Context - Why Does This Plan Exist?

Overview

In 1998 the Washington State legislature created the Watershed Management Act (Engrossed Substitute House Bill 2514, Revised Code of Washington 90.82) to support local communities in addressing water resource management issues. The Act established a voluntary planning process for the major river basins in the state; these basins are called Water Resources Inventory Areas or WRIAs. The Washington State Department of Ecology determined the boundaries of all of the WRIAs. This planning process allows local governments and interested groups and citizens to assess basin water resources and to develop strategies to manage water quantity, water quality, fish habitat and in-stream flows. This watershed planning is intended to support economic growth and promote water availability and quality for the state.

WATERSHED PLANNING
is intended to support economic growth and promote water availability and quality for the state.

Need for Management of Chehalis River Basin Water Resources

When this legislation was enacted, some areas of the Chehalis River Basin were facing problems related to water quality, water supplies for a growing population and fish habitat. A related issue was flooding. The Chehalis River system has historically had natural flood events in the winter and low flows in the summer; impacts from human development have contributed to extremes. As a result, fall and winter floods have plagued communities located within the floodplains throughout the Chehalis Basin, yet returning salmon have difficulty navigating portions of the mainstem Chehalis River and tributary streams in the summer due to low flows and related high water temperatures.

To address these problems in an educational and advisory capacity, a local group held its first fomal meeting on January 16, 1997. This group eventually became the Chehalis Basin Partership, which consists of four counties, two tribes,12 cities, two water suupply utilities, four state agencies, the Port of Centralia, major interests, and a citizen-at-large from each of the four counties. The Partnership was codified through an intergovernmental agreement dated August 31, 1998.

Chehalis Basin Partnership members

The 1998 Watershed Planning Act provides a framework to resolve water-related issues collaboratively. It encourages local citizens and governments to join together with tribes and state agencies to develop watershed management plans for entire watersheds. When legislative passage of the Watershed Planning Act made funding available for local groups to plan solutions to water resource problems, member organizations of the Partnership decided to seize the opportunity and undertake watershed planning.

Planning Process

Under state law, a group of "initiating governments" begins the watershed planning process by applying for state grant funds and determining the scope of planning. For a management area consisting of more than one watershed basin, the law prescribes that initiating governments shall be:

- All counties containing territory within the management area[1]
- The largest city or town within each WRIA in the management area
- The water supply utility obtaining the largest quantity of water from each WRIA in the management area
- All tribes with reservation land in the WRIA

The Initiating Governments for the Chehalis Basin consisted of those agencies that signed the Chehalis Basin Agreement on August 31, 1998:

1. The four largest counties in the Chehalis River Basin (Grays Harbor, Lewis, Mason, Thuston)
2. All interested cities and towns within the Chehalis River Basin (Aberdeen, Centralia, Chehalis, Napavine, Ocean Shores, Pe Ell)
3. The water supply utility obtaining the largest quantity of water in each the Upper and Lower Chehalis River Basin (Boistfort Valley Water in the Upper Basin, Grays Harbor Water District #2 in the Lower Basin);
4. Washington State Department of Ecology; and
5. The Confederated Tribes of the Chehalis Indian Reservation and Quinault Indian Nation.

The initiating governments are also responsible for determining the composition of the planning group, known in state parlance as the "planning unit," and for establishing the overall scope of planning. The majority of the initiating governments were members of the Chehalis Basin Partnership at the time the watershed planning process began. Since the Partnership was already focused on water resource issues and the Watershed Management Act gives the initiating governments broad latitude in the matter of setting up the planning unit, it was a logical decision to designate the Partnership as the planning unit for WRIAs 22 and 23.[2]

The planning unit has the authority to approve or reject the watershed plan for submittal to the county legislative authorities; however, it cannot create obligations for entities that are not represented on the planning unit and do not voluntarily accept obligations.

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1. Chapter 90.82.130(2)(c) RCW allows counties to opt out of watershed planning which have very small amounts of land in the Chehalis Basin chose not to participate in the development of this plan. Cowlitz County, Jefferson County, Pacific County and Wahkiakum County have chosen not to participate.

2. The Washington State Department of Ecology designated the Lower Chehalis Basin as WRIA 22 and the Upper Chehalis Basin as WRIA 23.

At the outset of the planning process, Partnership members committed to developing solutions that would be cost effective and that would complement and take advantage of the existing water resource management framework. This framework includes:

- Laws and regulations
- Growth management plans
- Coordinated water system plans
- Water quality monitoring efforts
- Salmon recovery planning/funding

Other Legislation Supporting This Plan

ESHB 2496, Salmon Recovery Act (Chapter 77.85 RCW)

The 1998 state legislative session also passed ESHB 2496, the Salmon Recovery Planning Act. ESHB 2496 established, in part, a statewide process to identify habitat factors limiting salmon production in the state. This process requires assembly of a technical advisory group of basin experts and utilizes a set of habitat criteria to be applied statewide to produce what has been termed a "Limiting Factors Analysis" for each river. This Limiting Factors Analysis serves as the primary source of information on fish habitat for the Watershed Plan. It is important to note that the Limiting Factors Analysis addresses only habitat; it does not address critically important, non-habitat related parameters, such as harvest rates, the influence of hatchery programs, and impacts of hydropower.

In addition, a Salmon Recovery strategy for the basin has been completed that identifies and prioritizes restoration projects in the basin. Grays Harbor County leads salmon recovery efforts for the entire basin.

For more information on these and other laws relevant to water resources in the Chehalis Basin, see Section IV-E of this Plan.

Additional Legislation: HB 1832 (Chapter 90.82 RCW)

In 2001, the state legislature passed a bill authorizing funding for local planning units to study instream flow levels, water quality, and/or water storage options at the WRIA level. Each WRIA would be eligible for $100,000 to assess these factors and make recommendations. The only stipulation set by the legislature was that if a planning unit accepted the $100,000 grant to study instream flows, it would recommend to the Washington State Department of Ecology (Ecology) whether or not to change the regulatory minimum flows and, if so, to what level.

The Partnership took advantage of this funding and expanded the scope of the planning effort to include water storage and instream flows as well as conducting a more thorough analysis and plan for water quality. Water storage results were due to Ecology on June 30, 2003. Instream flow recommendations are due September 30, 2003. Grays Harbor County is requesting an

extension for water quality recommendations and deliverables to October 31, 2003. The Partnership was therefore required to make a recommendation to Ecology on instream flows by September 30, 2003 — one month before the Plan itself was due.

Connections to Other Processes

Funding for watershed planning and implementation under ESHB 2514 is limited. Given this reality, the Partnership agreed to take advantage of plans, funding and resources from other processes, where possible, to facilitate watershed planning. Relevant processes are summarized in the following table:

Effort	*Elements Addressed*	*Comments*
Army Corps of Engineers' Ecosystem Restoration Study	Habitat, Water Quality	Recommends specific restoration projects, may provide future funding for these
Army Corps of Engineers' Flood Damage Reduction Study	Water Quantity, Quality	Only Upper Basin; provides matching funds for flood damage reduction
Coordinated Water System Plans	Water Quantity (supply)	Local water purveyors must complete these to address future water supply, stormwater, etc.
County comprehensive plans	Water Quantity (supply), Habitat & Water Quality via land use	Filed to meet Growth Management Act requirements
ESHB 2496, Salmon Recovery Act	Habitat	This ESHB 2514 plan uses 2496 information by incorporating the Limiting Factors Analysis and the habitat resoration work plan for WRIAs 22 and 23
Shoreline Master Plans	Habitat, Water Quality	Filed to meet Shoreline Management Act

Mission, Goals & Objectives

Early in its watershed planning effort, the Partnership opted to agree on a mission statement, along with goals and objectives, to guide the selection of technical studies and the development of the Plan itself.

Mission Statement

As with all its major decisions in the watershed planning process, the Partnership worked to reach consensus on a concise mission statement for the water resources planning process. Discussions over three months culminated in agreement in the fall of 2001 on the following mission statement that reflects the priorities of the Partnership:

The mission of the Chehalis Basin Partnership is to develop a management plan that will result in effective, economical, and equitable management of the water in the Chehalis Basin to sustain viable and healthy communities and habitat conditions necessary for native fish.

