bacteria concentrations, E. coli bacteria concentrations	Field sampling Colilert System Membrane filtration
Enhance 200 miles of forested riparian habitat to healthy riparian condition by 2010	Riparian buffer width and extent; % conifer; % hardwood, shading, vegetative cover, bank stability	Aerial surveys Field assessments
No net decline in eelgrass beds	Eelgrass % cover, shoot density, sediment composition, other aquatic vegetation	Field sampling Aerial multispectral sensor (MSS) imaging

Each monitoring *parameter* addresses a specific *CCMP Objective*. For example, fecal coliform bacteria monitoring provides a measure of the amount of bacteria in the waters of the Watershed, and directly addresses the CCMP objective of achieving at least a 25% reduction in bacteria loads to rivers. The bacteria monitoring program adheres to DEQ guidelines, and utilizes previously-established sampling stations to maximize usefulness of the data collected. The DEQ requests sampling five times per month at each station following the strict protocols of an approved Quality Assurance Project Plan (QAPP).



Wetlands Management

COMPREHENSIVE CONSERVATION AND MANAGEMENT PLAN  
IMPLEMENTATION PROGRESS 1993-1996

<p><b>Action</b></p> <p><b>WT-2.3</b> Develop and adopt uniform compensatory mitigation policies.</p>	<p><b>Government &amp; Private Initiatives</b> (Public, private and cooperative plans, programs and good intentions)</p> <ul style="list-style-type: none"> <li>Uniform policies and interagency memoranda of agreement on compensatory mitigation policies as called for in CCMP and local projects. But different state, federal and local mitigation guidelines and methods for new mitigation guidelines and methods. In 1995, federal agencies released new mitigation bank guidelines; and California Resources Agency issued compensatory mitigation bank guidelines for the State of California.</li> <li>S.F. Regional Board currently adopting mitigation projects into a plan has 10 years success of completed and in-progress mitigation projects, and to identify a bank, minimum set of mitigation project construction and reporting requirements.</li> <li>Bay Area Wetlands Planning, Control and Evaluation (BAPACE) currently exploring mitigation banking options for smaller, maintenance-type fill projects.</li> <li>Mitigation "banks" established in Sacramento County and Livermore, CA, 1993, and planned for Santa Clara County, but don't necessarily meet CCMP criteria or guidelines.</li> </ul>	<p><b>On-the-Ground Implementation</b> (Examples of specific, local completed or in-progress projects)</p>	<p><b>Current Gaps &amp; Roadblocks</b></p> <ul style="list-style-type: none"> <li>Continued lack of coordination and meeting on mitigation banking provisions among different government agencies. Federal and state mitigation provisions still not consistent, nor do they meet CCMP criteria for applicability in the future.</li> <li>Lack of direction until regional entities initiate goals complete jobs WT-2.3.</li> <li>Lack of success with current mitigation programs. Recent studies (flood) indicate that there is no follow-up on the baseline wetland escape conditions to ensure in the face of truly mitigation sites and poor implementation.</li> <li>Unresolved questions about mitigation "banking" — including the creation of large, multi-project mitigation bank credit systems to replace current bank set, more placement, project-by-project mitigation — facilitates wetland protection or improves habitat values (however) by replacement wetlands.</li> </ul>	<p><b>Ideas &amp; Opportunities for Further Progress</b></p> <ul style="list-style-type: none"> <li>Conducting an empirical, best-practice level study of existing, long-standing restorative restoration and mitigation projects in the Bay, and assessing their success using least ecological indicators and cohorts.</li> <li>Federal agencies should provide more assistance programs to local governments.</li> <li>Eliminate the use of Nationwide Permits with negative impacts on wetlands.</li> </ul>
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WORKBOOK

Figure 8-2: The TCPP web-based reporting system will resemble the San Francisco Estuary Project's

## **Financing the CCMP**

### **Federal, State, and Local Partnerships**

The National Estuary Program, as part of Clean Water Act Section 320, funds program development and research, but requires individual NEPs to develop funding mechanisms to help implement CCMP action plans. While some of the proposed actions are already funded and being implemented, many others require a funding strategy that matches local and state resources with federal funds. Many federal funding programs require local or state match, not only to help offset the high cost of restoration and enhancement projects, but to demonstrate local commitment to program implementation. Sufficient local and state matching funds have not yet been identified for implementation. As a result, CCMP implementation will require a more aggressive effort to identify non-federal matching fund sources.

To address these needs, the Financial Strategies Advisory Committee (FSAC) recommends local, state, federal, and private partnerships to generate adequate funds for CCMP implementation. The FSAC identified a number of funding programs to provide financial resources to implement the CCMP. This section provides brief descriptions of selected key programs. Additional funding sources can be found in Table 8-1, which lists selected federal and state funding sources, as well as local entities and private organizations to match federal funds. More detailed descriptions of the funding programs can be obtained from individual state agencies, non-profit groups, cities, and counties, or found in the Catalog of Federal Domestic Assistance (CFDA).

Table 8-2, at the end of this chapter, lists potential funding sources for each action, the total estimated implementation cost, and other pertinent information. Table 8-2 identifies a category of “earmarked funds,” meaning the dollar amount that agencies or entities have earmarked for Year One CCMP implementation. These funds are not necessarily secured.

Following is a summary of selected federal programs, followed by brief overviews of state, local, and private funding sources.

## **Federal Programs**

The United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) (formerly Soil Conservation Service) was created in 1935 to help farmers and ranchers care for the land. The Soil Conservation Act of 1935 charged the agency to deliver conservation assistance to farmers, ranchers and other private landowners. This assistance is provided through local Soil and Water Conservation Districts by agreements with the USDA and individual states. The NRCS is committed to helping private landowners and managers implement accepted conservation practices to improve land stewardship. The NRCS and the Farm Service Agency administer Farm Bill Programs for the North Coast Basin through the USDA Service Center in Tillamook.

The 1985 re-authorization of the Farm Bill linked eligibility for federal farm program benefits to land stewardship, especially soil conservation and wetland protection. The NRCS is responsible for delineating wetlands on agricultural lands and producing certified wetland delineation maps for Farm Bill program participants upon request.

The 1996 Farm Bill launched a number of new and innovative conservation programs. These voluntary, incentive-driven tools should prove useful in fostering understanding and action regarding conservation problems at the local level. The NRCS in the North Coast Basin will implement Farm Bill programs and the National Cooperative Soil Survey.

