1.0 INTRODUCTION AND PLANNING FRAMEWORK

This section introduces watershed planning and describes its framework of related natural resources management and planning.

- Section 1.1 introduces the framework for watershed planning in Washington State and describes how it has been applied in this Watershed Plan.
- Section 1.2 summarizes the history of watershed planning in Watershed Resource Inventory Area 18 (WRIA 18), describing the differences between the east and west WRIA 18 planning processes.

Watershed planning occurs under enabling legislation passed in 1998, and is closely tied to planning for other water and watershed resources, including salmon recovery, local land use planning, water system planning, stormwater management, and a host of other federal, state, regional and local laws, regulations, and planning initiatives. These were each reviewed and considered in the development of this watershed plan and are profiled briefly in Appendix 1-A. Related recommendations from other plans, studies and processes in WRIA 18 are listed in Appendix 1-B. Related documents (such as the Water Users Association Rules and Regulations) are in Appendix 1-C.

1.1 WATERSHED PLANNING IN WASHINGTON

In 1998 the Washington State Legislature passed Engrossed Substitute House Bill 2514, the Watershed Management Act (WMA) (RCW 90.82) to provide a framework for locally-based watershed planning and resource management. The primary goals of local watershed planning are to assess the status of water resources within Washington's 62 Watershed Resource Inventory Areas (WRIAs) and determine how to address competing demands for water within each WRIA. A stated purpose of the statute is "... *to develop a more thorough and cooperative method of determining the current water situation in each water resource inventory area of the state and to provide local citizens with the maximum possible input concerning their goals and objectives for water resources management and development*."

A Watershed Plan may be written for each WRIA in the State. This Plan addresses WRIA 18, stretching from Sequim Bay, just east of the Dungeness River, in the east, to the Elwha River, in the west (Figure 1.1-1 and Figure 1.1-2). Parts of WRIA 17 are also incorporated under an interlocal agreement encompassing Sequim Bay and the drainages feeding it (the westernmost portion of WRIA 17).

The WMA mandates certain steps for the watershed planning process, particularly in organizing and adopting the plans. The law also sets forth certain questions and broad parameters to be addressed in the plans. However, the legislature chose to leave local watershed groups with a great deal of flexibility in carrying out their work and does not mandate a particular approach to watershed planning.

The WMA establishes a process to create local "Planning Units," which carry out the planning process. It also provides a framework for these local bodies to assess current

and future water supply and water use, address water quality and habitat issues, and recommend instream flows for streams and rivers in each WRIA. These four – water quantity, water quality, habitat, and instream flows – are the basic elements of 2514 watershed planning. As salmonid stocks occupying large areas of Washington habitat have come under the protection of the Endangered Species Act (ESA), watershed plans incorporate salmon recovery and develop strategies to address these listings.

While watershed planning itself is not mandatory, once a decision is made to undertake planning, the Act requires some elements and allows Planning Units discretion in undertaking others. Watershed Plans must address water quantity and strategies for water supply; water quality, habitat and instream flows are optional. Instream flows may be referred to the Washington Department of Ecology (Ecology) for action, if desired. By unanimous vote, Ecology may be requested to change an existing instream flow. With unanimous agreement of governmental members and majority support of non-governmental members of a Planning Unit, Ecology will adopt a rule to implement an instream flow on a stream where a minimum flow has not yet been set (RCW 90.82.080).

A draft *Guide to Watershed Planning and Management* was published in January 1999 by Ecology in conjunction with State associations of cities, counties, public utility districts, sewer and water districts, and irrigation districts. The Addendum to the Draft Guide to Watershed Planning and Management (Ecology 2001a) was issued in October 2001. The Addendum provides extensive detail on the context and planning framework for watershed planning. The Guide and Addendum serve as a manual to assist Washington's local governments and tribes with watershed planning and management under the WMA. Ecology has also published a series of short summaries of 2514 watershed planning to clarify expectations for local Planning Units.

1.1.1 How Watershed Planning Is Initiated

Watershed planning may be initiated only with the concurrence of all counties with territory in a WRIA, the largest city or town located within the WRIA, and the water purveyor that obtains the largest quantity of water from the WRIA. These "initiating governments" must invite Native American Tribes with reservation lands within the WRIA to join them. Other affected tribes must also be invited, including those with federal fisheries resource rights in the WRIA, federally reserved water rights claims on WRIA resources, or federally-approved water quality standards in the WRIA or affected by waters of the WRIA. If tribes choose to join, as they have in WRIA 18, they too become initiating governments.

The initiating governments choose a lead agency (Clallam County, in the case of WRIA 18), and undertake an organizing phase (Phase 1), which includes developing a planning process; determining a scope of work; convening a Planning Unit broadly representative of water resource interests in the WRIA; developing necessary interlocal agreements; and applying for watershed assessment (Phase 2) and watershed planning (Phase 3) grants. The initiating governments, tribes, and other members of the planning unit have considerable flexibility to set the planning process, focus watershed

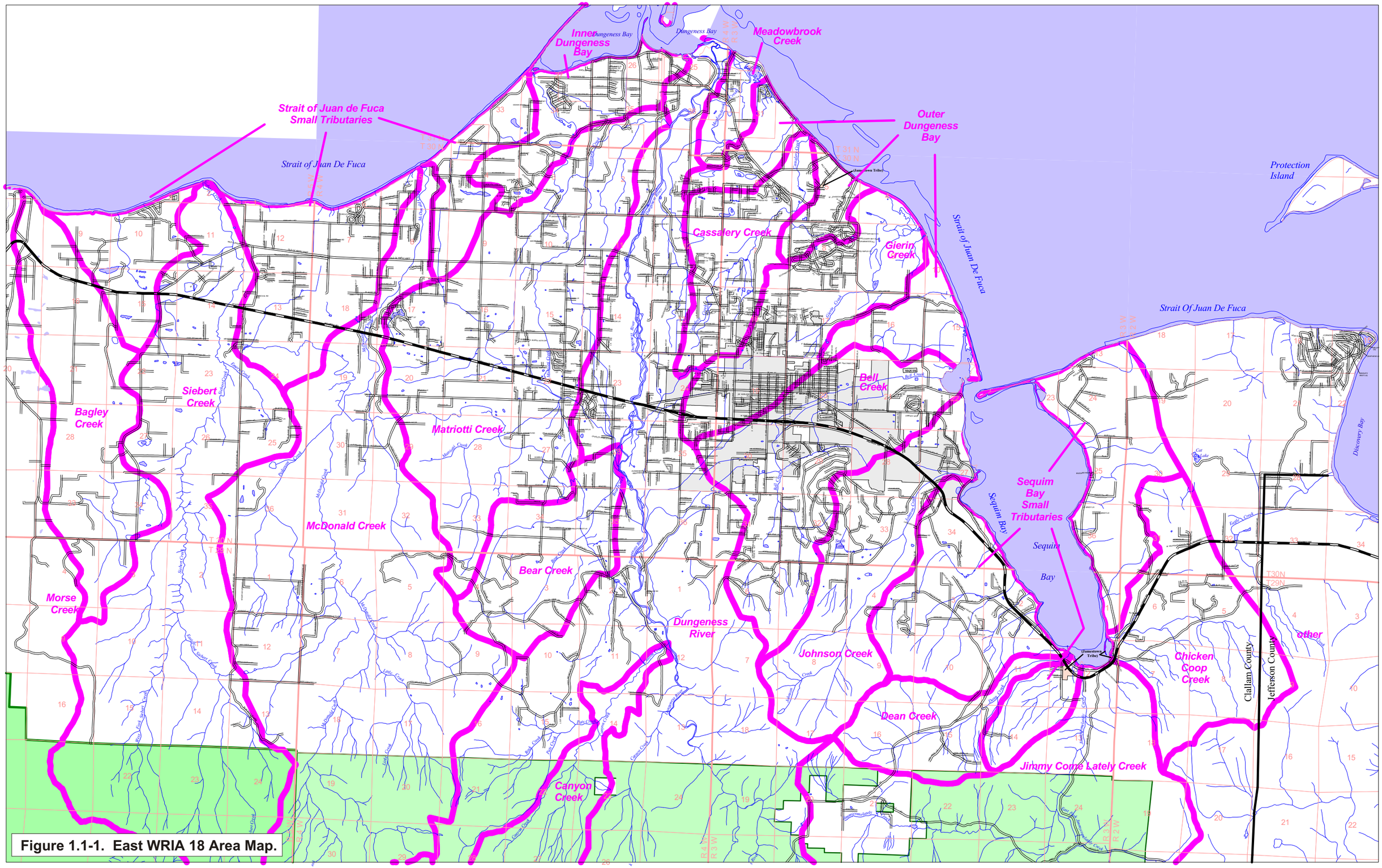

Figure 1.1-1. East WRIA 18 Area Map.

This page intentionally left blank.