To clarify the intent of the Mission Statement, the Partnership elaborated on the meaning of specific terms.

- "Economical" reflects the group's desire that water resource management decisions and Plan recommendations should consider associated costs.
- "Effective" is intended to convey the group's desire that this Plan be actively implemented and updated, not gather dust on a shelf.
- "Equitable" captures the Partnership's desire to have the cost of implementing Plan recommendations borne equally by all involved parties.
- The term "sustain" was carefully chosen to indicate the Partnership's awareness that the water resource management framework must preserve the valuable natural resource assets of the basin in perpetuity, to the extent possible.
- The Partnership expressed the desire and intent to preserve and, where possible, enhance "viable and healthy communities" while maintaining or improving the health of native fish runs. The term "viable and healthy communities" is meant to encompass all human endeavors in the Chehalis Basin including cities, tribes, rural areas, modern agriculture and forestry, and recreation opportunities.

Goals & Objectives

Simultaneous with developing its mission, the Partnership developed by consensus a set of specific goals and objectives for watershed planning, for public involvement, and for water quantity, water quality and habitat.[1] These are presented below.

General Goals

- Work together to find solutions, build relationships, and obtain consensus on the Plan while fostering a sense of the importance of watershed management and stewardship.
- Focus on cost-effective environmental improvements and efforts based on available funds, while balancing a sustainable environment with economic development, using a cooperative, not a regulatory approach.

Public Involvement Goals

- Use the Citizen Advisory Committee and public education to raise awareness of citizens about watershed issues.
- Gain input from the public in developing and adopting the Plan.
- Encourage basin residents to implement the Plan, with government support.

Water Quantity Goal & Objectives

Goal: Bridge the gap between existing stream flows and target flows for fish, wildlife and human use.

Objectives:

- Clarify Washington State water law to citizens.
- Conduct a water balance for the Chehalis Basin, including complete groundwater data.
- Identify tools available to meet this goal, e.g.
  - Existing water rights
  - (More) Conservation
  - Water storage
  - Landscape changes, including habitat improvements
  - Switch to deep groundwater withdrawals (no hydraulic continuity)
  - Adjust timing of usage
  - Buy senior water rights
  - Purchase "interruptible supply"

1. At the time the goals were developed (summer-fall 2001) instream flows were not included in the planning effort. However, when the state made additional funding available to assess instream flows, the Partnership decided to include flows in the planning effort.

Water Quality Goal & Objectives

Goal: Prevent degradation of and/or improve water quality to have clean water (as defined in Washington State water quality standards) for all fish, wildlife and human uses.

Objectives:

- Consider improving water quality through increasing water quantity (using tools identified above)
- Implement current and future water quality cleanup plans
- Develop strategies to identify and prevent water quality degradation

Habitat Goal

Prevent degradation and improve habitat to support healthy fish and wildlife populations and to support water quality and quantity goals.

Cooperative, Proactive Approaches to Obtain Goals

Members of the Partnership specified that voluntary, cooperative, proactive approaches to reach these goals would be vastly preferable to additional regulations. Partnership members felt that regulations in place at the time this Plan was developed, if enforced, would be sufficient to protect water resources in the Chehalis Basin indefinitely. These voluntary approaches should take the form of intergovernmental agreements or memoranda of understanding between local governments and water resource stakeholders. These agreements should be proactively developed in the forum of the Partnership.

MEMBERS
of the Partnership specified that voluntary, cooperative, proactive approaches to reach these goals would be vastly preferable to additional regulations.

Protection of Areas of Healthy Water Resources

In the process of developing the Chehalis Basin Watershed Plan, the Partnership reached agreement on an additional, overarching, high priority goal: to identify and protect areas that have healthy water resources. This goal is based on a recognition that it is invariably easier and less costly to protect healthy resources than it is to restore those resources after they have been allowed to deteriorate. These high quality resources are not only of value in themselves, they are also essential to efforts to restore degraded resources in more developed areas of watersheds. To accomplish this goal requires understanding why these areas support healthy resources, protecting them from deterioration, and expanding them.

IT IS INVARIABLY EASIER
and less costly to protect healthy resources than it is to restore those resources after they have been allowed to deteriorate.

Scope of Planning: Water Quantity, Water Quality, Habitat & Instream Flows

The Watershed Management Act identifies one required element (water quantity) and three optional elements (habitat, water quality, and instream flows) of watershed planning. The initiating governments are responsible for determining the scope of planning. The initiating governments in the Chehalis River Basin initially opted to address the required water quantity element and habitat and water quality from the optional elements.

In 2001, the Washington State legislature made funding available for local planning units to study instream flow levels and water storage prospects via ESHB 1832. The Chehalis Basin Partnership (the Partnership) elected to apply for grant funds to assess water storage possibilities and instream flow levels and to include reports on both elements in its water resources management plan for the Chehalis Basin.

This plan presents an opportunity to address all of these issues in a coordinated, collaborative manner across the entire Chehalis Basin.

Water Quantity

This element of the planning process involves assessing water supply and use in the management area and developing strategies for future use. The state directs local planning groups to develop alternatives for meeting current and future needs for both in-stream and out-of-stream objectives. This may include:

- An assessment of available water
- Inventory of water rights, claims and permits
- Projection of future needs
- Methods for increasing available water

During the development of this Plan, the Washington legislature passed and the Governor signed into law an act that requires planning efforts to "address the planned future use for municipal water supply purposes as defined in RCW90.03.015, including how these rights will be used to meet the projected future needs identified in the watershed plan, and how the use of these rights will be addressed when implementing instream flow strategies identified in the watershed plan. Thus, this additional requirement was added to the requirements of this watershed planning effort.

Habitat for Salmon

Fish habitat is integrally related to the health of salmon runs. The Chehalis River has historically had strong runs of several salmonid species, including chinook, chum, coho, cutthroat and steelhead runs. The decline of many

of these runs led to the inclusion of fish habitat in the watershed planning effort. It also led the Partnership to undertake salmon recovery efforts via ESHB 2496, the Salmon Recovery Act, and through development of a local strategy for habitat resoration. Grays Harbor County is the lead entity for the 2496 process.

Water Quality

Twenty-four water bodies or stream segments in the Chehalis Basin are on the Washington State 303(d) list of surface waters for which beneficial uses of the water — such as drinking, recreation, aquatic habitat, and industrial use — are impaired. These problems, along with increasing temperature and turbidity problems on the Chehalis River itself, moved the Partnership to include water quality in the scope of this planning effort.

Instream Flows

With the legislative passage of HB 1832, the state made additional funding available to assess instream flow levels. Hydrologists from the Washington State Department of Ecology indicated that 15 of the 31 stream flow control points did not provide enough data to assess whether minimum instream flow levels were being met or not. Given the need for additional information and the availability of funding to acquire it, the Partnership applied for and received a grant to fund stream gauging and data collection on several tributaries of the Chehalis River.

By adding instream flows to the planning effort, the Partnership adopted the full complement of elements eligible for consideration in this Watershed Plan:

- Water Quantity
- Water Quality
- Habitat
- Instream Flows

Water Storage

Under HB 1832, the state legislature allocated funding to assess options for water storage in the watershed planning process. The Partnership was interested in exploring whether excess water in the winter is a resource that might be used in the Chehalis Basin during the summer dry season. Consequently the Partnership applied for a grant to identify and assess the feasibility of multi-purpose storage projects in the Chehalis watershed. If feasible, stored water could be used to enhance low flows and/or provide water for both consumptive and non-consumptive uses.

Origin of Issues of Concern

The Partnership asked the Steering/Technical Committee to help with idenifying issues to be addressed in this Plan. That Committee compiled

Satsop River

a preliminary list of water resource issues of concern in the Chehalis Basin from late 2001 through mid 2002 and solicited additional issues from the Partnership at its monthly meetings during that time period.

State and federal natural resource agencies provided staff persons to the Chehalis planning effort to lend expertise on fish habitat, water quality issues, and water rights/usage analysis. These staff members suggested additional issues to consider.