Under existing programs, the USDA locally awards about \$200,000 per year to eligible agricultural producers. Each participant must complete and agree to implement a conservation plan to qualify initially, before USDA awards project money based on the North Coast Basin local work group ranking criteria. The agency initiated four projects in 1998. Several Farm Bill programs apply directly to CCMP actions and are therefore presented in more detail.

The USFWS funds projects that protect and restore fisheries and wildlife resources. Such projects could include wetlands and saltmarsh improvements, as well as research that benefits fish stocks. Two programs are listed in detail.

The U.S. Army Corps of Engineers provides funds and expertise in addressing navigation, flood control, and restoration needs in watersheds. One program is detailed on page 8-17, and several others are listed in Table 8-1.

FEMA, EPA, and the Federal Department of Transportation have programs designed to assist with implementation of projects similar to the CCMP actions. These programs are also listed in Table 8-1.

### **Environmental Quality Incentives Program (EQIP)**

CFDA number 10.912

**Description:** This program offers technical, financial, and planning assistance to address soil, water, and related natural resource concerns on agricultural lands. Contracts provide incentive payments and cost sharing for practices such as manure management and riparian area fencing.

**Eligibility:** Individual or family farmers who face serious threats to soil, water, and related natural resources, or who need assistance with complying with federal or state environmental laws.

**Types of assistance:** Direct payments.

**Available funds:** Fiscal Year 1999: \$174,000,000 total. \$10,000 per person per year, and \$50,000 total over length of project. Up to 75% cost share.

**Contact:** Tillamook NRCS office. (503) 842-2848.

### **Wetland Reserve Program (WRP)**

CFDA number 10.072

**Description:** Eligible landowners may offer farmed wetlands, prior converted wetlands, wetlands farmed under natural condition and certain other lands to be placed under a permanent or 30-year easement or restoration agreement.

**Eligibility:** An individual landowner, partnership, association, corporation, estate, trust, other business or other legal entities and, whenever applicable, a state, political subdivision thereof, or any agency thereof owning private croplands.

**Types of assistance:** Direct payment for specified use.

**Available funds:** Fiscal Year 1999: \$127,741,000 total.

**Contact:** Tillamook NRCS office. (503) 842-2848.

### **Wildlife Habitat Incentive Program (WHIP)**

CFDA number 10.914

**Description:** This program helps landowners develop habitat for upland wildlife, wetland wildlife, threatened or endangered species, fish, and other types of wildlife.

**Eligibility:** A landowner, landlord, operator, or tenant of eligible lands.

**Types of assistance:** Direct payments for specified use.

**Available funds:** \$15,000,000 total. Limited to \$10,000 per contract. Up to 75% cost share.

**Contact:** Tillamook NRCS office. (503) 842-2848.

### **Conservation Reserve Program (CRP)**

CFDA number 10.069

**Description:** This program reduces soil erosion and sedimentation, improves water quality, and creates better habitat for wildlife. It encourages farmers and ranchers to convert marginally productive, environmentally sensitive land to vegetative cover such as native grasses, wildlife plantings, trees, filter strips, or riparian buffers. Farmers receive an annual rental payment for the term of the 10–15 year contract.

**Eligibility:** Individuals, partnerships, associations, estates, business enterprises, states, or political jurisdictions.

**Types of assistance:** Direct payments for specified use.

**Available funds:** \$1,694,142,000 total. Range is from \$50 to \$50,000.

**Contact:** Tillamook FSA Office, (503) 842-2848.

**Notes:** To qualify owners must identify marginal pastureland that is suitable for use as a riparian buffer to be planted to trees. Acreage must also be determined by NRCS to be eligible and sustainable for riparian buffers, salt tolerant vegetation, or shallow water areas for wildlife. Rental rates, based on soil type, have been established for the North Coast Basin. The maximum rate is calculated in advance of enrollment. An additional incentive of up to 20% of the soil rental rate is offered for riparian buffers.

### **Conservation Reserve Enhancement Program (CREP)**

**Description:** This program supplements rent rates for recipients of CRP funds. Generally, CRP funds are significantly lower than fair market value, thereby limiting the willingness of farmers to enter the program. CREP creates more realistic financial compensation to farmers.

**Eligibility:** A landowner, landlord, operator, or tenant of eligible lands.

**Types of assistance:** Direct payments for specified use.

**Available funds:** Not known.

**Contact:** Tillamook FSA office, (503) 842-2848.

### **Cooperative Forestry Assistance**

CFDA number 10.664

Description: This program provides grant funds to improve non-federal forest management practices, and improve fish and wildlife habitat. Projects can include innovations in timber harvest, dispersal of seedlings, reforestation, assisting small woodlot owners with forest practices, conservation of forest land, and improving fish and wildlife habitat.

Eligibility: State forestry agency, nonprofits, or municipalities.

Types of assistance: Project grants, formula grants, and use of property, facilities, and equipment.

Available funds: \$104,793,000. Average amount of financial assistance: \$1,000,000. Requires 20% state cost share.

Contact U.S. Forest Service, (202) 205-1657.

### **Watershed Protection and Flood Prevention**

CFDA number 10.904

Description: This program provides technical and financial assistance in carrying out works of improvement to protect, develop, and utilize the land and water resources in small watersheds.

Eligibility: Any state agency, county, municipality, SWCD, or nonprofit.

Types of assistance: Project grants, advisory services and counseling.

Available funds: \$99,000,000. Average amount of financial assistance: \$650,000. 50% to 100% cost share.

Contact: Tillamook NRCS office, (503) 842-2848.

### **Water and Waste Disposal Systems for Rural Communities**

CFDA number 10.760

Description: This program provides funds to provide basic human amenities, alleviate health hazards, and promote the orderly growth of the rural areas of the nation by meeting the need for new and improved rural water and waste disposal facilities.

Eligibility: Any state agency, county, municipality, nonprofit organization, or local association.

Types of assistance: Project grants, direct loans, and guaranteed/insured loans.

Available funds: \$763,977,000 in direct loans, \$75,000,000 in guaranteed loans, \$500,000,000 in grants. Average amount of financial assistance: \$700,000. 75% cost share.

Contact: Water and Environmental Programs Rural Utilities Service, (202) 690-2670.

### **Economic Development: Grants for Public Works and Infrastructure Development**

CFDA number 11.300

**Description:** This program provides funds to promote long-term economic development and assist in the construction of public works and development facilities needed to initiate and support the creation or retention of permanent jobs in the private sector in areas experiencing substantial economic distress.

**Eligibility:** Any state agency, county, municipality, or nonprofit organization.

**Types of assistance:** Direct grants; 50%-80% match required.

**Available funds:** \$160,200,000.

**Contact:** Public Works Division, Economic Development Administration, Room H7326 Herbert Hoover Bldg. DOC, Washington , DC 20230. (202) 482-5265.