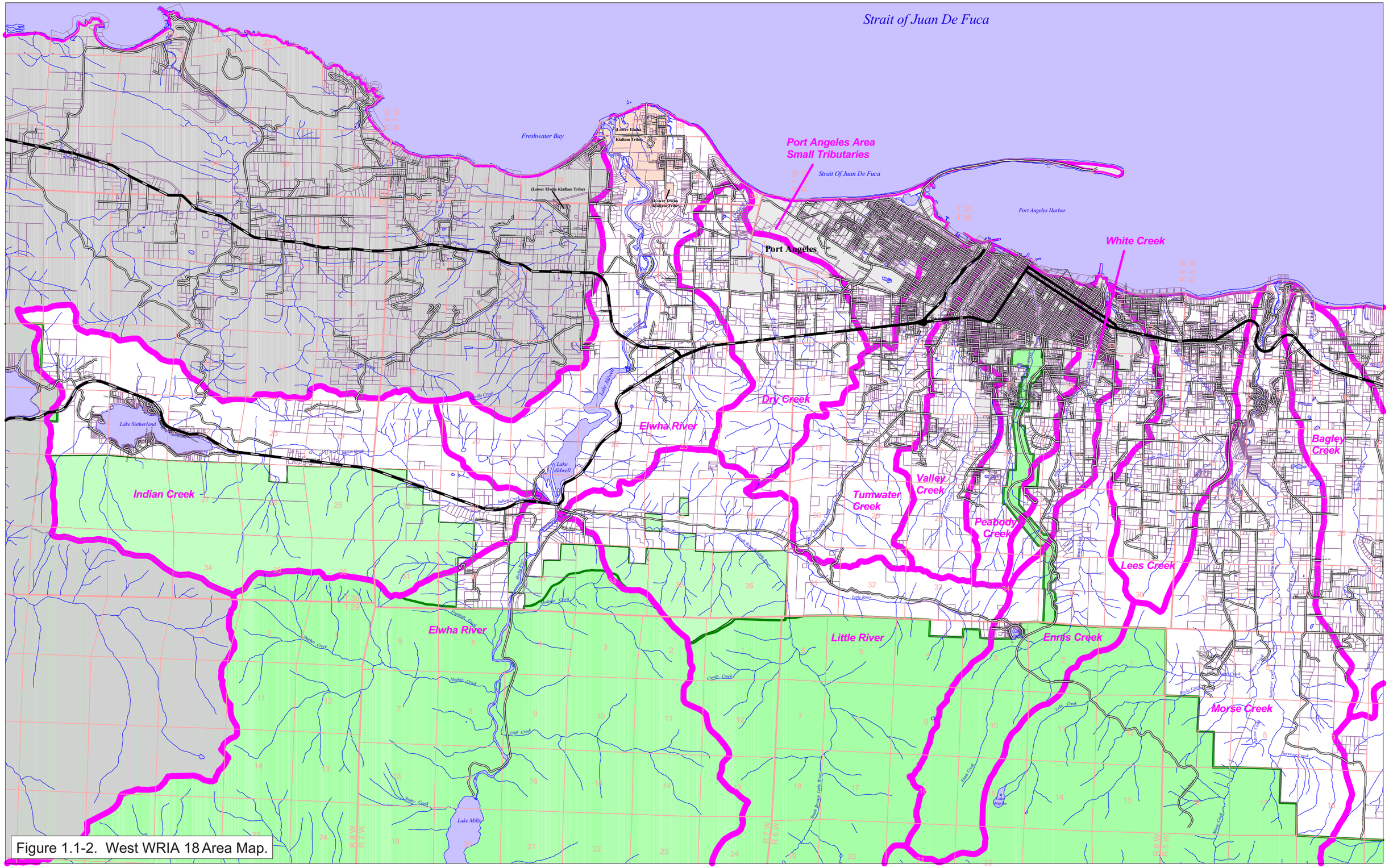

Figure 1.1-2. West WRIA 18 Area Map.

This page intentionally left blank.

inventories and plans on key issues of local importance, assess water resources and needs, and recommend management strategies. Planning generally must be complete within four years after expenditures of Phase 2 grant funds.

Approval of a watershed plan requires, at a minimum, the unanimous agreement of the local, State and tribal governmental members and a majority vote of non-governmental members of a Planning Unit. If approved, the Plan is submitted to the county governments with territory in the WRIA,for ratification by majority vote of each elected governing body in joint session.

The Watershed Management Act directs Planning Units to review planning, projects, and activities already completed or underway regarding natural resource management or enhancement in the area and incorporate their products as appropriate so as not to duplicate work already performed or underway. Section 1.2 reviews the history of watershed planning in WRIA 18. Section 1.3 summarizes local, state, regional and federal laws and regulations, together with actions taken under them which affect watershed planning, salmon recovery, or water supply.

1.1.2 Watershed Plan Limitations

The WMA also imposes certain restrictions on what a watershed plan may do. Among them, watershed plans may not conflict with law or tribal treaty rights, impair or diminish a water right, or affect or interfere with water rights adjudication. Watershed plans may not modify habitat restoration or enhancement projects under the Salmon Recovery Act (SRA). Plans may recommend changes in state, regional, or local regulations, policies or plans, but may not themselves change existing local ordinances or State rules. Entities that participate in the planning process and agree to be obligated by a watershed plan are bound by it. Where Planning Unit participants, including federal agencies participating in advisory capacities, agree to be obligated by a watershed plan and take appropriate action in accordance with plan provisions, existing law or regulation may be changed.

1.1.3 Expanded Planning Funds

Under legislation enacted in 2001, Planning Units became eligible for additional funding to finance further Phase 2 assessment activities in the areas of instream flows, water quality, and detailed assessments of water storage. WRIA 18 initiating governments received additional funding in all three categories.

1.1.4 Watershed Plan Implementation

Watershed management will require a substantial public investment to accomplish the goals established in State law. Ecology received funding in 2001 to convene a broadly representative panel on watershed plan implementation. The panel was charged with developing recommendations on implementing watershed plans, including how to pay for implementation. A final report of findings and recommendations was delivered to the legislature for the 2003 session, and an implementation funding program has been established.

1.2 WATERSHED PLANNING PROCESS AND HISTORY IN WRIA 18

1.2.1 Initiating Governments

The Initiating Governments (IGs) for WRIA 18 include Clallam County, the City of Port Angeles, Agnew Irrigation District, the Jamestown S'Klallam Tribe (JSKT), and the Elwha Klallam Tribe (EKT). The Initiating Governments signed an Intergovernmental Agreement dated December 9, 1998, to form an Elwha-Dungeness Coordinating Council, apply for and accept grants for watershed planning, and provide administrative support to the watershed planning process (Appendix 1-D).

Scope of Planning

The WRIA 18 Initiating Governments have elected to complete both the mandatory water quantity element of watershed planning, and all three discretionary elements, water quality, habitat and instream flow.

The *WRIA 18 Watershed Plan* provides recommendations for the management of watershed resources throughout WRIA 18. Areas falling within the jurisdiction of WRIA 18 initiating governments and Planning Unit participants include unincorporated Clallam County, the cities of Port Angeles and Sequim, and tribal lands of the Elwha Klallam and Jamestown S'Klallam. The Intergovernmental Agreement divides WRIA18 into two geographic planning areas:

- "**Dungeness Planning Area**" – extending from the eastern boundary of WRIA 18, encompassing the Dungeness River Basin to, and including, the Bagley Creek watershed (Figure 1.1-1).
- "**Elwha-Morse Planning Area**" – extending from Bagley Creek and including the Morse Creek watershed in the east to the western boundary of WRIA 18, encompassing the Elwha River Basin (Figure 1.1-2).

These two areas have come to be called "East WRIA 18" and "West WRIA 18", respectively. The designation of two Planning Units recognizes a history of focused planning in the eastern and western watershed areas of Clallam County over several decades.

Under a *Memorandum of Agreement* between the WRIA 17 Planning Unit and WRIA 18 Initiating Governments dated December 10, 2001, the westernmost portions of WRIA 17 (which fall within Clallam County) have been included in the WRIA 18 Watershed Plan. These include Sequim Bay and the several drainages that feed it: Johnson Creek, Dean Creek, Jimmycomelately (JCL) Creek, and Chicken Coop Creek. This arrangement recognizes a history of planning responsibility for these drainages (Box 1).

Box 1: History of Planning Responsibility for Sequim Bay and Associated Drainages

Clallam County and JSKT, both of which are WRIA 18 initiating governments, have been heavily involved in developing and implementing watershed plans and restoration activities in this area for many years.
The JSKT and Clallam Conservation District (CCD) are leading the current reconstruction and restoration of JCL Creek and its estuary.
The eastern boundary of Sequim Bay is also within the North Olympic Peninsula Lead Entity's salmon recovery planning territory.
Clallam County has established a Clean Water District for shellfish protection and other purposes, with boundaries that include the Sequim Bay watershed.
The Tribe and County are involved in recovery planning for ESA-listed fish in JCL Creek, particularly chum.
A hydrologic connection exists between the Dungeness River and Johnson Creek/Sequim Bay via the Highland Irrigation System.
The JSKT has the only reservation lands in WRIA 17 and has requested that these areas be incorporated into WRIA 18 watershed planning.

Delineation of Planning Units

The WRIA 18 Initiating Governments designated the Dungeness River Management Team (DRMT) and the Elwha-Morse Management Team (EMMT) to comprise the Planning Units for East WRIA 18 and West WRIA 18, respectively. Figure 1.2-1 outlines the general relationship among the Initiating Governments, Planning Units, and the governments, advisory agencies, and other stakeholders in WRIA 18.

Dungeness River Management Team (DRMT)

The DRMT has long played an integrative role in watershed management and salmon recovery in East WRIA 18. The original DRMT was active from 1988-1991 in preparing the *Dungeness River Area Watershed Management Plan* (Dungeness River Management Committee [DRMC] and Clallam County Department of Community Development 1993) and *Dungeness River Comprehensive Flood Control Management Plan* (Kramer, Chin & Mayo, Inc. [KCM] 1990). Other planning processes addressed Sequim Bay watershed management and later, Sequim-Dungeness groundwater protection. These culminated in the Dungeness-Quilcene Water Resources Management planning process (*Dungeness-Quilcene Water Resources Management Plan* prepared by the JSKT, Coordinating Entity for the Regional Planning Group; hereafter referenced as the DQ Plan 1994). The DRMT was suspended during development of the DQ Plan, from 1991-1994. All of these are reviewed below.