County Commissioners from Grays Harbor County underscored the importance of soliciting and addressing water resource issues from citizens of the Chehalis Basin. In the spring of 2002, the Partnership planned a series of four public meetings to inform citizens and water stakeholders of the basin about the planning process and obtain their ideas and water-resource related issues of concern. *(Summaries of these Study Area meetings are included in this Plan beginning on page VII-31.)*

In the fall of 2002 the Partnership reviewed the public input from the four public meetings and prioritized the list of water resource issues of concern. In early 2003 Steering/Technical Committee members volunteered to develop detailed, technical Issue Papers with possible solutions and recommendations on each of these topics for consideration by the Partnership. These Issue Papers *are included in their entirety in this Plan in Supplement Section IV, beginning on page 1*.

Stakeholders such as the Confederated Tribes of the Chehalis, the Quinault Indian Nation, Grays Harbor Water District #2 and Boistfort Valley Water Company suggested additional issues during briefings on the planning process in the spring of 2003. These issues, which were incorporated into existing issue papers where possible, are included in the overall issues matrix. The Steering/Technical Committee and full Partnership also reviewed and added to the comprehensive list of issues in the spring of 2003. This overall issues list, with a brief description of and response to each issue, is included on the following pages.

Study Area Meetings Spring 2002

Ocean Shores

Convention Center, February 26
Attendance: 10

Montesano

City Hall, March 19
Attendance: 50

Tumwater

Black Hills High School, April 16
Attendance: 45

Chehalis

Chehalis Middle School, May 21
Attendance: 50

Issues: Source, Response, Reference
Chehalis Basin Watershed Planning

Sources: STC: Steering/ Technical Committee; CBP: Chehalis Basin Partnership; Chehalis Tribe; Quinault Indian Nation, Grays Harbor Water District #2; Citizen Study Area Meetings (4)

Issues from Citizens at Local Study Area Meetings

Specific Issue	*Source*	*Description*	*Short Response*	*Plan Section or Other Document with Detailed Response*
(Army Corps' Proposed) Levee Placement	Citizen - Study Area Meeting	Paid for/built by tax $: will cause more flooding of my property and all near me (specific one is River St. & Arizona Ave & golf course area & farm property). I am totally against the levee!	The Army Corps incorporates public comment in its plans. Construction of this levee has not been authorized at this time.	Flooding Issue Paper
Action on Citizens' Issues	Citizen - Study Area Meeting	*Citizen Question:* How many of the issues raised by citizens will be included in the Plan?	Every issue raised by citizens is included in this matrix and contains a response. Those relating to water resource issues in the Chehalis Basin are addressed in detail.	Recommendations Section
Agriculture & Water Use	Citizen - Study Area Meeting	*Citizen Comment:* Natural vegetation draws up a lot of water too; it's not just irrigation.	Agriculture, especially using best management practices, is better for the health of our streams and rivers than some other land uses – though water withdrawals at certain times can impair stream flows. Water-wise agriculture (e.g. efficient, appropriately timed withdrawals) should be encouraged.	Agriculture and Water Management Issue Paper
Back-flooding	Citizen - Study Area Meeting	Connor Creek has this problem.	In WRIA 21, outside the management area of this Plan.	N/A
Bank Erosion	Citizen - Study Area Meeting	East Fork of Satsop has this issue	Erosion is a natural process, impacted by many factors including human activities. Hardening stream banks makes problems worse and transfers them to neighboring properties, and should be a last resort. Army Corps Ecosystem Restoration Study will identify bank erosion areas and prioritize flood damage reduction and habitat restoration projects. (NOTE: Army Corps funds can be used for public lands only; for other funding sources see the *Chehalis Basin Salmon Habitat Restoration & Preservation Work Plan*.)	Habitat Issue Papers

Specific Issue	*Source*	*Description*	*Short Response*	*Plan Section or Other Document with Detailed Response*
Bank Stability	Citizen - Study Area Meeting	Fisheries people told me to take out the rock I had placed and plant willow sprouts, but those washed away.	Bank stability is impacted by many factors including human activities. Army Corps Ecosystem Restoration Study will identify unstable stream bank areas and prioritize flood damage reduction and habitat restoration projects. Army Corps funds can be used for public lands only; for other funding sources see the *Chehalis Basin Salmon Habitat Restoration & Preservation Work Plan.*	Habitat
Black Lake Ditch	Citizen - Study Area Meeting	Close Black Lake Ditch - return water to Black River Drainage. (*STC Note:* This issue also applies to Macintosh Lake on Scatter Creek.)	Consider feasibility study, although cutting new channel through wetlands would be costly and Black Lake Ditch now has its own unique habitat including salmon runs. This study may not be as high priority as other needs.	Recommendations Section
Black River & other Dams	Citizen - Study Area Meeting	Once supplied water to Cedar Creek Corrections Ctr on Cedar Creek...What about fish passage over Skookumchuck Dam? (Reservoir is open but no public access.) Remove Williams Pipeline dam on Black River in order to restore salmon to Black Lake tributaries.	Water Storage Report evaluates use of dams; fish passage needed. Barriers to fish passage are addressed in Habitat Limiting Factors Analysis (LFA), a summary of which is included in this Plan. RE: Williams Pipeline, see *Black Lake Ditch* issue above.	Water Storage Report, Habitat LFA
Deepening Black Lake will dry up Ashley Creek	Citizen -Study Area Meeting	Timing may be too soon for Plan to affect.	No knowledge of plans to do this, unless it is linked to other Black Lake issues.	N/A
Building in floodplain	Citizen -Study Area Meeting	*Citizen Comment:* Development and filling in floodplain and floodways is a concern. Stop filling (protection of life and property).	Current land use management plans restrict building in floodplains, though this is allowed under certain conditions and can negatively impact other landowners.	Flooding Issue Paper

Specific Issue	*Source*	*Description*	*Short Response*	*Plan Section or Other Document with Detailed Response*
Culverts	Citizen - Study Area Meeting	Remove culvert near Churchill Rd. on Yelm-Tenino Rd (would restore salmon to branch of plunge pool Scatter Creek); what about culverts on old railroad grades?	Thurston County Parks and Recreation has applied for grant funding for this project through the Community Salmon Fund. If it doesn't get funded, the county can either pave the trail up to the culverts and stop until funding is acquired, or pave all the way to Tenino and come back sometime in the next three years (as per agreement with WDFW) to replace the culverts as funding becomes available. The trail will probably get paved in 2004.	See "Short Response"
Culverts	Citizen - Study Area Meeting	What about culverts on old railroad grades?	These and other culverts should be inventoried and, if blocking access to salmonid habitat, replaced.	Habitat LFA
E. Side Newaukum R.	Citizen - Study Area Meeting	Between I-5 bridge and county bridge on Kirkland Rd.-severe flooding every time, mitigation desirable	The Army Corps Ecosystem Restoration Study will prioritize flood damage reduction projects. Army Corps funds can be used for public lands only; for other funding sources see the *Chehalis Basin Salmon Habitat Restoration & Preservation Work.*	Flooding and Habitat Issue Paper
Fair/open planning	Citizen - Study Area Meeting	It was expressed at one or more Study Area meetings that this watershed planning process must be open and fair.	All Partnership meetings are open to the public. Four local study area meetings were held. Chehalis River Council website and *Drops of Water* paper update the residents of the Basin on watershed planning and meeting dates. Citizen representatives sit on all subcommittees of the Partnership. Four public meetings and four county-sponsored public hearings associated with Plan approval will offer other public involvement opportunities.	Public Involvement Section
Flood Control Impacts Downstream	Citizen - Study Area Meeting	*Citizen Comment:* Make sure flood control in Lewis County does NOT have negative impacts on areas downstream.	The environmental evaluation of the Army Corps' Flood Reduction Study indicates that upper basin efforts will not have negative impacts on the lower basin.	Flooding Issue Paper