### **Habitat Conservation**

CFDA number 11.463

**Description:** This program provides financial support to carry out research or projects that benefit fisheries, including habitat improvements or protection, restoration of depleted stocks, and wetland protection and restoration.

**Eligibility:** Any individual, for-profit or nonprofit group, state agency, county, or municipality.

**Types of assistance:** Project grants.

**Available funds:** \$5,000,000. Average amount of financial assistance is highly variable.

**Contact:** NOAA regional office, (206) 526-6187.

### **Protection, Clearing, and Straightening of Channels**

CFDA number 12.109

**Description:** This program provides funds to restore channels for purposes of navigation and flood control. Projects can include clearing logjams and restoring channels.

**Eligibility:** States and political subdivisions with the authority to implement such projects.

**Types of assistance:** Provision of specialized services.

**Available funds:** Not known.

**Contact:** U.S. Army Corps of Engineers, (202) 272-8835 or (703) 545-6700.

### **National Coastal Wetlands Conservation Grants**

CFDA number 15.614

Description: This program provides grant funds to carry out coastal wetlands conservation projects such as restoring impacted wetlands and acquiring new wetlands for protection.

Eligibility: Coastal States.

Types of assistance: Project grants.

Available funds: \$8,500,000 total. Individual grants range from \$90,000 to \$1,000,000. 50% to 100% cost share.

Contact: U.S. Fish and Wildlife Service Portland Office, (503) 231-6128.

### **Sport Fish Restoration (Dingell-Johnson Program)**

CFDA number 15.605

Description: This program supports projects designed to restore and manage sport fish populations for the preservation and improvement of sport fishing. Types of funded projects include habitat improvement, fishery research, and fish surveys and inventories.

Eligibility: State fish and wildlife agencies.

Types of assistance: Formula grants.

Available funds: \$257,447,000. Average amount of financial assistance: \$4,800,000.

Contact: U.S. Fish and Wildlife Service, (703) 358-2156.

### **Project Impact**

CFDA number 83.551

Description: This is a new program designed to encourage the implementation of sustained, pre-disaster mitigation programs by states and communities. Examples of projects are elevation of structures and facilities, evacuating flood plain of development, relocating structures out of the floodplain.

Eligibility: Any community, state, or jurisdictions with Project Impact communities.

Types of assistance: Project grants.

Available funds: \$300,000 per Project Impact community.

Contact: FEMA Region 10, (425) 487-4784.

### **State Programs and Agencies**

Oregon Watershed Enhancement Board manages a grant program for watershed assessments and action plans that lead to watershed restoration projects. OWEB funds on-the-ground projects and assists with staffing to coordinate watershed councils. Funding is available on a statewide competitive



basis. Applications are accepted continually and awards are announced at regularly scheduled OWEB Board meetings three times each year.

State agencies including ODF, ODFW, ODA, DEQ, DSL, and ODOT are responsible for implementation of enhancement and restoration projects and monitoring of ambient conditions. Table 8-1 lists state agencies and the CCMP actions that pertain to each agency.

### **Riparian Tax Incentive Program**

Description: This program provides a tax exemption for landowners who improve or maintain qualifying riparian lands. Landowners and ODFW must agree to a management plan, which details protection measures.

Eligibility: Private landowners of riparian areas.

Types of assistance: Tax exemptions.

Available funds: To be announced.

Contact: Oregon Department of Fish and Wildlife, (503) 872-5252, ext. 5587.

### **State Income Tax Credit**

Description: This program provides state income tax credits for landowners who make instream improvements. Riparian area enhancement measures that benefit instream habitat are eligible.

Eligibility: Private landowners.

Types of assistance: Tax credits equaling 25% of out of pocket expenses.

Available funds: To be announced.

Contact: Oregon Department of Fish and Wildlife, (503) 872-5252.

Note: This program has not yet been legislatively continued for the '99-'01 biennium.

### **Restoration and Enhancement Fund**

Description: This program funds fish habitat enhancement projects on public or private lands.

Eligibility: Local entities, non-profits, or private landowners.

Types of assistance: Grants.

Available funds: \$4,067,394 ('99-'00 biennium).

Contact: Oregon Department of Fish and Wildlife, (503) 872-5252.

### **Salmon and Trout Enhancement Program (STEP)**

Description: This program encourages citizen involvement in egg incubation and rearing, habitat improvement, and biological surveys. It provides a tremendous educational opportunity, as well as technical and limited financial assistance.

Eligibility: Citizens, schools, or other entities.

Types of assistance: Technical assistance and grants.

Available funds:

Contact: Oregon Department of Fish and Wildlife (503) 872-5252, ext. 5429.

### **Northwest Region Habitat Program**

Description: Wetland enhancement for private landowners; technical and financial support through cost sharing; liaison between landowners and agencies for regulatory processes, and landowner outreach.

Eligibility: Private landowners.

Types of assistance: Direct grants.

Available funds: \$250,000 per biennium.

Contact: Oregon Department of Fish and Wildlife (541)-757-4186, ext. 248.

### **Conservation Implementation and Planning Grants**

Description: Grants to SWCDs for on-the-ground projects. Grant proposals may include some planning, but the focus is on implementation.

Eligibility: Private landowners in conjunction with SWCDs.

Types of assistance: Grants.

Available funds:

Contact: Tillamook County Soil and Water Conservation District, (503) 842-2848.

### **SB 1010 Planning Process**

Description: Funds for the development of BMPs for basin-wide and individual farm plans as required by SB 1010. Overall basin plans must comply with OPSW.

Eligibility: Private landowners in conjunction with SWCDs.

Types of assistance: Technical assistance.

Available funds:

Contact: Tillamook County Soil and Water Conservation District, (503) 842-2848.

### **Section 319 Funds for Non-Point Source Pollution Control Projects**

- Description: Funds provided to reduce pollutants, improve land practices, reduce erosion, increase capacity of soil to hold water, and to rehabilitate and protect riparian areas. DEQ manages the program at the state level, using federal CWA funds.
- Eligibility: Any private citizen, organization, or local or state jurisdiction.
- Types of assistance: Matching grants (requires 40% local match).
- Available funds: \$2,700,000 available FY 2000.
- Contact: Oregon Department of Environmental Quality, (503) 229-5696.

### **Clean Water State Revolving Loan Fund**

- Description: Low interest loan program provides funds for point source and non-point source water quality improvement projects.
- Eligibility: States and their subdivisions, municipalities, special districts and corporations or other legal entities.
- Types of assistance: Low interest loans.
- Available funds: Not known.
- Contact: Oregon Department of Environmental Quality, (503) 229-5219.