The DRMT was reactivated in May 1995 by Clallam County Commissioners Resolution No. 104 (1995) and Jamestown S'Klallam Tribe Resolution No. 44-95. The DQ Plan had recommended that a watershed council be formed to provide more coordinated and

integrated natural resources planning for the Dungeness River watershed. A summary of DRMT watershed plans and activities since 1989 is attached as Appendix 1-D.

The current DRMT links and integrates tribal, federal, State and local government with local citizen and interest representatives, including representatives of:

- Riverside property owners
- Clallam County
- City of Sequim
- Jamestown S'Klallam Tribe (JSKT)
- Sequim-Dungeness Valley Agricultural Water Users Association (WUA)
- Washington Department of Ecology (Ecology)
- Washington Department of Fish and Wildlife (WDFW)
- United States Forest Service (USFS) (advisory)
- Protect the Peninsula's Future (PPF)
- North Olympic Land Trust
- DQ planning process (DQ)
- Sports fishers
- Clallam Conservation District (CCD) (advisory)
- Puget Sound Action Team (PSAT)

The DRMT periodically advertises for members. Public comment is welcomed at all meetings.

Elwha-Morse Management Team (EMMT)

The Elwha-Morse Management Team (EMMT) was formed to serve as the West WRIA 18 counterpart to DRMT in the watershed planning process. Established under the Intergovernmental Agreement in December 1998, EMMT held initial public outreach in April-May 1999. A *Facilitator's Report* for EMMT was published in June 1999 and the Planning Unit held its initial meeting that summer.

EMMT contains governments, tribes and citizen interests, including representatives of these governments and caucuses:

- West WRIA 18 property owners
- Clallam County
- City of Port Angeles
- Lower Elwha Klallam Tribe (LEKT)
- Washington Department of Ecology
- West WRIA 18 water purveyors
- Commercial and economic development caucus
- Education caucus
- Environment caucus
- Recreation caucus
- Sport fishing caucus

Several other caucuses were represented early in the EMMT process (civics, forestry, industry), however representatives from these interests did not participate throughout the planning process.

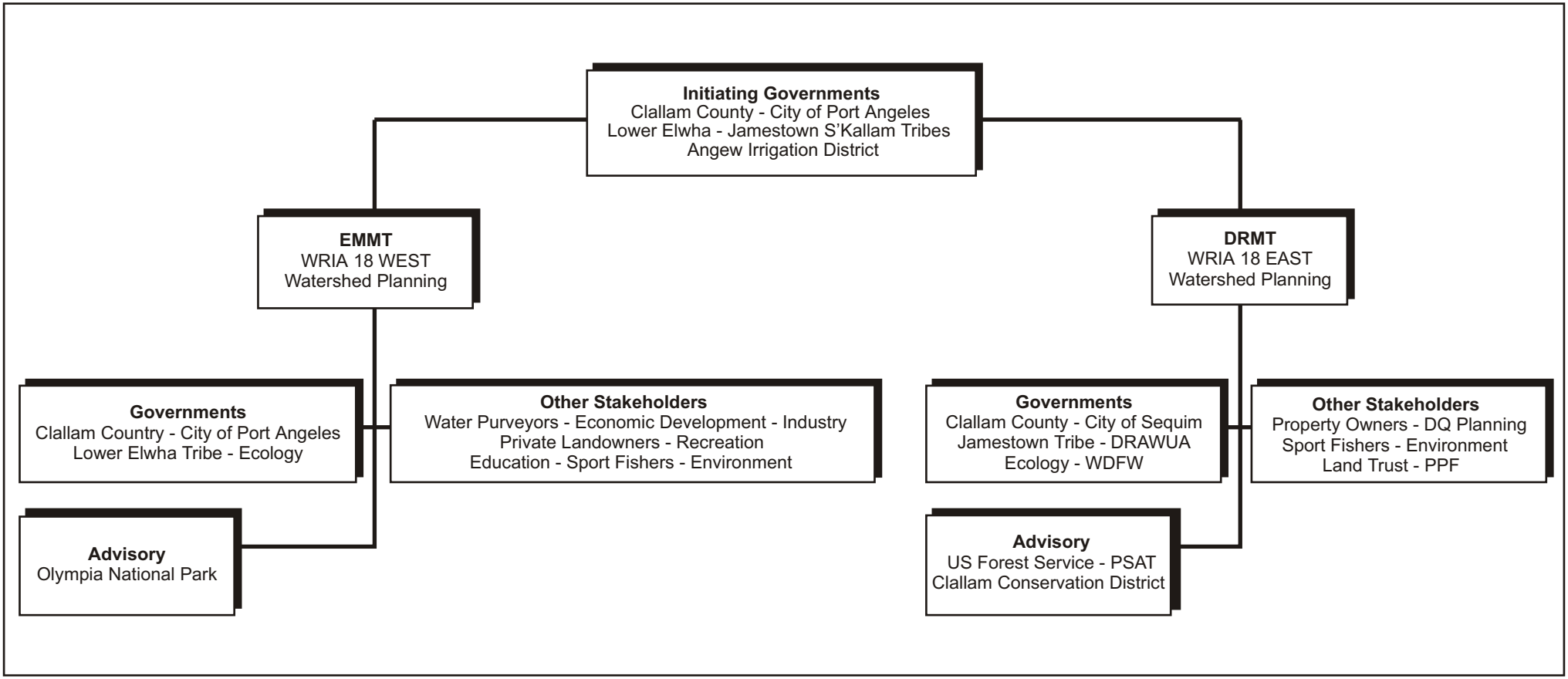

Figure 1.2-1. WRIA 18 Watershed Planning Unit Organizational Chart.

This page intentionally left blank.

Integration of Planning Units with Other Watershed and Salmon Efforts

Table 1.2-1 illustrates the integration of members of the Planning Units with other natural resource management and salmon recovery efforts underway in WRIA 18, including:

North Olympic Peninsula Lead Entity (NOPLE)
Comprehensive Irrigation District Management Plan Technical Advisory Committee (CIDMP TAC)
Marine Resources Committee (MRC)
Clean Water Work Group (CWWG)
Elwha River Restoration Work Group (ERRWG)
Dungeness River Restoration Work Group (DRRWG)
Clallam Conservation District (CCD)

Phase 3 Grant Agreement

The Initiating Governments and Ecology signed a Grant Agreement setting forth objectives for the WRIA 18 Watershed Plan (Box 2). The "head start" given the DRMT through the *Dungeness-Quilcene Water Resource Management Plan* (see below) is recognized in the Grant Agreement. The Grant Agreement does not address West WRIA 18 in the same detail as East WRIA 18, but recommends a general planning process.

1.2.2 History of Watershed Planning in East WRIA 18

The Dungeness watershed has a long-established tradition of collaborative water resource and watershed planning. The areas covered under plans for the Dungeness have varied; current boundaries of the "Dungeness watershed" are considered to include Sequim Bay and its tributaries (partially in WRIA 17), the Dungeness River and its tributaries, and small independent drainages as far west as Bagley Creek. For a broad, general introduction to the literature concerning the Dungeness River Basin, see Clark and Clark (1996), whose extensive annotated bibliography includes many agency reports produced at local, state, and federal levels. (Chapter 2 includes a full bibliography of source material.)

Sequim Bay Watershed Management Plan (1989, revised 1991)

The *Sequim Bay Watershed Management Plan* was developed in 1989 (revised in 1991) by a committee of local citizens (Sequim Bay Watershed Management Committee [SBWMC]) appointed by the Clallam County Board of Commissioners to carry out planning under an "early action" shellfish protection grant from Ecology. It framed water quality as a quality of life issue and was based on these shared concerns and values, as stated in the Plan:

- Recognize the importance of water quality and shellfish, not only for their economic and resource values but also for their irreplaceable contribution to quality of life.

- Articulate the desire to proactively protect these values.
- Address increased threats to public health and wildlife, and the prospect of shellfish closures.
- Stimulate widespread community support for stewardship and water quality protection.

The *Sequim Bay Watershed Management Plan* (SBWMC 1989) was developed through a collaborative, diverse, citizen-based, and consensus-driven process that set the stage for years to come in East WRIA 18 watershed planning, leading to the DQ Plan in 1994, the formation of DRMT, and this Watershed Plan. It anticipates not only many of the issues that continue to require attention today in East WRIA 18, but also the priorities and approaches to watershed planning and management that have become widely used standards in attempts to protect watersheds, deal with nonpoint pollution sources, restore habitats, and recover fish populations.

The *Sequim Bay Watershed Management Plan* (SBWMC 1989) built on the *Sequim Bay Watershed* report issued the previous year (1988) by the Puget Sound Cooperative River Basin Team (PSCRBT), funded under a technical assistance program in cooperation with the United States Department of Agriculture (USDA), Soil Conservation Service (SCS), and the State's *Puget Sound Water Quality Plan*. The PSCRBT characterized the watershed, beneficial uses (fisheries, recreation and irrigation), nonpoint sources of pollution (categorized as rural/agricultural, forestry, urban, and other), and stream corridors in the watershed (Jimmycomelately, Johnson, Bell, Dean and Chicken Coop Creeks).