Specific Issue	*Source*	*Description*	*Short Response*	*Plan Section or Other Document with Detailed Response*
Flooding Scott Lake	Citizen - Study Area Meeting	The lake doubles in quantity each year, the golf course floods and septic systems are impacted.	Scott Lake citizens have created a Drainage District to manage this issue. Due to the uniform elevation of this area, it is a difficult problem to solve.	See "Short Response"
Gravel Extraction	Citizen - Study Area Meeting	Gravel bar causes erosion of streambanks, harms fish habitat.	Gravel bars are influenced by many factors including human activities and do not necessarily harm fish habitat. Gravel extraction is no longer a common practice and must be examined in a holistic way.	Stream Function Issue Paper
Hazardous Materials	Citizen - Study Area Meeting	Need closer drop-off point to Ocean Shores for hazardous waste, e.g. old gasoline/oil, paint, etc (LeMays, outside Aberdeen, is 25 miles away and only open 2 days a week)	Funding limits Grays Harbor County from offering more locations for hazardous material drop-off.	N/A
Hydropower Water Storage	Citizen - Study Area Meeting	*Citizen Comment:* When they hold the river at a higher level to generate power, it washes away our land when they let it go.	Dams have FERC release require-ments; this issue best addressed via re-licensing process.	See Short Response
Invasive Species	Citizen - Study Area Meeting	*Citizen Comment:* Nuisance aquatic vegetation (Duck Lake was mentioned) creates too much phosphorus & other nutrients.	Plant species that are not native to this area can have negative impacts on habitat, water quality, etc. Those species that can dominate other vegetation here must not be intro-duced or should be eliminated.	Recommendations Section
Lack of En-forcement	Citizen - Study Area Meeting	Existing laws and regulations may be adequate for preservation of water resources.	This Plan recommends enforcement of existing laws. The Plan also recommends proactive, cooperative, voluntary approaches to water resource preservation.	Recommendations Section
Levees	Citizen - Study Area Meeting	*Citizen Comment:* We feel that levees are a bandaid and not a true solution to the flooding problem.	Flooding is a common and historic occurrence in the Chehalis Basin. The Army Corps study attempts to recommend a balanced approach to flood damage reduction using several techniques.	Flooding Issue Paper
Mission Statement	Citizen - Study Area Meeting	Needs to include agriculture/farming.	"Viable and healthy communities" implicitly includes agriculture. This was specifically discussed by the Partnership during formation of the mission statement.	N/A

Specific Issue	*Source*	*Description*	*Short Response*	*Plan Section or Other Document with Detailed Response*
Nuisance Species	Citizen - Study Area Meeting	Example: Increase in seal population in Grays Harbor creating fecal coliform issue + hazard to migrating salmon.	Studies of circulation patterns and DNA analysis of fecal coliform bacteria would be needed to show this. Actions to address seal impacts to salmon must consider that seals are protected under Marine Mammal Protection Act.	See Short Response
Outreach/ Assistance for Citizen Projects	Citizen - Study Area Meeting	Need to establish mechanisms to provide assistance and resources for citizens who have a habitat or water quality project.	Resource list has been created; refer to *Chehalis Basin Habitat Restoration and Preservation Work Plan*, at www.co.grays-harbor.wa.us under Public Services & Partnership	See Short Response
Overuse of water	Citizen - Study Area Meeting	The Level 1 Assessment indicates that there are a lot more water rights in the basin than water being used.	Water conservation is a key component and recommendation of this Plan.	Water Conservation Issue paper
Parks/Trails: *Comment/ (e.g., rowing access to Black Lake?)*	Citizen - Study Area Meeting	*Citizen Question:* Are there any plans to develop parks, water access, or interpretive trails in the watershed?	This Watershed Plan does not specifically identify water-related recreation activities. The Plan encourages the cultivation of outdoor recreation opportunities where they can contribute to a sustainable economic revenue base.	See Short Response
Preserve Black Lake	Citizen - Study Area Meeting	Preserve Black Lake	This Plan recommends preserving high quality water resources of the Chehalis Basin.	Recommendations Section
Study Area Boundaries	Citizen - Study Area Meeting	*Citizen Comment:* Coal Creek is a tributary to Salzer Creek; Study Area boundaries may be incorrect.	Map has been corrected.	See Short Response
Up-River Changes	Citizen - Study Area Meeting	Modifications affect folks living down-river. This needs to be taken into account in planning.	This Plan attempts a holistic approach to water resources to address this.	See Short Response

Water Quantity Issues

Specific Issue	*Source*	*Description*	*Short Response*	*Plan Section or Other Document with Detailed Response*
Availability	CBP	Is there enough clean water for our desired current and future use? The Chehalis Basin Watershed Plan addresses this crucial question. *ALSO includes (formerly separate issues):* • Conservation • Reuse • Water Storage • Recharge	The amount of water represented by water rights in the basin far exceeds the amount of water actually used. Federally Reserved Water Rights have not been quantified; if quantified these would likely add water to streams for instream flow. Water conservation and appropriate management of the water in the basin may not ensure that water is available for future human and fish needs in all parts of the Basin.	Water Quantity Core Issues Issue Paper
Water Balance Needed	STC	The Plan must estimate the amount of surface and ground water in the river basin, how much is being used, and the total amount of water represented by water rights. This will let us know how much water is available in the basin. *NOTE: while flood problems in the Chehalis Basin are commonly known, there is a need to help the public and decision makers understand there is also a problem with too little water in the Chehalis Basin. Source pg. IV-5. A general Water Balance was completed for the entire Chehalis Basin that shows that total water input through precipitation is around 8,249,542 total outlaw through stream flows is around 7,709,000 total evapotransporation is around 2,717,000, and total water stored in groundwater/lakes is around 540,542.*	A general Water Balance was completed for the entire Chehalis Basin.	Water Quantity Core Issues Issue Paper
Hydraulic Continuity	STC	This is where water in the ground has a direct connection to water in streams or rivers. By trickling to the surface, groundwater feeds the river or stream. When groundwater is withdrawn, it can cause low stream flows (especially in the summer). *Need more info on how continuity works. Scientific world is at odds, and farmers could manage water better with clear scientific info.This is where water in the ground has a direct connection to water in streams or rivers by trickling to the surface. When groundwater is withdrawn, it can cause low stream flows, especially in the summer.* *Need more info on how continuity works; farmers could manage water better with clear scientific info.* The technical studies completed for this study indicate that most groundwater in the Chehalis Basin is in continuity with surface waters of the basin. There may be a few pockets of deep groundwater that is isolated, but the amount is likely limited.	Technical studies completed for this study indicate that most groundwater in the Chehalis Basin is in continuity with surface waters of the Basin. There may be areas of groundwater that would not impair stream flows if tapped; however, studies to identify these areas would be costly. For all practical purposes, local governments should assume all shallow groundwater is connected to surface water.	Hydraulic Continuity Issue Paper

Water Quantity Issues

Specific Issue	*Source*	*Description*	*Short Response*	*Plan Section or Other Document with Detailed Response*
Adjudication	STC	To manage water, need to know what existing water rights are. To know this, adjudication is needed. Existing legal framework makes adjudication difficult.	Consider adjudication in Chehalis Basin – streamlined if at all possible: refer to Washington Attorney General/ -Department of Ecology report *"Streamlining the Water Rights General Adjudication Procedures (2002)."* Over the long term, effective management of rights in the Chehalis requires that water be used as efficiently as possible. This will best be done through flexible mechanisms that allow water to find its way to the highest value uses through voluntary exchanges. No effective management system will be possible if there is substantial uncertainty surrounding the valid quantity of each right.	Water Quantity Core Issues Issue Paper
Consumptive Water Use / Water Returned to River	STC	Many water uses are considered "non-consumptive" since a large portion of the water withdrawn is returned to the river system. "Consumptive use" refers to that portion of the water that does not return to the river. *QUESTION: How is it accounted that most water used is returned to the river after use? Need to define consumptive use, e.g. 100% usage with no water returned, or some % consumed with some amount returned down river? Most water users return some water to the river. This term refers to that portion of the water that does not return to the river.*	Existing estimates state that only 15% to 45% of water is consumed when septic systems are used. More data is needed to refine these estimates and to learn how much water is returned to the system as treated wastewater.	Hydraulic Continuity Issue Paper
Exempt Wells	STC	Exempt wells usually draw from sources that feed rivers and streams. Combined with development paving over land to prevent water from returning to the ground, this results in less water available in the rivers for fish and people. *Citizen Comment:* Dairies have exempt wells, and there's no science to show this damages water supply. They must be encouraged to stay in business, as they are the best recharge areas.	Exempt wells impact instream flows and water availability. This is a statewide issue. It needs to be studied in greater depth in the Chehalis Basin to determine instream-flow impacts, especially in specific subbasins where flows are a concern.	Exempt Wells Issue Paper