### **Stewardship Incentive Program**

- Description: Low interest loan program provides funds for point source water quality improvements.
- Eligibility: Private forest landowners.
- Types of assistance: Direct loans.
- Available funds: \$130,000 (1999).
- Contact: Oregon Department of Forestry.

### **Boating Facility Grants**

- Description: Provides funds to assist with development of improvement of boating-related facilities, including restrooms, and means to improve runoff and erosion from parking areas or boat ramps.
- Eligibility: State, city, and county agencies, and park and recreation depts.
- Types of assistance: Direct grants.
- Available funds:
- Contact: Oregon State Marine Board, (503) 378-8587.

### **Oregon Watershed Enhancement Board**

- Description: Provides funds for watershed monitoring, assessment, habitat improvement, and watershed council support.
- Eligibility: Any citizen, non-profit, state or local agency, or other entity.
- Types of assistance: Grants (requires 25% match).
- Available funds: \$15,000,000 ('97-'99 biennium).
- Contact: Oregon Watershed Enhancement Board, (503) 378-3589.

### **Wetland Mitigation Banking Revolving Fund**

- Description: Provides funds for wetland (including tidal) restoration and enhancement projects.
- Eligibility: Any private citizen, organization, or local or state jurisdiction.
- Types of assistance: Direct grants.
- Available funds: \$132,000 ('95-'97 biennium).
- Contact: Oregon Division of State Lands, (503) 378-3805.

### **Water Development Loan Program**

- Description: Provides assistance to develop water resources through water supply projects for small communities, fish protection and watershed improvements, and irrigation and drainage projects.
- Eligibility: Public entities.
- Types of assistance: Low interest loans.
- Available funds: Up to \$20,000,000 ('99-'00 biennium).
- Contact: Oregon Water Resources Department, (503) 378-8455.

### **Water and Wastewater Fund**

- Description: Provides funds for road improvements or wastewater and stormwater system upgrades.
- Eligibility: Cities and port authorities.
- Types of assistance: Direct grants.
- Available funds:
- Contact: Oregon Economic Development Department, 1-800-233-3306.

### **Regional Strategies Program**

- Description: Lottery-funded program that supports key industry development in the areas of ecosystems industries, small forestry products industries, or targeted, off-season tourism marketing.
- Eligibility: Public, private, and non-profit entities.
- Types of assistance: Direct grants.

Available funds:

Contact: Northwest Oregon Economic Alliance, (503) 842-2236.

### **Local Entities**

The Tillamook County Soil and Water Conservation District (SWCD) currently has \$475,000 through an EPA grant for waste management system modifications or upgrades related to the Methane Energy and Agriculture Development (MEAD) project. Once funds have been loaned to MEAD participants and begin to be paid back, this low interest loan opportunity will be available to landowners for other water quality related projects (WAQ-02).

Economic Development Council of Tillamook County houses an Ecosystems Industries Revolving Loan Fund of over \$300,000. The main purpose of the fund is assist start up-businesses in ecosystem restoration or to help existing businesses retool for such work (SED-01, 02, HAB- 05–10).

Tillamook County and the cities of Tillamook, Bay City, and Garibaldi are responsible for implementation of some CCMP actions, such as adopting local ordinances, expanding sewer systems (WAQ-07), and regulating new construction (FLD-05). Tillamook County and individual cities will be responsible for providing some matching funds, and Table 8-1 suggests several ideas for generating those funds.

### **Private and Non-profit Organizations**

Private organizations such as the Oregon Forest Industries Council (OFIC) and the Pacific Coast Shellfish Growers Association (PCSGA) can provide private industry resources for CCMP actions including updating shellfish closure criteria (WAQ-13) and controlling burrowing shrimp (HAB-25).

Non-profit organizations such as The Nature Conservancy (TNC), the Meyer Memorial Trust, and Trout Unlimited are committed to the protection, restoration, and enhancement of natural resources. While each organization focuses on different resources, many CCMP actions represent appropriate use of funds. For example, TNC is well known for purchasing ecologically important land in order to protect it from development, residential, or incompatible agricultural uses. Protecting tidal marsh (HAB-19) is an excellent opportunity to match non-federal (TNC) funds with a federal funding program. Table 8-1 lists additional private and non-profit organizations that should be solicited for CCMP implementation funds.

**Table 8-3: Potential sources of federal, state, local and private funds for CCMP implementation (\*CFDA = Catalog of Federal Domestic Assistance number)**

<b>Federal Programs</b>			
<b>Funding Source</b>	<b>Program</b>	<b>CFDA *</b>	<b>Actions</b>
<i>Farm Service Agency, USDA</i>	<i>Conservation Reserve Program ("CRP")</i>	10.069	<i>HAB-06, 08, 09, 13, 21, SED-01</i>
<i>Farm Service Agency, USDA</i>	<i>Conservation Reserve Enhancement Program ("CREP")</i>		<i>HAB-06, 08, 09, 13, 21, SED-01</i>
<i>Forest Service, USDA</i>	<i>Cooperative Forestry Assistance</i>	10.664	<i>SED-01, 02, 05</i>
<i>Rural Utilities Service, USDA</i>	<i>Water and Waste Disposal Systems for Rural Communities</i>	10.760	<i>WAQ-07, 09</i>
<i>Rural Utilities Service, USDA</i>	<i>Solid Waste Management Grants</i>	10.762	<i>WAQ-07, 09</i>
<i>Rural Utilities Service, USDA</i>	<i>Water and Waste Disposal Loans and Grants</i>	10.770	<i>WAQ-07, 09</i>
<i>Natural Resources Conservation Service USDA</i>	<i>Watershed Protection and Flood Prevention ("Small Watershed Program")</i>	10.904	<i>HAB-05, 06, 07, 09, 10, 11, 24, 26, FLD-02</i>
<i>Natural Resources Conservation Service USDA</i>	<i>Environmental Quality Incentives Program ("EQIP")</i>	10.912	<i>HAB-05, 06, 07, 09, 13, 19, 20</i>
<i>Natural Resources Conservation Service USDA</i>	<i>Wetland Reserve Program (WRP)</i>	10.072	<i>HAB 08, 11, 19 WAQ 10, 11, SED 02</i>
<i>Natural Resources Conservation Service USDA</i>	<i>Wildlife Habitat Incentive Program ("WHIP")</i>	10.914	<i>HAB-05, 06, 07, 11, 22</i>
<i>Economic Development Administration, U.S. Department of Commerce</i>	<i>Economic Development: Grants for Public works and Infrastructure Development</i>	11.300	<i>WAQ-06, 07</i>
<i>NOAA, U.S. Department of Commerce</i>	<i>Coastal Zone Management Administration Awards</i>	11.419	<i>HAB-15, 16</i>
<i>NOAA, U.S. Department of Commerce</i>	<i>Habitat Conservation</i>	11.463	<i>HAB-03, 04, 05, 06, 07, 11, 22</i>
<i>Corps of Engineers, U.S. Dept. of Defense</i>	<i>Emergency Operations Flood Response and Post Flood Response</i>	12.103	<i>FLD-02</i>