Water quality in the watershed at the time of the *Sequim Bay Watershed Management Plan* was reported to be generally good (rated by the State as Class AA). The Management Plan focused on nonpoint sources of pollution stemming from animal wastes directly entering waterways, lack of adequate riparian buffers, failing or poorly maintained septic systems, marine and land misuse, poor water conservation, and improper use of or disposal of hazardous products. Among the resources identified as threatened by these sources were recreational and commercial shellfish beds, fisheries, property values, tourism, and both surface and groundwater, including potable drinking water supplies.

Part 1 of the Plan describes why and how it was developed. Part 2 characterizes the watershed and lists threats to water quality. This part includes a discussion of environmental values and beneficial uses (these include high water quality, recreation and aesthetics, shellfish, fisheries, wildlife, stock watering and irrigation, and wetlands). Part 3 identifies four priority policy goals and lists necessary actions to protect water quality (specific source control programs are recommended for both agricultural and forest practices, onsite sewage disposal, and development and urban runoff). The four priority policy goals are:

- **Priority 1**: Education—Increase widespread public education and involvement, to foster a sense of stewardship among all residents of the watershed.

Table 1.2-1. Integration among Members of Watershed Planning Units and Other Natural Resource Management and Salmon Recovery Efforts in WRIA 18.

Entities	EMMT	DRMT	IG	NOPLE	TRG	MRC	CWWG	CIDMP TAC	DRRWG	ERRWG
Clallam County	x	x	x	x	x	x	x	x	x	x
Clallam Conservation District		x					x	x		
City of Port Angeles	x		x	x						
City of Sequim		x		x			x			
Lower Elwha Klallam Tribe	x		x	x	x	x				x
Jamestown S'Klallam Tribe	x	x	x	x	x	x	x	x	x	
SDVA Water Users Association		x	x				x	x		
WA Department of Agriculture								x		
WA Department of Ecology	x	x	x	x			x	x	x	x
WA Department of Fish & Wildlife	x	x			x	x		x	x	x
Puget Sound Action Team	x	x				x	x			
USDA Forest Service		x					x	x	x	
USDI Olympic National Park	x									x
USDI Fish & Wildlife Service							x	x		
USDI National Marine Fisheries Service								x		
US Environmental Protection Agency								x		
North Olympic Salmon Coalition		x			x					
Industry Representative	x									x
Local Citizens	x	x		x	x	x	x			

Legend

CWWG	Sequim-Dungeness Clean Water District Work Group
CIDMP TAC	Comprehensive Irrigation District Management Plan Technical Advisory Committee
DRMT	Dungeness River Management Team
DRRWG	Dungeness River Restoration Work Group
EMMT	Elwha Morse Management Team
ERRWG	Elwha River Restoration Work Group
IG	Initiating Governments for WRIA 18 2514 Watershed Planning
NOPLE	North Olympic Peninsula Lead Entity Group
MRC	Clallam County Marine Resources Committee
TRG	NOPLE Technical Review Group

Note: DRMT and EMMT also function as 2496 Citizen Facilitation Group

This page intentionally left blank.

Box 2: Grant Agreement Objectives for WRIA 18 Watershed Plan

Entire WRIA 18 (Phase 2 Completion)

- Estimate surface water present in the management area.
- Estimate surface and ground water available in the management area, taking into account seasonal and other variations.
- Estimate water in the management area represented by claims in the water rights claims registry, federally reserved rights, and any other rights to water.
- Estimate surface and ground water actually being used in the management area.
- Estimate water needed in the future for use in the management area.
- Identify areas where aquifers are known to recharge surface water bodies and areas known to provide recharge of aquifers from the surface.
- Estimate surface and ground water available for further appropriation, taking into account minimum instream flows adopted by rule or to be adopted for streams in the management area.
- Develop a detailed scope of work for watershed planning.
- Identify and seek funding for projects to address gaps in information crucial to a thorough watershed assessment and effective watershed management plan.
- Identify and seek funding for immediate action projects for water conservation, water quality, habitat restoration, or other appropriate activities identified by the planning unit.

East WRIA 18 (DRMT)

- Explore funding and approach for a Dungeness subregional groundwater model.
- Synthesize East WRIA 18 existing information and data.
- Address critical issues (surface water under influence of groundwater, salmon recovery, water conservation and establishment of instream flows).
- Update the DQ Plan.
- Conduct detailed review of regional and watershed recommendations.
- Summarize changes to DQ Plan recommendations.
- Identify tasks implemented since the DQ Plan and major issues needing further analysis.
- Revisit issues listed as unresolved in the DQ Plan.
- Describe problems which have surfaced since the DQ Plan
- Recommend a strategy for integrating salmon recovery with water quantity and quality recommendations.
- Review instream flow study (Instream Flow Incremental Method (IFIM)) results and the Limiting Factors Analysis done by the Washington Conservation Commission.
- Review options to establish minimum instream flows via rule-making or the Endangered Species Act
- Recommend a pathway to establish instream flows.
- Complete water management strategies for salmon recover

West WRIA 18 (EMMT)

- Address conflicting instream and out-of-stream uses of the Elwha River, with and without removal of one or both dams, such as impacts to salmon from withdrawals during summer low-flow periods and options for managing water supply.
- Address the need for interim instream flow recommendations on the Elwha, given the likelihood of dam removal and the need to repeat the work.
- Address high- and low-flow management issues in Morse Creek and other drainages within the planning area.
- Integrate the 2514 process with other local, State, and federal watershed and salmon recovery processes, to recommend a pathway to establish instream flows
- Investigate alternative strategies of water management.

- **Priority 2**: Keep Things Out of the Water—Eliminate contaminants from polluting the water, including (1) bacteria; (2) sediment; (3) toxins, chemicals, and plastics; and (4) nutrients.
- **Priority 3**: Habitat and Diversity—Protect and enhance the habitat and biological diversity in the watershed including fisheries, wildlife, and vegetation.
- **Priority 4**: Implementation—Implement this plan through long-term (1) coordination; (2) funding; (3) ongoing monitoring; and (4) evaluation and adaptation as necessary to ensure protection of water quality resources in the watershed.

Part 4 of the Plan details an implementation strategy, envisioning a coordinated effort among state agencies, local government, irrigation districts, water purveyors, and the JSKT. At the heart of the strategy lies a comprehensive monitoring and implementation plan adopted by Clallam County as lead agency, including the establishment of a Water Quality Division with the Department of Community Development.

Dungeness River Comprehensive Flood Control Management Plan (1990, revision underway)

The *Dungeness River Comprehensive Flood Control Management Plan* was completed by KCM, a consulting team in 1990 under funding from Washington's Flood Control Assistance Account Program (FCAAP) administered by Ecology. The Plan was developed under the direction of the first Dungeness River Management Team, which set long-term goals and objectives for flood hazard planning.

The 1990 Flood Plan focused on the 100-year floodplain of the lower Dungeness River both because of its tendency to flood and because federal agencies have management responsibility for the upper basin. It provided general and conceptual guidance and addressed chronic problems and specific problem areas attributed to aggradation, erosion, excursion (forming of new channels), log jams, and steep slopes. Recommendations for flood management and control included nonstructural solutions (e.g., public education, planning, or regulations) and structural measures (e.g., bank stabilization, dikes, channelization, levees, gravel bar scalping, placing instream boulders, and reestablishing riparian vegetation). Locations of some problem sites included:

Burlingame Bridge approach
Railroad Bridge approach and downstream
Upstream of Highway 101 Bridge
Dungeness Meadows and upstream irrigation diversions
Ward Road (near bridge)
Cut bank upstream of School House Road Bridge
Corps of Engineers levee

Most of the problem areas and specific recommendations of this plan have been implemented, and Clallam County has received a new FCAAP grant from Ecology to update the Flood Plan and integrate flood management with habitat restoration

underway on the Dungeness (Clallam County RFP for Dungeness River Flood Plan Amendment, August 2002; also see Section 2.8.3).

Aquatic Resource Assessment of the Dungeness River System (1992 and 1994)

In support of the DQ process, Orsborn and Ralph (1992) reviewed Dungeness River-related literature, providing a matrix showing whether the citation addresses basins, streams, fish, hydrology, hydraulics, and habitat. For each citation, the authors review content, applications, related fisheries topics for which the source may be of use, completeness, and information needed. The report recommended further study of stream flows, channel geometry, and a fish habitat assessment. Additional recommendations addressed regional water supply, storage, conservation, flood management, sewage and waste water, and land use. A second report, in 1994, provided the recommended physical channel analysis, hydrology and hydraulics, and fish habitat survey. This report goes beyond the 1990 Flood Plan to provide:

- Analysis of the river channel and its historical changes
- Bridge influences
- Gravel traps and riprapping
- Land use impacts
- Hydrologic influences
- Spawning habitat characteristics
- Stream temperatures
- Fish habitat
- Potential habitat and channel stabilization projects
- Solutions to passage problems
- Monitoring guidelines

The 1994 report includes recommendations on linking habitat surveys with salmon life history; rearing and spawning habitat; upstream migration and adult holding habitat; habitat modifications; stream management; stabilization and habitat improvement projects.