Water Quantity Issues

Specific Issue	*Source*	*Description*	*Short Response*	*Plan Section or Other Document with Detailed Response*
Water Rights: information, investigation, validation, issuance	STC	This information is held by the Department of Ecology; it shows how much water is represented by existing water rights.	At present, there is insufficient information available to manage water quantity in the Chehalis Basin. A few of the most obvious missing pieces are: actual stream flow data (for some streams), information on: • which certificates are actually valid and which may have lapsed • how much water is actually being used by active rights • which claims are valid • actual water used by most of the claims that have been filed. Ecology should revise water rights regulations to require latitude and longitude information for the point of diversion of each water right for new applications and claims, and should develop a program to obtain latitude and longitude information for existing rights.	Water Quantity Core Issues Issue Paper
Conservation Measures + Information/ Education on These	STC	Using existing water resources efficiently will be essential to ensuring sufficient water for human and fish needs during summer months. Public awareness of this must be raised.	Simple and inexpensive conservation measures can help delay or eliminate the need to tap new water sources or build expensive capital projects. Public information is needed to spread the word.	Water Conservation Issue Paper
Groundwater Right Issuance	STC	Possible source of future water supplies for the basin's growing population.	If deep aquifers are found in the Chehalis Basin, it would be ideal to tap that water for municipal supply in order not to disrupt water quantity, instream flows or hydraulic continuity.	Water Quantity Core Issues Issue Paper

Flooding Issues

Specific Issue	*Source*	*Description*	*Short Response*	*Plan Section or Other Document with Detailed Response*
Flooding	CBP	The Chehalis River Basin, with the largest drainage area on the west slopes of the Cascade Range, responds directly and relatively quickly to rainfall events. The largest of these occur typically in the fall and early winter months, causing flooding. Flood-caused damage to private and public property and periodic closure of critical transportation routes has been an ongoing problem. Flooding can have benefits: water spreading into floodplain reduces peak runoff, stores water that recharges the river during lower flows. It is worth examining whether it would be more costly to build where flood damage is likely or elsewhere.	Flooding can have benefits: water spreading into floodplain reduces peak runoff, stores water that recharges the river during lower flows. It is worth examining whether it would be more costly to build where flood damage is likely – or elsewhere.	Flooding Issue Paper

Water Quality Issues

Water Quality Data: poor access to local data; lack of local input into data collection programs; lack of coordinated monitoring	STC/CBP	In the past, Chehalis Basin communities have felt "blindsided" by regulatory requirements related to water quality. They have not felt adequately informed. Also, while there is a perception that water quality monitoring is occurring in the Basin, these efforts have not been coordinated to obtain the needed data in the most economical fashion.	The Partnership has undertaken development of a Coordinated Water Quality Monitoring Program to identify the data needs in the Basin, and set forth a plan to collect the necessary data. This plan also sets forth the organizational structure that will manage and coordinate the monitoring program.	Water Quality report
Temperature	STC	A high water temperature harms the health of fish and other life in the rivers because it reduces the ability of water to hold oxygen. High temperatures in the mainstem of the Chehalis must be addressed.	Multi-story riparian vegetation increases shading of the water, decreasing water temperature.	Water Quality Impairment issue paper
Sediments/ Turbidity	STC	Dirt, silt, and other particulates washed into streams harm habitat and water quality – when water is cloudy it gets warmer and cannot hold as much oxygen. Excessive siltation can also suffocate salmonid eggs.	Land use practices that minimize sediment should be used in the Chehalis Basin through the application of permit conditions. Protecting areas with high water quality should be encouraged.	Land Use, Water Quality Impairment and Protection of Areas Issue Paper
Failing Septic Systems	STC	Without properly functioning leach fields, these allow fecal coliform bacteria to reach water bodies.	Owners of septic systems should inspect them regularly (every five years) to ensure water quality is not impacted. County health districts can assist in this effort.	See Short Response

Water Quality Issues

Specific Issue	*Source*	*Description*	*Short Response*	*Plan Section or Other Document with Detailed Response*
Stormwater/ Runoff / Impervious Surfaces	STC	On pavement or where trees are cut, surface runoff from rains increases in quantity and is more rapid than in vegetated/treed areas, leading to erosion. Stormwater management is needed in some areas, especially those facing increased growth.	The Chehalis Basin is predominantly in forestlands, but population and other development are concentrated in areas close to water bodies and this can have serious impacts on water quantity and water quality. These more intensive uses include agriculture, urban or industrial use. Although only 11 percent of the basin as a whole is in intensive uses, this figure climbs to 42 percent in those areas within one mile of the major Chehalis rivers around which land uses are most intensive.	Storm Water Issue Paper
TMDL (total maximum daily load)	STC	Now called Water Cleanup Plans, TMDLs describe the type, amount and sources of water pollution in a given water body. They analyze how much the pollution must be reduced or eliminated to meet water quality standards, and they provide targets and strategies to control the pollution.	Department of Ecology should fund and enact detailed implementation plans based on a priority list and schedule contained in this Plan.	TMDL Issue Paper
Toxics: Point sources	STC	Large plants, factories, mills, etc. can emit pollution that can damage sections of land (and ground water) or waters and may directly harm fish.	Certain "hot spots" may be affecting water quality; these should be identified and mitigated.	Water Quality Impairment Issue Paper
Toxics: Non-point sources	STC	More difficult to control than point sources, these small sources of pollution add up to cause damage, for example, from storm drains, cars (oil/grease), sewage, pesticides, fertilizers, and dirt and silt. Information should be shared with the public about the impacts of these sources.	Non-point sources produce more pollution than point sources. Public information is needed to help citizens understand the impact of their choices on the waters of the Basin.	Water Quality Impairment Issue Paper
NPDES permits	STC	Permits are required to dump certain substances into water bodies. Many of these permits have expired and many dumpers don't have permits.	Administration and enforcement of this program by the Department of Ecology should be improved.	Water Quality Impairment Issue Paper
Tidal Influence / Saltwater Intrusion	STC	Saltwater intruding into freshwater systems can assist salmon in smolting, although when too much ground water is pumped out of the aquifer, saltwater may be pulled into people's wells.	This issue may warrant further study.	N/A

Land Use Issues

Specific Issue	*Source*	*Description*	*Short Response*	*Plan Section or Other Document with Detailed Response*
Riparian damage	STC	Certain kinds of vegetation retention along stream banks help keep pollution and sediments out of the river, provide shade to keep the water cooler, and ensure that the banks won't erode into the river.	Native riparian vegetation should be encouraged as a significant aid to habitat and water quality.	Habitat LFA
Runoff	STC	Vegetation controls runoff into streams. Traditional patterns of growth increase impervious surface, resulting in declining water quality.	Development should be low impact and use Best Management Practices where economically feasible.	Land Use Issue Paper
Development Near Streams	STC	Healthy riparian areas are one of the best ways to protect the quality of a stream's waters. They also help slow stormwater runoff and stabilize stream banks, mitigating flooding.	Existing and future laws (e.g. for streamside buffers) must be followed for there to be enough clean water for our future.	Land Use Issue Paper
Landscaping	STC	How we manage the natural environment of our property is directly related to the health of our water. Native plants help preserve the water we have and keep it clean and provide habitat for fish and wildlife.	Use native plants for landscaping and avoid impervious surfaces where possible.	Land Use Issue Paper
Forestry Practices	STC	When it rains near clear cuts, the river nearby has a very rapid response and heavy sediments. Today's logging practices, as dictated by the Forests & Fish rules, have fewer negative impacts on water resources, though logging roads are a source of sediment and must be built and maintained responsibly.	Forestry is the land use that provides the best water resources. Urban areas provide the worst. In terms of land use and water resources, a rough continuum from good to poor is probably forest, agricultural, rural residential, suburban, urban. Therefore, water resource managers should do all they can to encourage landowners who have property in forests to keep it in forest and to encourage farmers to continue to farm. At the same time, it important to encourage the use of forestry and agricultural practices that mitigate the adverse impacts of timber, crop, and livestock production on water resources.	See Short Response
Protection of land	STC	By understanding lands that are protected and the nature of existing protections in the Basin, the Partnership can focus its efforts on the areas that most need attention. Existing areas with healthy water resources must be protected when possible.	This Plan proposes the development of an inventory of protected areas, beginning with those identified in local Growth Management Act plans and under Critical Areas Ordinance (e.g., wetlands, aquifer recharge areas)	Mission & Goals Section