<b>Funding Source</b>	<b>Program</b>	<b>CFDA</b>	<b>Actions</b>
<i>Corps of Engineers, U.S. Dept. of Defense</i>	<i>Flood Plain Management Services ("FPMS")</i>	12.104	FLD-01, HAB-24
<i>Corps of Engineers, U.S. Dept. of Defense</i>	<i>Flood Control Projects ("Small Flood Control Projects")</i>	12.106	FLD-01, 02, HAB-24
<i>Corps of Engineers, U.S. Dept. of Defense</i>	<i>Protection, Clearing and Straightening Channels ("Emergency Dredging Projects")</i>	12.109	HAB-24
<i>U.S. Fish and Wildlife Service, U.S. Dept. of Interior</i>	<i>Sport Fish Restoration ("D-J Program")</i>	15.605	HAB-05, 06, 07
<i>U.S. Fish and Wildlife Service, U.S. Dept. of Interior</i>	<i>Coastal Wetlands Planning, Protection and Restoration Act ("National Coastal Wetlands Conservation Grants")</i>	15.614	HAB-08, 18, 19, 20, 21
<i>Office of Water, EPA</i>	<i>Wetlands Protection--Development Grants</i>	66.461	HAB-08
<i>Federal Emergency Management Agency</i>	<i>Project Impact</i>	83.551	FLD 03, 04
<i>Environmental Protection Agency</i>	<i>Clean Water Act Section 319 Non-Point Source Funds</i>		HAB-06, 09, WAQ-06, 08, 09
<i>Mitigation Directorate, FEMA</i>	<i>Flood Mitigation Assistance ("FMA")</i>	83.536	FLD 02, 03
<i>Response and Recovery Directorate, FEMA</i>	<i>Individual and Family Grants ("IFG")</i>	83.543	FLD-03
<i>Department of Transportation</i>	<i>Transportation and Community and System Preservation Pilot (Transportation Equity Act for the 21st Century (TEA-21))</i>		FLD-02
<b>State Programs</b>			
<b>Funding Source</b>	<b>Program</b>	<b>Actions</b>	
<i>Oregon Department of Fish and Wildlife (ODFW)</i>	<i>Riparian Tax Incentive Program State Income Tax Credit Restoration and Enhancement Fund Salmon and Trout Enhancement Program Northwest Region Habitat Program</i>	<i>HAB-01, 02, 03, 04, 05, 06, 07, 09, 17, 18, 20, 22, 23, 26, 29, 30</i>	
<b>Funding Source</b>	<b>Program</b>	<b>Actions</b>	

<i>Division of State Lands (DSL)</i>	<i>Wetland mitigation banking revolving fund</i>	<i>HAB-02, 19, 23</i>
<i>Northwest Oregon Economic Alliance</i>	<i>Regional Strategies Program</i>	<i>WAQ-06, 07, 08, 09, FLD-03</i>
<i>Oregon Department of Transportation (ODOT)</i>		<i>FLD-02</i>
<i>Oregon Department of Environmental Quality (DEQ)</i>	<i>Clean Water State Revolving Loan fund Section 319 Non-Point Source Pollution Funds</i>	<i>WAQ-07, 10, 11</i>
<i>Oregon Department of Forestry (ODF)</i>	<i>Stewardship Incentive Program</i>	<i>HAB-11, SED-01, 02, 03, 05</i>
<i>Oregon Department of Agriculture (ODA)</i>	<i>Conservation Implementation and Planning Grants SWCD Administration Grants</i>	<i>WAQ-01, 02, 03, 13</i>
<i>Oregon Economic Development Department</i>	<i>Water and Wastewater Fund</i>	<i>WAQ-07, 08, 09</i>
<i>Oregon Marine Board</i>	<i>Boating Facility Grants</i>	<i>WAQ-09</i>
<i>Oregon State Police (OSP)</i>		<i>HAB-27</i>
<i>Oregon Water Resources Department</i>	<i>Water Development Loan Program</i>	<i>HAB-14</i>
<i>Oregon (Governor's) Watershed Enhancement Board (OWEB)</i>	<i>Watershed Support Grants Monitoring Grants Habitat Improvement Grants</i>	<i>HAB-01, 05, 06, 07, 09, 10, 19, 20, 21, 22</i>
<b>Local Entities</b>		
<b>Funding Source</b>	<b>Program</b>	<b>Actions</b>
<i>Tillamook County</i>	<i>Boating user fee Recreational user fee State revolving loan fund County hotel tax Bond measure County tax assessment Vanity license plates License fees</i>	<i>HAB-15, 16, 17, 23, FLD-01, 03, 04</i>
<i>Cities of Bay City, Tillamook, Garibaldi</i>	<i>City hotel tax Bond measure City tax assessment</i>	<i>SED-06, WAQ-08</i>



<b>Funding Source</b>	<b>Program</b>	<b>Actions</b>
Soil and Water Conservation District	SB 1010 Planning Process Conservation implementation and planning grants	HAB-06, 10, 12, CIT-07
Oregon Forest Industries Council (OFIC)	Forestry practices research	SED-02, 05, FLD-03
<b>Private and Non-profit Groups</b>		
Pacific Coast Shellfish Growers Association (PCSGA)		HAB-25, WAQ-13
The Nature Conservancy (TNC)	Land conservation and protection	HAB-08, 19, 20, CIT-06
The Bullitt Foundation	Environmental protection and restoration	HAB-08, 11, 12, 20
National Fish and Wildlife Foundation	Wetland conservation, fisheries and wildlife habitat conservation, education	HAB 05-11, 19-22, 29
Environmental Defense Fund (EDF)		HAB-08, 11, 12, 21
Meyer Memorial Trust		HAB-08, 11, 12, 21
Trout Unlimited	Fisheries habitat, restoration, and protection	HAB-08, 11, 12, 21
Audubon Society	Avian protection and appreciation	HAB-08, 11, 12, 21