Dungeness River Area Watershed Management Plan (1993)

The *Dungeness River Area Watershed Management Plan* (Dungeness Area Plan) (DRMC and CCDCD 1993) was prepared to identify water quality problems affecting beneficial uses. It established a framework for maintaining and improving water quality in eastern Clallam County. Continuing the direction begun in the *Sequim Bay Watershed Management Plan*, it was developed over a two-year period (1991-1993) by the Dungeness Watershed Management Committee through a collaborative, diverse, citizen-based, and consensus-driven process. The Puget Sound Cooperative River Basin Team (PSCRBT) provided technical support, studying the watershed to provide a detailed watershed characterization.

A predecessor to the Port Angeles Regional Watershed Plan (Clallam County Planning Division et al. 1994) described below, the *Dungeness River Area Watershed Plan* (DWMC and CCDCD 1993) summarized watershed resources, beneficial uses and nonpoint sources of pollution. It presented recommendations for five major goals

(develop a community stewardship ethic; maintain and improve water quality; improve knowledge and understanding; encourage interagency cooperation; and fully implement the Plan). The Plan found indications that nonpoint sources threatened future water use for recreation, wildlife, finfish and shellfish, and domestic water supply. The Plan highlighted issues and needs for study in salmonid stock status, habitat degradation, low flows, and groundwater. The *Dungeness River Area Watershed Plan* also pointed toward a need for coordinated, collaborative action.

Sequim-Dungeness Groundwater Protection Strategy (1994)

The *Sequim-Dungeness Groundwater Protection Strategy* (Sequim-Dungeness Groundwater Committee and the CCDCD 1994) was prepared over a three-year period by a committee made up of citizens and agency staff, coordinated by the Clallam County Water Quality Program. The Committee's tasks included education, groundwater monitoring, threat identification and other research, and development of a plan to protect groundwater resources in eastern Clallam County. An approximately 82-square-mile area was addressed, bounded roughly by Siebert Creek to the west, Sequim Bay to the east, the Strait of Juan de Fuca and Dungeness Bay to the north, and to the south by a line from approximately King Hill to Sequim Bay State Park. The Committee's goal was "to protect groundwater quality and quantity for present and future inhabitants."

The *Sequim-Dungeness Groundwater Protection Strategy* included a description of the physical setting, findings, and recommendations. The study area corresponded generally to East WRIA 18 boundaries, including all of Clallam County east of Bagley Creek. The Strategy notes that aquifers in this area provide most of the drinking water as well as fish and wildlife benefits. It cites water level declines in public and private drinking water wells over a two-year period, and a precedent-setting case in which a building permit had to be conditioned because a nitrate test did not meet potable standards.

Due to coarse soils in the central Sequim-Dungeness "prairie," underlying aquifers are susceptible to contamination from activities at the land surface. The Strategy builds on key studies of groundwater resources and effects upon them of changes in land use, conducted during the 1980s by the United States Geological Survey (USGS) (Drost 1983, 1986). It responded to concerns regarding the effects of irrigation diversions on the original hydrology of the area and nitrate levels in wells.

Recommendations of the Groundwater Protection Strategy are organized by issue, and address nitrates, pesticides, stormwater, underground storage tanks, seawater intrusion, well construction and abandonment, water supply permitting, information management, public involvement, and funding. Significant recommendations include:

- Establishing "areas of special concern" where nitrate concentrations are documented to exceed 3 ppm.
- Initiating inspection programs for on-site sewage disposal systems and water well construction.

- Encouraging Best Management Practices (BMPs) for agriculture and landscaping.
- Studying the hydrogeology of the area to determine patterns of groundwater flow and availability.
- Establishing a central data repository in custody of the County.

While some recommendations addressed relatively straightforward adjustments to current programs or regulations, others involved funding of ongoing key services or major new initiatives.

Dungeness-Quilcene (DQ) Water Resources Management Plan (1994)

A key document in the history of Dungeness watershed planning is the *Dungeness-Quilcene Water Resources Management Plan* (DQ Plan 1994). This watershed plan builds upon and updates the DQ Plan, and integrates recommendations found to remain applicable. The Intergovernmental Agreement acknowledges this planning effort and states: “It is not the intent of the Initiating Governments to repeat, overturn, or delay implementation of technical studies, management recommendations, and water use agreements which were included in the [DQ Plan].” Chapters 5 and 6 of the DQ Plan contain the recommendations of the Regional Planning Group (RPG).

The DQ Plan itself reflects important milestones in the history of watershed planning for the Dungeness watershed and Washington State. It was created under the Chelan Agreement, consummated in 1990 by tribes, the State of Washington, and water stakeholders throughout the State. The Chelan Agreement was prompted by emerging water resource concerns and tribal interests and rights in water and water management. It created a Statewide forum to review water management policies and a framework for the development of regional water management plans. The DQ Plan provides further detail as to the Chelan Agreement goals and principles and reproduces the Agreement itself (Chapters 11 and 12).

In 1991, the Washington Legislature authorized Ecology to select two watersheds to develop pilot regional water management plans under the Chelan Agreement. The Dungeness-Quilcene was one of two pilots funded to test the process. Local leadership formed eight caucuses comprising State, local and tribal governments, agriculture, business, environmental groups, and recreation interests. These caucuses prepared the DQ Plan and submitted it to Ecology in1994.

The DQ Plan (1994) in turn built upon preexisting positive relationships fostered through initiatives by the Jamestown S’Klallam Tribe (Tribe), Ecology, the County, and others. In 1986, the County initiated a series of discussions on the Dungeness River, together with an Ecology-funded comprehensive water quality planning effort in the adjacent Sequim Bay watershed. These processes brought together the Tribe, riparian landowners, irrigators, business and industry representatives, realtors, educators, and several State and federal agencies with jurisdiction over river management. They laid a groundwork for cooperative water planning and convinced key parties, particularly in the agricultural community, that they offered a constructive opportunity to resolve resource management conflicts.

The DQ Plan includes chapters describing the information resources collected in the planning process (Chapter 4, containing topical summaries of the extensive libraries of materials housed at the Jamestown S'Klallam Tribal Administration Building in Blyn, Washington) and the technical support structure established for data management (Chapter 9, containing analysis of information needs and data gaps as well as strategies and recommendations for research and data management). Chapter 4 of the DQ Plan also provides overviews of project reports commissioned for the Plan and technical studies undertaken by Plan participants; inventories planned and recent habitat studies and projects; and inventories stream flow data.

Chapter 11 of the DQ Plan contains its mission statement and regional planning goals and objectives, which adopt those of the Chelan Agreement. Chapter 12 of the DQ Plan provides the original water resources planning agreements, which created a foundation for collaborative water and watershed planning in Washington. These include the Tribal/State Environmental Protection Memorandum of Understanding and the subsequent Chelan Agreement, as well as the Regional Planning Group (RPG) ground rules. Chapters 13-15 describe the RPG committees, the pilot project itself, and its linkages.

Dungeness Area Watershed Analysis (1995) and Modules for Sedimentation and Stream Channels (2002)

As part of regional forest management planning at the federal level, a watershed analysis was prepared for the Dungeness River. An interagency team (Dungeness Area Watershed Analysis Cooperative Team [DAWACT]) was formed in 1994 to complete the analysis, including the Olympic National Forest, United States Fish and Wildlife Service (USFWS), Olympic National Park (ONP), Natural Resources Conservation Service (NRCS), Washington Department of Fish and Wildlife (WDFW), Clallam County, Jamestown S'Klallam Tribe (JSKT), Quilcene Ancient Forest Coalition, and Merrill & Ring Timber Company. The team followed federal guidelines for watershed analysis, referencing the *Olympic National Forest Plan*, DQ Plan (1994), *Dungeness River Area Watershed Management Plan* (DRMC and CCDCD 1993), and *Sequim Bay Watershed Management Plan* (SBWMC 1989).

The *Dungeness Area Watershed Analysis* (DAWACT 1995) area included the Dungeness River and its tributaries, as well as Johnson Creek to the east and McDonald and Siebert creeks to the west. "Key questions" were defined in five categories: fish/fish habitat; water quality/quantity; wildlife; vegetation; and riparian areas. Each of these categories forms a "module" in the plan. For each key question, values and uses are described; past and current conditions are characterized; desired conditions and trends are projected; opportunities are identified; and monitoring and information gaps are addressed.

The Olympic National Forest (Sasich et al. 2002) prepared updated sedimentation and stream channel modules to supplement the1995 *Dungeness Area Watershed Analysis* in these critical areas. The modules present a similar approach in defining key questions and describing resource conditions. They do not present recommendations related to these findings, however.

Keys to an Understanding of the Dungeness River System (1996)

A fundamental information source of broad scope, the *Keys to an Understanding of the Dungeness River System* was compiled by Clark and Clark (1996). This document includes an overview of the river as a system; a detailed account of the history of human resource development and use in the watershed; summaries of fish and wildlife, geology and climate history; a detailed presentation of hydrologic and hydrogeologic data; and an extensive, annotated bibliography. It also includes a milepost description of the Dungeness River and its tributaries. A manual to using the "Keys" also was published.

Trust Water Agreement (1998)

Washington State's first Trust Water Rights agreement was negotiated between the WUA and Ecology, and signed as a Memorandum of Understanding (MOU) to Transfer Water Under Trust Water Rights Program Chapter 90.42 RCW, dated April 13, 1998. Substantially all of the perfected surface water irrigation rights on the Dungeness River are brought under this MOU. Under the MOU, the irrigators have agreed to divert no more than half the flow of the Dungeness River[1] and transfer water saved through conservation and efficiency measures to trust status. The MOU (WUA 1998) contains other notable purposes and provisions for watershed planning:

- It establishes certainty and a collaborative basis for water conservation and efficiency improvements for agricultural water use, to extend limited water supplies.
- It protects the water placed in the program from relinquishment under Washington law.
- It reserves one-third of the water for future irrigation use, as needed, under adjudicated rights of the water users, and transfers two-thirds to instream flow.