Habitat Issues

Specific Issue	*Source*	*Description*	*Short Response*	*Plan Section or Other Document with Detailed Response*
Atlantic Salmon				WDFW contact: John Kerwin, 360-902-2681
Barriers to Fish Passage	STC	When barriers keep fish from swimming upstream, fish cannot access potential spawning and rearing habitat. This is a significant problem for access to habitat.	Prioritize habitat areas above barriers; restore access to best/largest habitat areas first. Continue restoring access to priority habitat areas as resources allow.	Habitat LFA
Channel Incision / Bank Erosion	STC	Channel incision and bank erosion are usually symptoms of cumulative impacts/problems upstream. When streambeds are lowered, the stream can get separated from the floodplain and its habitat. Erosion leads to sediment in rivers, a water quality problem.	Avoid building in floodplain. Native riparian vegetation must be encouraged as a significant aid to habitat and water quality.	Habitat LFA
Bank Armoring	STC	Bank armoring prevents river's natural processes, resulting in downstream impacts. It also increases erosion.	Consider workshops and other informational outreach methods to waterfront property owners. Alternatives must be presented.	Habitat LFA
Fisheries Harvest Management	STC	Complexities of this issue must be conveyed (international, multi-jurisdictional, state/ tribal/ federal etc.)	Also addressed via 2496 process.	Habitat LFA
Wildlife Habitat	STC	This Plan does not specifically discuss terrestrial habitat in the Chehalis Basin, though water resource health is related to wildlife habitat integrity.	Implementation of Chehalis Basin Watershed Plan will assist terrestrial wildlife; integration and coordination with wildlife programs to share costs and resources is encouraged.	N/A

Instream Flow Issues

Instream Flow Rules	STC	Need sufficient water flowing in streams to support all salmon life stages. *Question: How do we have confidence that the State's instream flow standards are realistic or real?*	Regulatory minimum in-stream flows in the Chehalis Basin should represent flows that provide a healthy environment for fish and other aquatic life, do not impair out-of-stream water uses, and occur in the stream regularly under natural conditions. The three components in this statement (healthy environment for fish, impairment to out-of-stream uses, and natural flows) need to be quantified.	Instream Flow Issue Paper

Instream Flow Issues

Specific Issue	*Source*	*Description*	*Short Response*	*Plan Section or Other Document with Detailed Response*
Gaging	STC	Measuring devices on tributaries of the Chehalis help us know how much water exists on the surface at any given time. This helps us know how much water exists overall.	Department of Ecology should monitor flows at 31 gauging sites in Chehalis Basin.	Instream Flow Issue Paper
Low Flows	STC	Low stream flow levels in summer are bad for fish habitat and water quality.	Examine all voluntary approaches to making water available for stream flows, implement where possible and enforce existing laws.	Instream Flow Issue Paper

Governance Issues

Measuring Success	CBP	How will we know if the Watershed Plan is working?	Monitoring will be critical. During the implementation phase, the Partnership will consider this question.	See Measuring Success
Changes in Laws or Regulations	CBP	The Watershed Plan can request changes in existing laws. Also, new water-related laws will affect the Watershed Plan and agreements in it.	Agreements must be made as to how to handle changes in water-related laws.	Voluntary Agreements Issue Paper
Existing Laws, Regulations & Rules	CBP	Many federal, state, regional and local laws, regulations and rules impact water in the Chehalis Basin.	These need to be identified and catalogued in their effects on the Basin (to understand what we are dealing with) followed by an educational process. *NOTE: The educational piece is still needed.*	Regulatory Framework Section
Implementation	CBP	The Plan won't do anyone any good if the projects and agreements in it are not put into action.	The Partnership may consider becoming a legal entity to coordinate Plan implementation, funding and updates.	Implementation Section
Regulatory vs. Voluntary Approach	CBP	Voluntary actions are preferred to rules and regulations.	Agreements between local governments, businesses, etc., are needed. Public information about the need for such agreements is essential. Also, in some instances new laws may be a better approach.	Voluntary Agreements Issue Paper
Cost-Benefit Analysis	CBP	To figure out if a project is worthwhile, the costs and benefits need to be discussed, if not specifically studied.	This Plan established the vision of water resource management; the implementation plan will assess cost-effectiveness of specific projects.	Implementation Section

Governance Issues

Specific Issue	*Source*	*Description*	*Short Response*	*Plan Section or Other Document with Detailed Response*
Ongoing Studies & Projects	STC	Numerous studies and projects related to water are occurring in the Chehalis Basin. These have been catalogued and the information used in this Plan in an attempt to avoid duplication of effort.	These should be compiled in a central, accessible location or on the internet and integrated into water resource management decisions.	Legal & Regulatory Framework Section
Updates to Plan	STC	As new information becomes available and conditions change in the Chehalis Basin, the Watershed Plan will need to be updated.	The Partnership may consider becoming a legal entity to coordinate Plan implementation, funding and updates.	Management Framework Issue Paper

Quinault Indian Nation Issues

From meeting with Partnership representatives, March 20, 2003

Flood Damage Reduction Project	Quinault Indian Nation	Army Corps project is problematic for Tribe, since it is an expensive project that would allow additional development in Upper Basin.	Flooding issue paper recommendation: limit development in floodplain.	Flooding Issue Paper
Instream Flows for Fish	Quinault Indian Nation	Important issue for Tribes	Plan recommends: • retaining regulatory minimum flows with 1976 priority date • possibly establishing new regulatory flows based on recent information	Instream Flows Issue Paper
"Muni Bill" legislation	Quinault Indian Nation	Tribes concerned that this bill would grant water rights to Class B water systems and other water users who have not shown Beneficial Use of the water.	Partnership and Plan acknowledge Tribal federally reserved water rights that superceded municipal rights.	Legal & Regulatory Framework Section
Water quality in Lower Basin	Quinault Indian Nation	North Bay, Humptulips mentioned	Recommend monitoring these water bodies as part of Chehalis Basin Comprehensive Water Quality Monitoring Plan	Water Quality Report
Zoning/Land Use	Quinault Indian Nation	Standards (e.g., building practices), must be high due to ESA listings in basin	Land Use issue paper recommendation: low impact development	Land Use Issue Paper
Agricultural runoff	Quinault Indian Nation	Concern about impact on water quality	Agriculture and water management issue paper recommendation: use best management practices for agriculture	Agricultural and Water Management Issue Paper

Quinault Indian Nation Issues

Specific Issue	*Source*	*Description*	*Short Response*	*Plan Section or Other Document with Detailed Response*
Lack of enforcement	Quinault Indian Nation	Need enforcement of existing regulations on all water resource issues; many good laws on the books are not being enforced	Partnership and Plan recommend enforcement of existing laws prior to establishing any new regulations, though some new laws may be needed.	Recommendations Section
Federally Reserved Rights	Quinault Indian Nation	Must be addressed early in the Plan and woven in throughout the document	These rights, which are often unquantified, exist and are acknowledged in this Plan.	Legal & Regulatory Framework Section
Habitat Restoration	Quinault Indian Nation	Important component of Plan (including Army Corps study)	Army Corps' Ecosystem Restoration Study will include prioritized habitat restoration projects; Plan recommends pursuing funding to undertake these projects.	Habitat LFA
Management System	Quinault Indian Nation	"Complete the picture" - Plan won't do any good if it is not implemented, with a functional and sustainable management framework in place.	The Partnership may consider becoming a legal entity to coordinate Plan implementation, funding and updates.	Management Framework Issue Paper
Monitoring	Quinault Indian Nation	Needed to measure success	Monitoring of water quality components and instream flows are critical to knowing if the Plan is working.	See Measuring Success
Spring Chinook, Newaukum system	Quinault Indian Nation	High priority for Quinault Indian Nation	This Plan addresses general habitat and stream flow needs for all areas of the Chehalis Basin.	Habitat LFA
Reservoir Releases	Quinault Indian Nation	Must be to support fish health and stream morphology	This Plan recommends considering fish needs.	Water Storage Report
Flows in Black River	Quinault Indian Nation	Concern about flow levels being sufficient to support fish runs	Instream flow recommendation requests monitoring of Black River flows. (IFIM site?) Information needed on what flow levels support fish runs.	Instream Flows Issue Paper