<b>Table 8-4: Implementation Cost Estimates-Tillamook Bay National Estuary Project/Performance Partnership</b>							
<b>Action</b>	<b>Action Description</b>	<b>Cost/Unit</b>	<b># Units</b>	<b>Low Total</b>	<b>High Total</b>	<b>Earmarked \$ (99-00)</b>	<b>Possible Funding Sources</b>
HAB-01	Characterize riparian and instream habitat	\$1400/mile + \$90,000 for W.A.	200 riparian miles	\$370,000	\$370,000	ODFW: \$20,000 DLCD: \$8,333-\$12,500 OWEB: \$55,000	Federal: NRCS State: ODFW, DLCD, OWEB
HAB-02	Assess and map riparian and wetland habitat	\$36,250 for staff; \$2500 for GIS		\$38,750	\$38,750	DLCD: \$8,333-\$12,500	Federal: NRCS State: DSL, DLCD
HAB-03	Prioritize upland protection and enhancement sites	\$150/mile	200 stream miles	\$30,000	\$30,000	DLCD: \$8,333-\$12,500	Federal: NOAA (11.463) * State: ODFW, DLCD, ODF
HAB-04	Prioritize floodplain/lowland protection and enhancement sites	\$150/mile	500 stream miles	\$75,000	\$75,000	DLCD: \$8,333-\$12,500	Federal: NOAA (11.463) State: ODFW, DLCD
HAB-05	Protect and enhance upland riparian areas	\$16,860/mile	200 riparian miles	\$3,372,000	\$3,372,000	DLCD: \$8,333-\$12,500	Federal: USDA (10.904, 10.912, 10.914, 11.463, 15.605) State: OWEB, ODFW, ODF, DSL, DLCD
HAB-06	Protect and enhance lowland riparian areas	\$13,179/mile - \$17,646/mile	500 riparian miles	\$6,589,500	\$8,823,000	ODFW: \$6,300 DLCD: \$8,333-\$12,500 OWEB: \$100,000 USFWS: \$33,000	Federal: USDA (10.904, 10.912, 10.914), NOAA (11.463), USFWS (15.606) State: DEQ, ODFW, ODA, SWCD, OWEB, DLCD
HAB-07	Protect and enhance instream habitat	\$10,000-\$50,000/project	100 projects	\$1,000,000	\$5,000,000	ODF: \$155,000 ODFW: \$6,300	Federal: USDA (10.904, 10.912, 10.914), NOAA (11.463), USFWS (15.605) State: ODFW, OWEB, ODF, ODA
HAB-08	Protect and enhance freshwater wetland habitat	\$10,000-\$75,000/project	20 projects	\$200,000	\$1,500,000	ODFW: \$2,100	Federal: USDA (10.069), USFWS (15.614), EPA (66.461) State: DLCD, ODFW Other: Non-profits (The Nature Conservancy)

Action	Action Description	Cost/Unit	# Units	Low Total	High Total	Earmarked \$ (Year 1)	Possible Funding Sources
HAB-09	Restrict livestock access to streams	\$13,179/mile - \$17,646/mile	500 riparian miles			Costs covered in HAB-06	Federal: USDA (10.904, 10.912, 10.914), NOAA (11.463), USFWS (15.606) State: DEQ, ODFW, ODA, OWEB Local: SWCD
HAB-10	Stabilize streambanks using alternatives to riprap	\$10,000-\$30,000/project	50 projects	\$500,000	\$1,500,000	ODFW: \$6,300	Federal: USDA (10.069, 10.904) State: ODFW, ODA Local: SWCD
HAB-11	Encourage protection and enhancement on private lands	\$25,000/year TCPP staff time	1 year	\$25,000	\$25,000	ODFW: \$4,200	Federal: USDA (10.904, 10.914), NOAA (11.463) State: ODF, ODFW, ODA Other: Non-profits
HAB-12	Sponsor a native vegetation planting day	\$2,500/year	10 years	\$25,000	\$25,000		Local: SWCD Other: Non-profits
HAB-13	Increase incentive program payments	\$25,000/year for NRCS staff	1 year	\$25,000	\$25,000		Federal: USDA (10.069, 10.914, 10.912, CREP) Local: SWCD
HAB-14	Ensure minimum streamflows	\$25,000/year for hydrologist	5 years	\$125,000	\$125,000	ODFW: \$2,100	State: OWRD, OR Water Trust, ODFW
HAB-15	Revise local ordinances to increase protection of riparian areas, wetlands, and instream habitat	\$25,000/year County staff time	1 year	\$25,000	\$25,000	DCD: \$25,000 ODFW: \$4,200	State: ODF, ODA, ODFW, DLCD Local: DCD
HAB-16	Effectively enforce laws and regulations	\$50,000/year agency staff + \$12,500/year (1st year only)	10 years	\$512,500	\$512,500	DCD: \$62,500 ODFW: \$4,200	State: OSP, ODFW, DLCD, ODF, ODA Local: DCD
HAB-17	Characterize estuarine and tidal habitats	\$25,000/year for staff	10 years	\$250,000	\$250,000	ODFW: \$2,100	Federal: USFWS (15.614) State: ODFW
HAB-18	Prioritize tidal sites for protection and enhancement	\$12,500/year for TCPP staff	1 year	\$12,500	\$12,500		Federal: USFWS (15.614) State: ODFW
HAB-19	Protect and enhance tidal marsh	\$4000/acre	750 acres	\$3,000,000	\$3,000,000	ODFW: \$4,200	Federal: USDA (10.069, 10.912), USFWS (15.614) State: ODFW, OWEB Other: Non-profits