Innovative uses of the Trust Water MOU could be incorporated within any of the "pathways" for ESA (e.g., as part of a program qualifying for 4(d) Rule exception, as part of reasonable and prudent alternatives leading to a "no jeopardy" opinion, or as part of a Habitat Conservation Plan [HCP]).

Sequim-Dungeness Valley Agricultural Water Users Association Comprehensive Water Conservation Plan (1999)

The Montgomery Water Group (MWG) completed a *Comprehensive Water Conservation Plan* in 1999 for the WUA, detailing options for infrastructure improvements to reduce Dungeness River diversions, implement DQ recommendations, and meet the conditions of the Trust Water Agreement. The Plan projects an increase in

[1] With conservation measures now implemented, even during the 2001 drought the WUA did not divert more than about 37 percent of the flow at any time.

Dungeness River flows of up to 28 cfs if all recommendations are implemented, equating to a 16 percent gain in streamflows in average and dry years (see Section 1.3.4 below for further detail).

Floods in Lower Sequim Bay Tributaries (1999)

Orsborn and Orsborn (1999) prepared flood hazard analysis and planning in five drainages in the Blyn Basin, all tributaries of Sequim Bay. The five, including Dean, JCL, and Chicken Coop creeks (and two unnamed streams) were described in terms of existing hydrology and potential for increased flooding with future development. Recommendations were provided to minimize impacts for wetlands, streams, and fish.

Washington State Conservation Commission Salmon and Steelhead Habitat Limiting Factors for WRIA 18 (1999)

The *Limiting Factors Analysis* (Haring 1999) summarizes technical information on the role of habitat in healthy populations of natural spawning salmon and habitat limiting elements; watershed descriptions for WRIA 18 streams; species-by-species summaries of distribution and condition of salmon and steelhead stocks; an extensive and detailed analysis of fresh water habitat limiting factors by subbasin; analysis of marine habitat limiting factors; an assessment of the severity of limiting factors; a summary of high quality habitats in need of protection; and a review of data gaps. Each subbasin analysis addresses fish access, floodplain modifications, channel condition, substrate, riparian condition, water quality, water quantity, biological processes, and estuarine conditions and present recommendations to address limiting factors.

Hydrogeologic Assessment of the Sequim-Dungeness Area (USGS 1999)

The DQ Plan recognized critical interactions between groundwater and surface water in the Dungeness watershed, and recommended an extensive program of hydrogeologic research. The USGS (Thomas et al. 1999) accomplished significant progress toward these recommendations in its 1999 *Water Resources Investigations Report*, *Hydrogeologic Assessment of the Sequim-Dungeness Area*. The report was prepared in cooperation with Clallam County and Ecology. Its objectives are to:

- Describe and quantify the hydrogeologic framework, groundwater flow, and hydraulic properties of the groundwater system, including the Miller Peninsula to the east and extending to Morse Creek in the west, the Strait of Juan de Fuca to the north, and the Olympic foothills to the south.
- Improve estimates of groundwater recharge.
- Estimate flows between the groundwater system and streams and irrigation ditches.
- Describe the magnitude and distribution of nitrate and estimate the probable major sources of nitrate in the groundwater system.
- Determine pumpage from the major aquifers for one calendar year.
- Estimate subsurface inflow from bedrock areas to the south.

Three aquifers were described, including their boundaries, confining beds, and rate and direction of flow across them. These three are termed the “shallow,” “middle,” and “lower” aquifers. Water budgets were created for both the long-term and the study period (December 1995 to September 1997), based on analyses of precipitation, runoff, evapotranspiration, and groundwater recharge and discharge. The report is extensively reviewed in Chapter 2 of this Plan.

1.2.3 History of Watershed Planning in West WRIA 18

Elwha River Ecosystem and Fisheries Restoration Act (PL 102-495) and Dam Removal (1992)

Elwha River resources were addressed in a previous watershed planning process leading to the Elwha River Ecosystem and Fisheries Restoration Act (Public Law (PL) 102-495, 1992). The Act established a framework for evaluating the effects of the two dams on the Elwha mainstem, and for their removal if necessary for the full restoration of the Elwha River ecosystem and native anadromous fisheries. The Act explicitly does not abridge or modify existing rights to Elwha River water or affect any tribal rights.

Implementation of the Act to date by the United States Department of Interior (USDI) has included a Secretarial Report to Congress (The Elwha Report, USDI et al. 1994), two Environmental Impact Statements (USDI et al. 1995, 1996), and a Record of Decision. The WRIA 18 Intergovernmental Agreement states that “*planning carried out under this agreement shall complement, not reopen or otherwise prejudice, that preexisting and ongoing process*.”

The Elwha Report (USDI et al. 1994) includes terms of acquisition for the dam projects, alternatives in lieu of dam removal, specific proposals for management of all lands acquired outside the boundaries of the ONP, measures to protect existing quality and availability of water from the Elwha River for municipal and industrial purposes: An Elwha River Restoration Mitigation and Information Work Group (ERRWG) meets monthly to address mitigation options for the City of Port Angeles, Dry Creek, and Elwha Homeowners water systems prior to dam removal. A supplemental EIS by the National Park Service (NPS) is expected to be completed in 2004.

Port Angeles Regional Watershed Characterization (1994)

Concerned with potential effects of nonpoint pollution on beneficial uses of water, in 1993 Clallam County Commissioners requested the Puget Sound Cooperative River Basin Team (PSCRBT) to assist in characterizing the Port Angeles Area watershed. A local watershed committee was formed to guide the characterization, including representatives from Clallam County, the City of Port Angeles, Port of Port Angeles, Clallam Conservation District, ONP and the PSCRBT. A draft characterization was prepared in 1994 (Clallam County Planning Division et al. 1994), which the County used to develop and implement both a watershed plan and regional comprehensive land use planning under the Growth Management Act (GMA). The characterization divides the Port Angeles watershed into four zones, including:

The area east of Morse Creek (to Siebert Creek);

The west side of Morse Creek, west through the lower Elwha River drainage and Lake Sutherland, including the City of Port Angeles and Ediz Hook;

Eden Valley and the upper Colville and Salt creek areas; and

National Park lands to the south.

The characterization (Clallam County Planning Division et al. 1994) summarizes watershed natural resources, land use and socio-economics; reviews beneficial uses of water (including drinking water, fish, shellfish and wildlife habitat, recreation, commerce and navigation) and describes nonpoint sources of pollution (forestry, agriculture, urban, and residential). Lake Sutherland is identified and profiled as an Area of Special Concern; water quality in the lake was considered adequate but potentially at risk from onsite septic systems.

Generally, the report found that the Port Angeles Harbor and urban streams were the most severely impacted; urban and high density residential growth were considered the most important threats to future water quality. Uncontrolled stormwater was greatly affecting many urban streams, particularly turbidity in Peabody and Valley creeks. Fecal coliforms were high in Peabody Creek and were elevated above standards in Dry, Tumwater, and White creeks. Road construction and timber harvest in forestlands adjacent to streams affected salmon habitat, but agricultural impacts were limited. Stream baseflows were fed by groundwater recharge and wetlands, and low flows were limiting to both anadromous and resident fish populations.

Washington State Conservation Commission Salmon and Steelhead Habitat Limiting Factors for WRIA 18 (1999)

The Limiting Factors Analysis (Haring 1999) described above also includes West WRIA 18 streams.

1.2.4 WRIA 18 Watershed Planning Process

WRIA 18 Watershed Plan Roadmap

Figure 1.2-2 illustrates the WRIA 18 watershed planning “roadmap.” The figure combines information on the duration and timing of activities in the several phases of watershed planning; it shows stakeholders involved and their major activities; and it lists for each phase the key agreements and products. A key at the bottom of the figure identifies the various icons.

Following the organization and grant agreement steps described above, Phase 3 watershed planning began with a “visioning” workshop, moving into plan development, review, and approval. The two Planning Units participated in watershed planning on separate and parallel tracks. Both EMMT and DRMT held a series of workshops, drawing on existing watershed assessments and resource studies to identify issues, develop alternative solutions, and prepare plan recommendations.

Time	To Feb 2001	March 2001	2002-2003	Feb - June 2003	September 2003
Phase	Start-up	Vision	Plan Development	Plan Review	Plan Adoption
Activities	Select IG's Select WORK PLAN APPROVE	P.I. WORK PLAN Workshop Vision Workshop Workshop Interviews	PH 2 Morse Creek Small Basins Elwha River EMMT Public Process NON-PROJECT REVIEW FORM Workshops PH2 Rpt Open House	Draft SEPA Draft Plan Draft Plan Public Review PLAN REVIEW REVISE, APPROVE	County Commissioners Final Plan
Agreements	• Contract • Work Plan	• Process • "Headlines" Issues Action • Visions • Outline of Plan	• Characterization of Issues • Identification of Alternatives • Ranking of Alternatives • Plan Recommendations Midpoint Review STOP and take stock of progress re "combined plan" document	• EMMT/DRMT Approve Plan • EMMT/DRMT Approve SEPA	• County Commissioners Approve Final WRIA 18 Watershed Plan and SEPA
Products	• Contract • Work Plan • Office Set-up	• Outline • Public Involvement Work Plan	• Phase 2 Data Synthesis (EMMT) • Phase 2 Report (DRMT) • Workshop Materials • Outreach Materials	• Draft Plan • Draft SEPA (NPRF)	• Final Watershed Plan • Final SEPA
Key	EMMT, DRMT, IG's, Facilitator, Documents, Public Meetings, Dept. Ecology, County Commissioners, Stakeholder Interviews, Outreach Coordinator				

Figure 1.2-2. WRIA 18 Watershed Plan Roadmap.