Confederated Tribes of the Chehalis Issues

From meeting with Partnership representatives, March 20, 2003

Specific Issue	*Source*	*Description*	*Short Response*	*Plan Section or Other Document with Detailed Response*
Implementation of Plan	Confederated Tribes of the Chehalis	How will this plan be implemented, especially instream flows, water quality, and habitat elements?	There are numerous implementation strategies and methods available. The Partnership has focused on measurable voluntary efforts, though important new laws, rules or regulations will likely be needed. A system is needed to track action on recommendations. Local governments will likely sign Memoranda of Agreement or Inter-Local Agreements.	Implementation section
Will the plan address exempt well use?	Confederated Tribes of the Chehalis	Exempt well use may impair stream flow levels.	The plan recommends that the Department of Ecology address this issue on a statewide basis.	Exempt Well issue paper
How will the plan address over-appropriation?	Confederated Tribes of the Chehalis	The amount of water allocated to existing permits and claims is greater than the water in the Chehalis River system at some times of the year.	Plan recommends adjudication of existing water rights to address this issues	Water Quantity Core Issues issue paper
How will the plan address discrepancy between water use and allocated rights?	Confederated Tribes of the Chehalis	Actual water use in the Chehalis basin is a small fraction of the amount allocated by water rights.	Plan recommends adjudication of existing water rights to address this issues	Water Quantity Core Issues issue paper
What if counties fail to approve the plan?	Confederated Tribes of the Chehalis	The Partnership cannot adopt the plan, but only recommend the plan to counties for adoption.	If counties fail to approve the plan, they must return it to the Partnership for revision. If the revised plan is passed by the Partnership but the counties do not approve it, the planning process terminates. It would be up to the member agencies of the Partnership to develop a plan for how to proceed in this case.	See Short Response
How will the plan be used?	Confederated Tribes of the Chehalis	The plan should not just sit on a shelf, but be a living document that, if updated, can/will guide water resource management in the Chehalis basin for decades to come.	Following county approval of the plan, each county and each State agency that accepted obligations under the plan must undertake implementing actions. These actions will cover a broad range of issues and policies.	See Short Response

Confederated Tribes of the Chehalis Issues

Specific Issue	*Source*	*Description*	*Short Response*	*Plan Section or Other Document with Detailed Response*
What form will the Partnership take?	Confederated Tribes of the Chehalis	The Chehalis Basin Partnership is not an independent, legal entity as of this writing. One of its primary reasons for existing is the creation of this plan; there is no roadmap yet for after the plan is complete.	To oversee plan implementation, a coordinating body is needed. This plan recommends that the Partnership become a legal entity.	Mgt. Framework issue paper
Future water right determination	Confederated Tribes of the Chehalis	Will Ecology use the Plan as a management tool to guide the allocation of future water rights?	This appears to be one of the primary reasons for the passage of the Watershed Planning Act.	Water Quantity Core Issues issue paper
Voluntary action vs. enforcement	Confederated Tribes of the Chehalis	When will enforcement be used, and when should voluntary actions be encouraged?	Both voluntary action and enforcement of existing laws are tools to avoid new rules and regulations. Enforcement of existing laws is hampered by lack of resources and lack of political will, but would improve the health of the water resources of the Basin. Voluntary actions will be encouraged whenever feasible.	See Short Response

Boistfort Valley Water Company Issues

From meeting with Partnership representatives, March 20, 2003

Four-wheelers, horses	Boistfort Valley Water	Harm surface water quality, impact quality of water supply	Consider monitoring if funding can be obtained; if harm found, close watershed to recreation that impacts water quality.	See Short Response
Illegal Dumping	Boistfort Valley Water	Trash in the water bodies	Public information, communication is needed to assist in behavior change	See Short Response
Beaver Dams	Boistfort Valley Water	*Suggestion:* use these to store water for release during low flow periods	Water Storage Assessment recommends leaving beaver dams intact to serve a variety of purposes.	Water Storage Report

Grays Harbor County Water District #2 Issues

From meeting with Partnership representatives, May 5, 2003

Specific Issue	*Source*	*Description*	*Short Response*	*Plan Section or Other Document with Detailed Response*
Hydropower and water storage	Grays Harbor County Water District #2	When the Corps released water from the dam during a 1995 flood event, there was not enough warning. This resulted in threats to lives, homes, and personal property. The District was concern about flooding the wellhead and used a boat to access the site.	Better coordination and warnings to residents of future flooding threats would begin to address this concern. Grays Harbor County Emergency Management implemented a telephone warning system after the last severe flood. This system has yet to be tested. During 1995, the wellhead was not impacted because it is located above the 100-year floodplain.	See Short Response
Governance and Implementation.	Grays Harbor County Water District #2	Will this process result in the establishment of a formal board or watershed council? Who and how will membership be determined? How will it operate with respect to policing, appeals, and managing bureaucracy? Will this board be effective?	The Partnership may consider becoming a legal entity to coordinate Plan implementation, funding and updates. Participation of initiating governments, such as Grays Harbor Water District #2, will help determine this body's rules of operation and will increase its effectiveness.	Management Framework Issue Paper
Source protection	Grays Harbor County Water District #2	Currently the wellhead area is protected through a buffer and land use designation/ zoning. An influx of people or livestock may impact this protection.	The Department of Health has required Source Water Protection Assessments to comply with the Safe Water Drinking Act. These are not completed for the Chehalis; once they are, water providers should take action to reduce risks they identify.	See Short Response
Conservation	Grays Harbor County Water District #2	Currently Well #6 is pumping at 98% of the water rights allocation. Any conservation measures proposed should not anticipate conservation from the Central Park sources.	This Plan includes a section on water conservation.	Water Conservation Issue Paper
Water Quality	Grays Harbor County Water District #2	Some residents experience failing septic systems due to the age of the systems and the soil conditions (clay). The concern relates to the impacts this situation poses to water quality of the Chehalis River and the small tributaries located in Central Park.	Plan recommends public information on inspection and care of septic systems	Water Quality Impairment Issue Paper

Approach

The Chehalis Basin Partnership (the Partnership) prepared this management plan for the Chehalis River Basin, which includes two Water Resource Inventory Areas: WRIA 22, the Lower Chehalis Basin, and WRIA 23, the Upper Chehalis Basin. These two WRIAs were further subdivided into 30 drainage sub-basins for purposes of the Level 1 Assessment in Phase 2 of the watershed planning process. As the planning unit for WRIAs 22 and 23, the Partnership operated using a consensus process to decide on recommendations from the Steering/Technical Committee and from other sources.