Action	Action Description	Cost/Unit	# Units	Low Total	High Total	Earmarked \$ (Year 1)	Possible Funding Sources
HAB-20	Protect and enhance eelgrass habitat	\$25,000/year staff time, \$30,000 every 5 years for MSS imaging	4 years (research), 10 years MSS imaging	\$160,000	\$160,000		Federal: USFWS (15.605, 15.614) State: ODFW, OWEB
HAB-21	Remove or modify ineffective tidegates and culverts	\$7000/tide gate	25 tide gates	\$175,000	\$175,000	ODFW: \$2,100 OWEB: \$40,000	Federal: USDA (10.069, 10.904, 10.914), NOAA (11.463) State: OWEB, ODFW, ODA
HAB-22	Enhance large wood in estuary	\$2500/project	30 projects	\$75,000	\$75,000	ODFW: \$4,200	Federal: USDA (10.912, 10.914) State: ODFW, OWEB
HAB-23	Update the Estuary Plan	\$25,000/year for TCDCD staff	1 year	\$25,000	\$25,000	DCD: \$25,000 DLCD: \$30,000	State: DSL, DLCD Local: Till. County, TCPP, DCD
HAB-24	Reconnect sloughs and rivers	\$3 mil total for feasibility study; incl. \$500,000 for hydrodynamic model, \$100,000-\$500,000/project.	20 projects	\$2,000,000	\$10,000,000	Model and feasibility study costs included in FLD-01.	Federal: USDA (10.904), COE (12.106, 12.109)
HAB-25	Control burrowing shrimp populations	\$62,500/year research	4 years	\$250,000	\$250,000		Federal: USDA (10.025) State: ODFW Other: PCOGA
HAB-26	Prevent and control exotic species	\$12,500/year for agency staff	5 years	\$62,500	\$62,500	ODFW: \$2,100	Federal: USDA (10.025) State: ODFW
HAB-27	Effectively enforce fishing regulations	\$50,000/year, \$2,500 for web pg.	5 years	\$252,500	\$252,500	OSP: \$82,500	State: ODFW, OSP
HAB-28	Evaluate fishing practices	\$12,500/year for agency staff	1 year	\$12,500	\$12,500		Federal: USFWS (15.605, 15.608) State: ODFW
HAB-29	Implement essential fish habitat mandates	\$12,500/year for agency staff	1 year	\$12,500	\$12,500	ODFW: \$2,100	State: ODFW, DSL

Action	Action Description	Cost/Unit	# Units	Low Total	High Total	Earmarked \$ (Year 1)	Possible Funding Sources
HAB-30	Support Oregon Plan for Salmon and Watersheds	\$25,000/year TCPP staff time	10 years	\$250,000	\$250,000		Local: TCPP
WAQ-01	Define, implement, and enforce pollution prevention and control measures on agricultural lands	\$50,000/year for agency staff	5 years	\$250,000	\$250,000		Federal: USDA (10.912) State: ODA
WAQ-02	Implement voluntary farm management plans	\$50,000/staff/yr	3 writers, 1 engineer for 8 yrs	\$1,600,000	\$1,600,000		Federal: USDA (10.215) State: ODA
WAQ-03	Implement revised CAFO inspection procedure	\$62,500/year agency staff + \$5,000/year for flyovers	10 years; 1 flyover/year	\$675,000	\$675,000		Federal: NRCS State: ODA
WAQ-04	Use farm-specific agronomic rates for nutrient management	\$30,000/study + \$100/soil test	1 study + 200 soil tests	\$50,000	\$50,000		Federal: NRCS State: ODA, OSU Extension
WAQ-05	Provide farm management/livestock training programs	\$12,500/year agency staff	10 years	\$125,000	\$125,000		Federal: NRCS State: ODA, OSU Extension
WAQ-06	Ensure adequate wastewater treatment capacity	\$12,500/year agency staff; \$25,000- \$50,000/study; \$200/tour	3 studies/yr; 20 tours/vr; 10 years	\$915,000	\$1,665,000		State: RLF, DEQ Local: Tillamook County, local cities
WAQ-07	Expand sewer network	\$1.5 mil-\$1.8 mil for remaining Tillamook UGB + \$12,500/year agency staff	1 year (staff time)	\$1,562,500	\$1,862,500		Federal: USDA (10.760, 10.762, 10.770) State: DEQ SRLF Local: City of Tillamook, Tillamook County
WAQ-08	Ensure adequate urban runoff treatment and retention	\$25k-\$50k engineering; \$10k-\$100k construction + \$25,000/year staff	1 year (staff time)	\$60,000	\$175,000		State: DEQ Local: City of Tillamook

Action	Action Description	Cost/Unit	# Units	Low Total	High Total	Earmarked \$ (Year 1)	Possible Funding Sources
WAQ-09	Ensure properly functioning on-site sewage disposal systems	\$30,000/yr surveys; \$25,000/year staff; \$1000 brochure, \$25,000 cost of ordinance; \$2000-\$10,000/sewer annexation; \$50,000/year for floating restroom	10 years (staff time)	\$1,078,000	\$1,086,000	DCD: \$21,000-\$30,000	Federal: USDA (10.760, 10.762, 10.770) State: OMB Local: DCD
WAQ-10	Implement temperature management strategies	\$100,000 for study (agency staff time)	1 study	\$100,000	\$100,000		State: DEQ, ODA
WAQ-11	Implement suspended sediment mgt strategies	\$37,500 for staff + \$50,000 for study (first year only)	10 years	\$425,000	\$425,000		State: DEQ, ODA, DLCD
WAQ-12	Evaluate shellfish growing area classifications	\$7,500-\$12,500/year agency staff	1 year	\$7,500	\$12,500		Federal: FDA State: ODA, ODFW
WAQ-13	Update shellfish closure criteria	\$25,000 for surveys, monitoring, data analysis, \$50,000 ODA/DEQ staff time	1 year	\$75,000	\$75,000		Federal: FDA, ODA, PCOGA
SED-01	Implement road erosion and risk reduction projects	\$100,000/year ODF staff; \$100k/year private staff; \$3mil-\$7mil/year for road upgrades; \$50,000/year for decommissioning; \$2-\$4 mil/year maintenance	Upgrade 1400 miles over 10 years Decommission roads over 5 years	\$52,250,000	\$112,250,000	ODF: \$3,000,000 road improvements; \$75,000 road decommissions; \$250,000 road maintenance	Federal: USDA (10.069, 10.664) State: ODF
SED-02	Implement practices that will improve sediment storage and routing	\$50,000/year agency staff	10 years	\$500,000	\$500,000		State: ODF

Action	Action Description	Cost/Unit	# Units	Low Total	High Total	Earmarked \$ (Year 1)	Possible Funding Sources
SED-03	Reduce risks in landslide-prone areas	Costs associated with decreased harvest	10 years				Federal: USDA (10.064, 10.664) State: ODF Local: DCD Other: OFIC
SED-04	Ensure sufficient resources to enforce Forest Practices Act	\$100,000/year Agency staff	10 years	\$1,000,000	\$1,000,000	ODF: \$74,000	State: ODF
SED-05	Reduce sedimentation from non-forest management roads	\$50,000/year for agency staff	1 year	\$50,000	\$50,000		Federal: USDA (10.664) Local: Tillamook and Washington Counties Other: OFIC
SED-06	Develop and implement storm-water management ordinance	\$25,000 to develop/adopt ordinance; \$25k-\$50k for engineering studies	1 ordinance, 1 study	\$50,000	\$75,000	DCD: \$20,000	State: DLCD Local: Cities of Tillamook, Bay City, and Garibaldi; DCD
FLD-01	Develop a GIS-based hydrodynamic model	\$3 mil total for feasibility study, including \$500,000 for hydrodynamic model	1 model, 1 feasibility	\$3,000,000	\$3,000,000	State: \$270,000 COE: \$540,000	Federal: COE (12.104) State: State agencies Local: Tillamook County
FLD-02	Implement watershed drainage modification projects	\$75,000 for plan development administration; easements and implementation expected to be high		\$75,000	\$75,000		Federal: USDA (10.904), COE (12.103, 12.106)
FLD-03	Elevate and/or relocate structures, livestock, and equipment	18,750/house, \$10,000-\$20,000/cow pad	55 houses; 18 cow pads	\$1,211,250	\$1,391,250	DCD: \$1,391,250	Federal: FEMA (83.543), USDA (10.904) State: ODA Local: DCD
FLD-04	Update existing floodplain map	\$50,000/year staff	1 year	\$50,000	\$50,000	DCD (via FEMA): \$80,000	Federal: FEMA ( 83.543) Local: DCD