This page intentionally left blank.

EMMT used a geographic focus to organize its work, proceeding from Morse Creek in the east, through the smaller urban independent drainages in the center of West WRIA 18, and completing its work with the Elwha River. For each subbasin, EMMT developed characterizations of resources (including salmon stocks and status, habitat condition and limiting factors) as a basis for issues identification, alternatives analysis and plan recommendations.

DRMT took a somewhat different approach, building on and updating the existing DQ Plan. A series of workshops were held to update that plan and deal with new and emerging issues. These issues included habitat, flows, groundwater, water quality, estuarine/nearshore, irrigation, water conservation, flood-hazard planning, stormwater, land use, forest practices, roads, water supply, water use, water budget, education and public involvement, as well as issues specific to Sequim Bay (WRIA 17).

The East and West WRIA 18 planning processes culminated in joint meetings in which EMMT and DRMT plans were integrated, resulting in this Watershed Plan. This Plan links local resource knowledge and planning to regional and State salmon recovery guidelines and processes, including the Joint Natural Resources Cabinet Guidance on Watershed Assessment for Salmon (JNRC 2001), the Shared Strategy (discussed below), and the North Olympic Peninsula Lead Entity Strategy and Process - 2001 Project Strategy (NOPLE 2001). As part of the watershed planning process, pathways to ESA resolution and salmon recovery were explored. Through links to a Comprehensive Irrigation District Management Plan (CIDMP) being developed by the WUA, a Habitat Conservation Plan (HCP) may also become incorporated in the longer-term WRIA 18 planning process.

East WRIA 18 Flow of Planning

Figure 1.2-3 depicts the flow of planning in East WRIA 18, linking the watershed planning, salmon recovery, and habitat restoration processes. The figure illustrates the origin of East WRIA 18 planning in the DQ Plan (described above). As shown, DRMT carries forward the watershed planning process begun under DQ. As provided by County ordinance, it also advises Clallam County Commissioners.

DRMT is integrating responses to the listings of salmonid species under the Endangered Species Act (shown in blue in the center axis of the figure); the completion of 2514 watershed planning (shown in blue to the right side of the figure); and the restoration of Dungeness River habitat and recovery of salmon (shown in green to the left side of the figure).

A number of the governments represented on DRMT are pursuing 4(d) Rule compliance with ESA, as shown by the black arrows connecting their “seats around the table” to that box in the ESA pathways. The USFS, a federal agency, is complying with ESA through Section 7 consultation. The irrigators have undertaken a pilot Comprehensive Irrigation District Management Plan (CIDMP, shown in yellow) funded by the Washington Department of Agriculture (WDA). The CIDMP process was negotiated with the federal

Agencies National Marine Fisheries Service (NMFS) and USFWS through Washington's Agriculture Fish and Water process. This was carried forward from the Governor's Extinction is Not an Option salmon recovery initiative (JNRC 1999). The WUA has been selected for this pilot project, based on its track record of collaboration with groups pursuing watershed management and salmon recovery in the Dungeness, predating the DQ process and continuing to the present. A key success of the DQ Plan has been the implementation by the WUA of two keys to Dungeness River restoration:

- A Trust Water Memorandum of Agreement (see discussion above).
- The development of a Comprehensive Water Conservation Plan, which the WUA is now implementing.

These two cornerstones of East WRIA 18 watershed planning are also shown in yellow, leading into the current CIDMP process. The CIDMP process is intended to result in Implementing Agreements with the federal agencies that will satisfy federal requirements under Endangered Species Act (ESA) and the Clean Water Act (CWA). Because of the scale of the irrigators' river diversions, it is not likely that they will be able to pursue a 4(d) pathway to comply with the ESA, but they may incorporate a Habitat Conservation Plan (under Section 10 of the ESA) in their Implementation Agreement. The Implementation Agreement for Clean Water Act compliance would likely be in the form of a Total Maximum Daily Load analysis (TMDL). An Environmental Impact Statement (EIS) is also required under the State Environmental Policy Act (SEPA).

Similar outcomes are expected from the watershed planning process, shown in the blue box on the bottom right corner of Figure 1.2-3. The outcomes of watershed planning include:

Recommendations for an instream flow rule (instream flow element)
A water supply assessment (water quantity element)
Habitat recommendations (habitat element)
Draft Non-Project Review Form for SEPA compliance
Strategies for meeting water needs of fish and humans

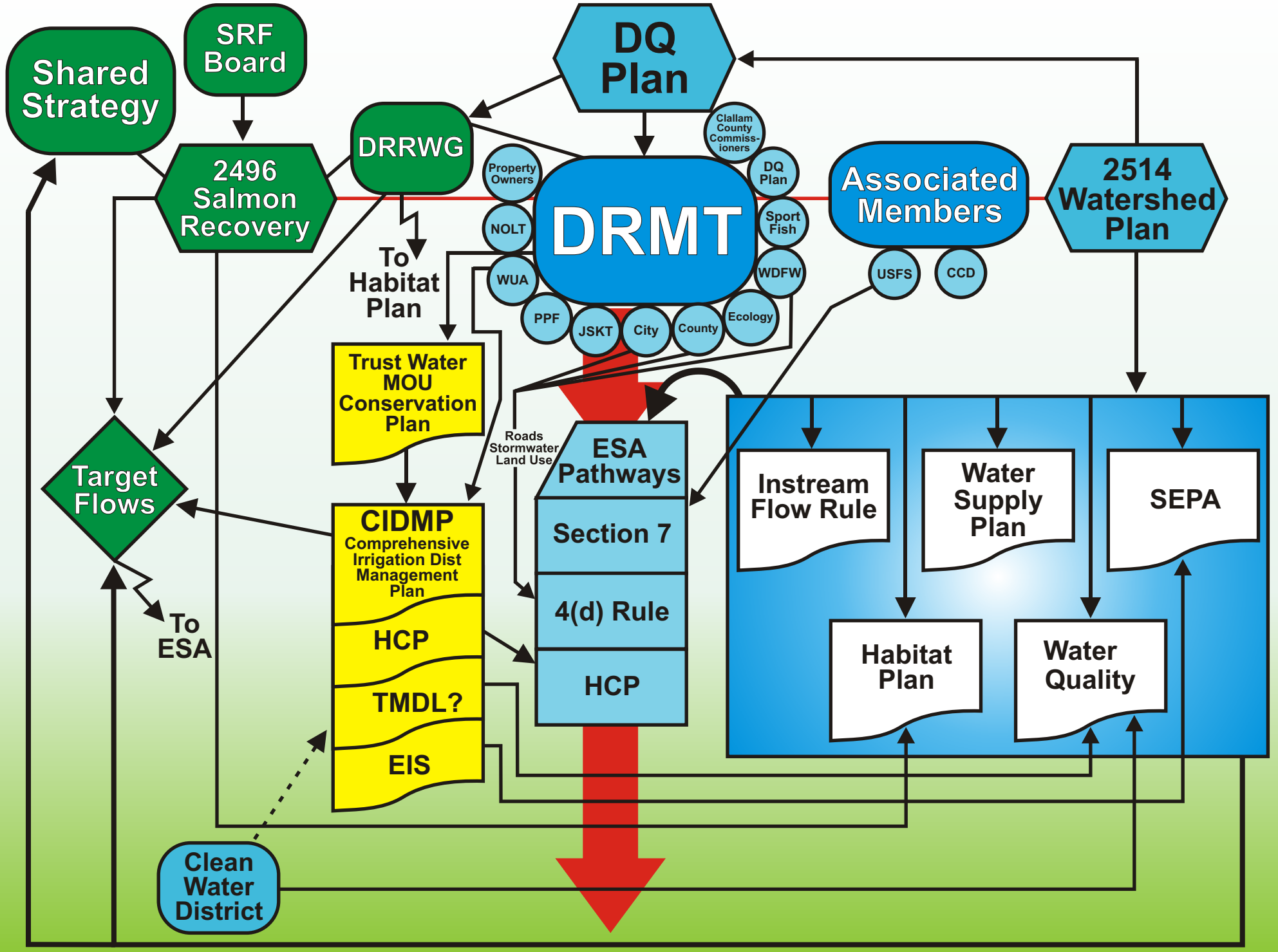

Figure 1.2-3. Flow of East WRIA 18 Planning.

This page intentionally left blank.

These watershed planning elements incorporate a number of activities and plans already underway in the watershed and overseen by DRMT. These are shown directly linked to the DRMT watershed management functions, with ESA pathways shown in blue and the irrigation compliance activities shown in yellow. All three of these—ongoing DRMT watershed management, the 2514 Watershed Plan, and the Comprehensive Irrigation District Management Plan—are directly linked to the habitat restoration and salmon recovery activities shown in green.

In completing watershed planning, DRMT has held workshops on habitat restoration, salmon recovery and ESA compliance; Dungeness River instream flows; small streams, wetlands, riparian areas, and wildlife; water quality; estuaries and nearshore marine habitat; groundwater; City of Sequim water supply; flood hazard and stormwater; irrigation; water conservation; forest practices and roads; land use; Siebert Creek; and water supply, water management and water use (see Appendix 1-E for the DRMT focus workshop schedule). A separate workshop on Sequim Bay addressed WRIA 17 issues contained within the Dungeness planning area.