Action	Action Description	Cost/Unit	# Units	Low Total	High Total	Earmarked \$ (Year 1)	Possible Funding Sources
FLD-05	Regulate new construction and development in the floodplain	\$12,750/year staff costs; Study costs included in FLD-02; mitigation project costs site-specific and will be high	5 years	\$63,750	\$63,750	DCD: \$5600-\$7000	Local: Tillamook County
FLD-06	Effectively clear floodways of hazardous materials	Costs of removing hazardous materials will be moderate					Federal: COE (12.104) State: ODF Local: Tillamook County
CIT-01	Implement an OSU Watershed Master's Series	\$12,500/year staff; \$250/series for materials	1 year; 3 series	\$13,250	\$13,250		Student enrollment fees to cover materials
CIT-02	Implement Associate of Arts Oregon transfer degree in Environmental Studies	\$336/credit instructor costs	17 credits (2 years)	\$5,712	\$5,712	TBCC: \$2856	Student enrollment fees
CIT-03	Improve Professional Development for K-12 teachers	\$50,000/year for education staff; \$1200/mentor	1 year/ 4 mentors	\$54,800	\$54,800		Tillamook County Educational Consortium, Non-profits
CIT-04	Strengthen Organizational and Institutional Linkages				No new costs		State: DSL, ODA
CIT-05	Expand authentic learning experiences	\$50,000/year for education staff;	1 year	\$50,000	\$50,000		Local: Tillamook County Educational Consortium Other: Non-profits
CIT-06	Establish land trust	\$12,500 TCPP staff, \$100k land	1 year	\$112,500	\$112,500		Other: Non-profits (The Nature Conservancy)



Action	Action Description	Cost/Unit	# Units	Low Total	High Total	Earmarked \$ (Year 1)	Possible Funding Sources
CIT-07	Support a Tillamook Bay Watershed Council	\$50,000/year Council Coordinator	1 year	\$50,000	\$50,000		State: OWEB, DSL, ODFW, ODF Local: SWCD
CIT-08	Sustain the Tillamook Coastal Watershed Resource Center	\$150,000/year staff; \$31,000 interns; \$26,000 materials and overhead	5 years	\$1,035,000	\$1,035,000		State: OWEB, ODFW

Monitoring Costs (see Chapter 10 for descriptions)	Estimated Cost	Term	Low	High	Funds Earmarked for Year 1
Bacteria	\$103,000/year	10 years	\$1,030,000	\$1,030,000	TBNEP/TCPP
Temperature	\$70,000/year	10 years	\$700,000	\$700,000	DEQ
Total suspended solids	\$40,000/year	10 years	\$400,000	\$400,000	TBNEP/TCPP
Riparian assessment	\$75,000/5 yrs	10 years	\$150,000	\$150,000	TBNEP/TCPP, ODA, ODF
Stream channel and habitat assessments	\$50,000/year	10 years	\$500,000	\$500,000	ODFW
Tidal wetland assessment	\$75,000/year	10 years	Costs covered in riparian monitoring		ODA, Tillamook County, DSL
Submerged aquatic vegetation survey	\$40,000/survey	every 5 years	Costs covered in HAB-20		TBNEP/TCPP
Forest road surveys	\$75,000/year	10 years	\$750,000	\$750,000	ODF
Fish monitoring (rivers)	\$40,000/year	10 years	\$400,000	\$400,000	ODFW, ODF, TBNEP/TCPP
Fish use of the estuary	\$25,000/year	10 years	\$250,000	\$250,000	TBNEP/TCPP
Benthic invertebrate inventory (bay)	\$50,000/survey	every 5 years	\$100,000	\$100,000	ODFW
Ecological interactions among eelgrass, oysters, and burrowing shrimp	\$25,000/year research (3 years) + \$5,000/year air photos (10 years) + \$20,000/MSS survey (every 5 years)		\$125,000	\$125,000	MSS covered in HAB-20 TBNEP/TCPP/USFWS
Nutrients	\$45,000/year	10 years	Costs covered in bacteria storm monitoring		TBNEP/TCPP
Benthic macroinvertebrates	\$10,000/year	10 years	\$100,000	\$100,000	DEQ
Plankton	\$5,000/year	10 years	\$50,000	\$50,000	TBNEP/TCPP
Total			4,555,000	4,555,000	
<i>Note: Some monitoring costs may be covered in CCMP actions</i>					

	<b>Totals</b>			<b>Low Est.</b>	<b>High Est.</b>	
	GRAND TOTAL (all CCMP actions and monitoring; 10 years)			\$84,778,250	\$162,574,750	
	TOTAL Year One earmarked funds from outside sources			\$6,460,204**	\$6,495,606**	
<b>Notes on Cost Table</b>						
	* Denotes Catalog of Federal Domestic Assistance Code.					
	** Includes earmarked funding estimates from TBCC, DCD, ODFW, ODF, DLCD, and EPA/NEP.					
HAB-06	"Riparian" distance is defined as the distance along one side of a stream. There are 2 "riparian" miles for each "stream" mile.					
	Costs are broken down to a "per riparian foot" figure, and include \$1.45/foot for fencing, \$.35-\$.60/foot for revegetation, \$.32/foot for water line, \$.12/foot for engineering and design, and \$.256-\$.852/foot to purchase or lease the land.					
	Water line costs are \$.22/foot for the actual water line, but based on the average number necessary per riparian mile to date, the figure comes to \$.32 per riparian foot.					
	To date, landowners have not required compensation for the fenced riparian area. The figures in Table 8-2 reflect a range to account for lease or outright purchase.					