Another significant result of the DQ process was the establishment of a Dungeness River Restoration Work Group (DRRWG), a technical working group responsible for identifying and driving forward the implementation of key habitat restoration projects on the Dungeness. The DRRWG has developed a detailed habitat restoration plan ("Blue Book") for the Dungeness River, which is a key source for 2496 projects and 2514 habitat planning. Since the adoption of the DQ Plan, Washington has created a Salmon Recovery Funding Board (SRFB) to review project proposals prepared under regional strategies developed by Lead Entities, including the North Olympic Peninsula Lead Entity (not named in the figure, but included within the 2496 Salmon Recovery oval). Both the DRRWG Blue Book and NOPLE Strategy and Process (NOPLE 2001) are incorporated by reference in the Watershed Plan habitat element. All three are interacting directly with the Puget Sound Salmon Forum Shared Strategy, providing the local level planning functions and technical resources needed to ground that regional strategy in effective local action. All three, plus the irrigators' CIDMP, also feed directly into the development of target flows, a key outcome for salmon recovery, ESA compliance, and watershed planning.

West WRIA 18 Flow of Planning

The flow of planning in West WRIA 18 is considerably simpler than that in East WRIA 18 (Figure 1.2-4 and Appendix 1-G), for several reasons:

EMMT does not have a history rooted in an earlier generation of watershed planning, as DRMT does with the DQ Plan. EMMT made a recommendation for a Westside watershed council comparable to the DRMT (see Chapter 3).

Irrigated agriculture is minimal in West WRIA 18, and is not represented in EMMT. There is no comparable CIDMP process. Shellfish closures have not affected nearshore waters off West WRIA 18, and there is no Clean Water District.

EMMT lacks a technical committee, and has not established a working relationship with a restoration work group (such as the Olympic National Park's Elwha River Restoration Work Group) comparable to that which exists between DRMT and the DRRWG. EMMT made a recommendation for the creation of a technical committee to advise the Westside watershed council (see Chapter 3).

The West WRIA 18 flow of planning (Figure 1.2-4) shares with DRMT the 2514 process, the 2496 salmon recovery process, and the ESA compliance pathways. Each of these processes are proceeding similarly in the two Planning Units, with similar linkages.

Target flows are of equal concern on the West side, particularly as they may affect Morse Creek and the Elwha River.

Watershed Visions

DRMT and EMMT met in a joint Watershed Vision Workshop on March 29, 2001. The two Planning Units considered watershed functions and values that members wanted the Watershed Plan to reflect and defined the pressing needs to which it must respond. They identified indicators of stress in WRIA 18 watersheds as well as drivers of change (such as population growth and land development). High-quality preservation and restoration areas were listed as those places in WRIA 18 that remain in good condition and those that need attention. Visions of the future were elicited as a guide to the planning process. These included visions of habitat and instream flows in 50 years, and of water supply and water quality in 20 years.

The Planning Units also developed an overview of the larger planning framework used to orient watershed planning within the larger context of laws and regulations. The "human dimensions" of watershed planning were explored to identify watershed planning stakeholders, their needs, and how they will use or be served by the plan for long-term resource management. Joint implementation of Watershed Plan recommendations was discussed, to identify what parts of the watershed plan might be implemented across all of WRIA 18 and what parts could lead to independent recommendations and actions in East and West WRIA 18. A draft Watershed Plan outline was developed, considering the scope of issues and the constraints of time and budget. The joint Planning Units reviewed the watershed planning process to define the flow of work and "road map" for Plan development.

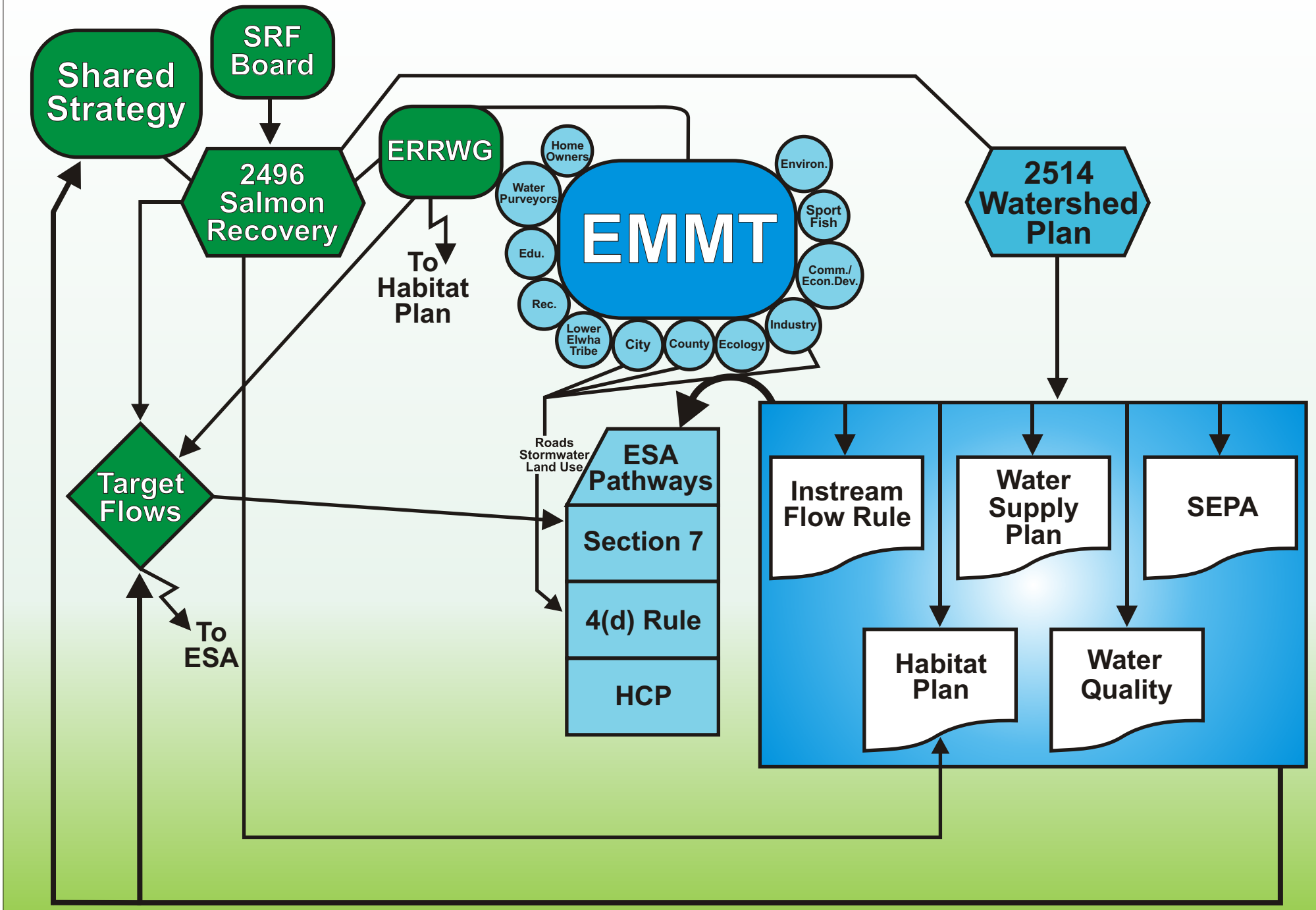

Figure 1.2-4. Flow of West WRIA 18 Planning.

This page intentionally left blank.

Summary of Public Involvement Process

Both Planning Units have followed the Watershed Management Act's mandated process to organize, secure the involvement of key stakeholders in the watershed, and invite the participation of tribes. Each Planning Unit prepared a public outreach plan and held a total of four public meetings (two in Sequim and two in Port Angeles) during the course of Watershed Plan preparation. A public hearing was held by Clallam County Board of Commissioners at the time the final plan was considered for approval.

The *WRIA 18 Watershed Plan* is the result of a lengthy, collaborative, and consensus-based process involving all key stakeholders in the watershed. Each Planning Team developed its approach to watershed planning through a planning process characterized by open public meetings; active public outreach; full involvement of all key stakeholders as members of the Planning Teams; and lengthy consideration of watershed issues, alternatives, and solutions. In DRMT's case, planning has extended over more than a decade, rooted in the previous Dungeness-Quilcene Watershed Plan.

The Watershed Plan represents the collective wisdom and collaborative work of many participants over an extended period. The Intergovernmental Agreement mandates that interim decisions reached during the planning process be reached by consensus (which the Agreement defines as "unanimous agreement"), and both Planning Teams have proceeded under consensus-based decision-making.

ADDENDUM, May 2005

- 2003 amendments to Chapter 90.82 RCW describe and authorize funding opportunities for implementation (a.k.a. Phase 4), including a requirement for a complete implementation plan within the first year of funding.

- SEPA documentation may be found in Appendix 1-H.

- The planning unit submitted their approved watershed plan to the Board of Clallam County Commissioners in the fall of 2004 for its adoption. Following three public hearings and a variety of outreach activities extending into spring 2005, the joint planning unit amended some of the recommendations from Chapter 3.

- On June 7, 2005, the Board of Clallam County Commissioners unanimously approved the WRIA 18 Watershed Plan as amended by the joint planning unit. Documentation of the extended public hearing process may be found in Volume 2: Appendix 3-E.

This page intentionally left blank.