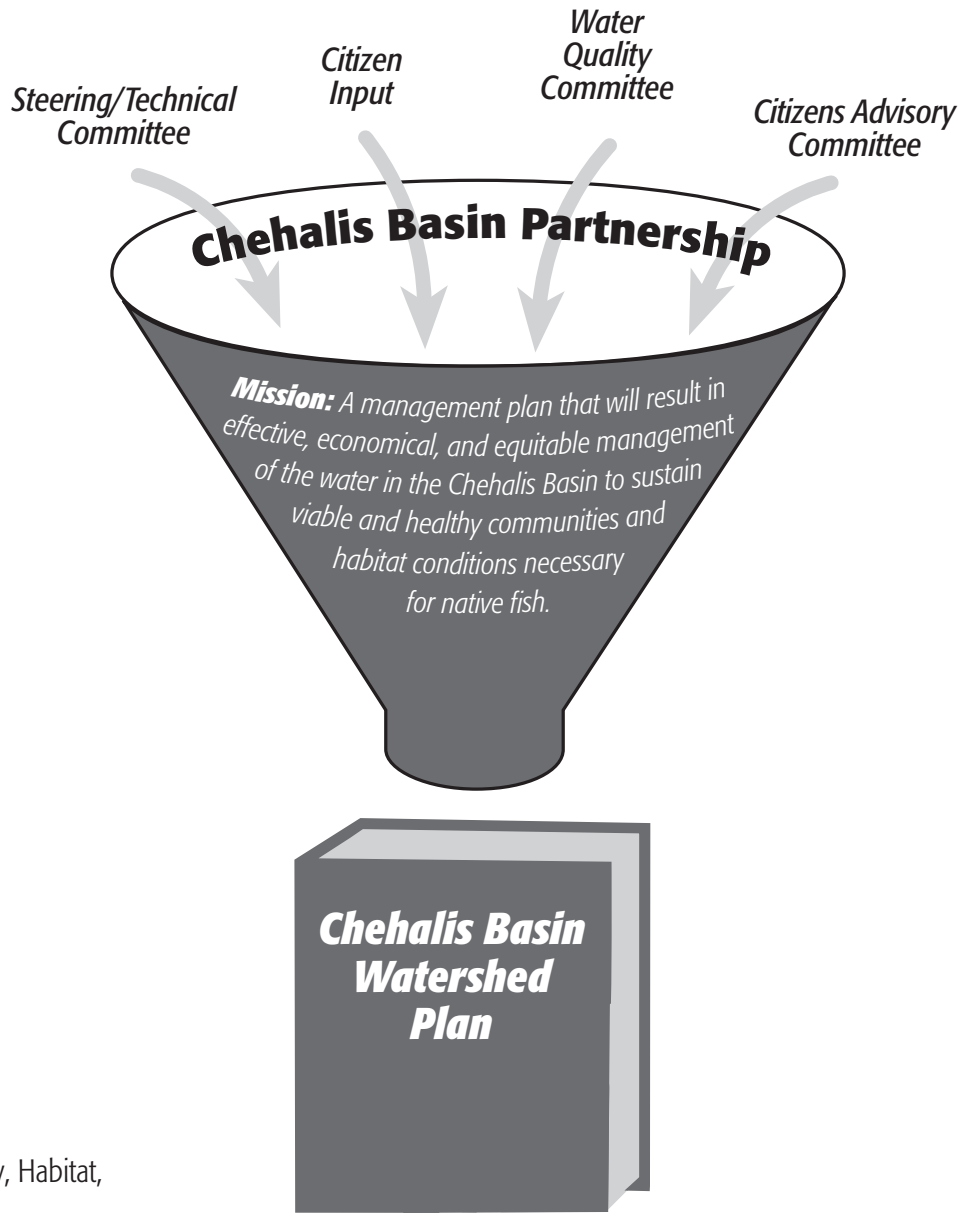
The following graphic illustrates the general process used to develop this Plan.

Monthly meetings of the Partnership addressing watershed planning began in August 1998 and will likely continue well beyond the approval of this Plan, with a focus on guiding successful implementation of the agreements and recommendations in this Plan. Lewis County, the original lead agency for watershed planning under ESHB 2514, withdrew from the role of lead agency in November 1999 due to staff and resource limitations. Grays Harbor County subsequently assumed this role, led by Lee Napier, Deputy Community Development Director.

The Watershed Planning Act designates three phases for the planning process:

- Phase 1: Organization of Planning Effort
- Phase 2: Technical Assessment
- Phase 3: Watershed Plan Development

Phase 1 of the watershed planning effort, the organizational phase, was accomplished relatively smoothly since the Partnership had already been created prior to undertaking 2514 planning. In 1999 the Partnership convened a Steering/Technical Committee to guide the planning effort and established a Citizens Advisory Committee to ensure adequate public awareness of and input to the planning process. In September 2002 a Water Quality Committee was established to oversee the water quality assessment and to develop recommendations for consideration by the Partnership.



Elements: Water Quantity, Water Quality, Habitat, and Instream Flows

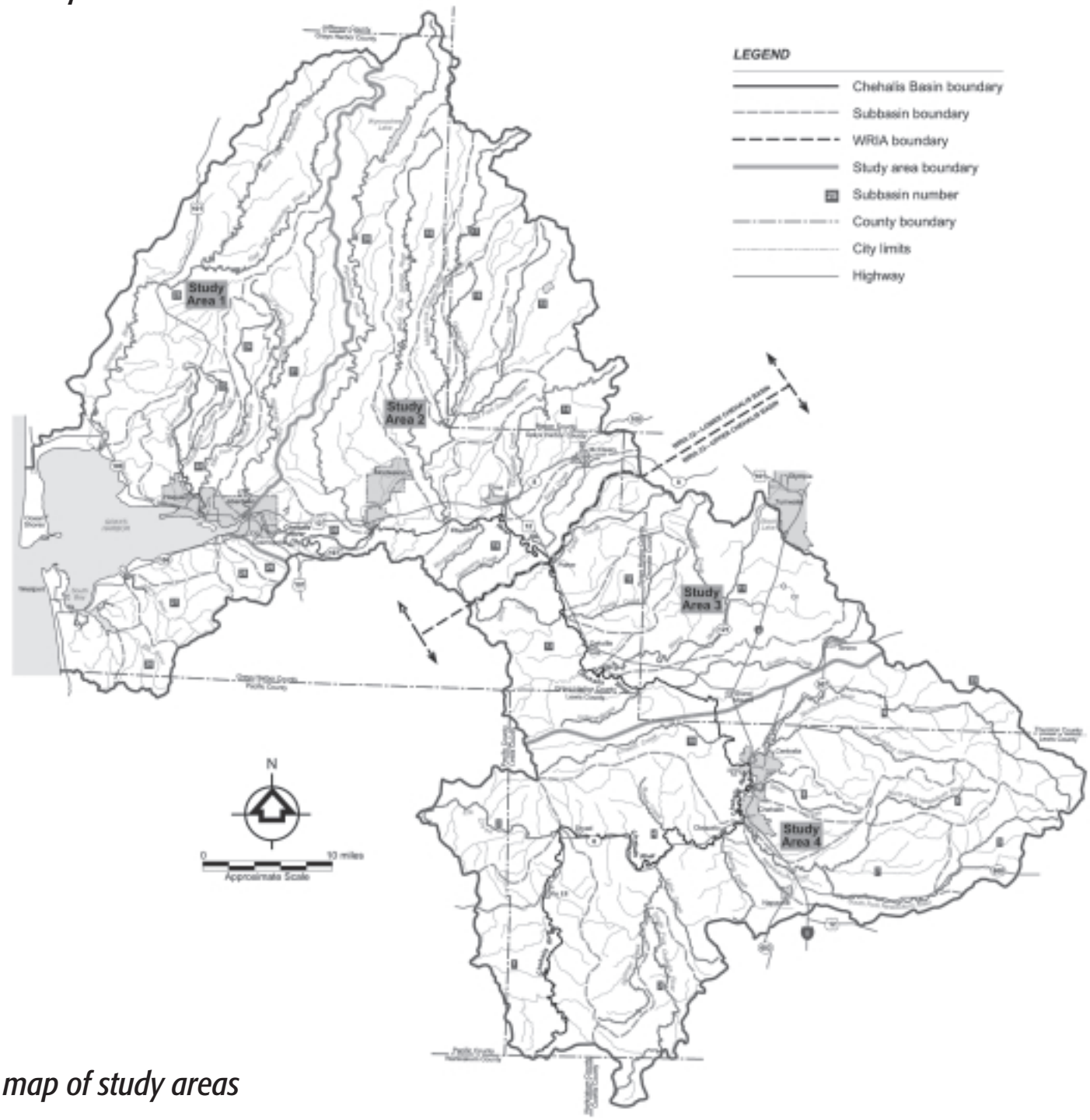
Goals:

- Work together to find solutions, build relationships, and obtain consensus on the Plan while fostering a sense of the importance for watershed management and stewardship
- Focus on cost-effective environmental improvements and efforts based on available funds, while balancing a sustainable environment with economic development using a cooperative, not regulatory approach
- Use the Citizen Advisory Committee and public education to raise awareness of citizens on watershed issues and gain input from the public in developing and adopting the Plan
- Encourage basin residents to implement the Plan, with government support
- Bridge the gap between existing stream flows and target flows for fish, wildlife and human use
- Prevent degradation of and/or improve water quality to have clean water (as defined in Washington State water quality standards) for all fish, wildlife and human uses.
- Prevent degradation and improve habitat to support healthy fish and wildlife species and to support water quality and quantity goals.

Level 1 Assessment & Detailed Summary

The first step under Phase 2, the technical assessment phase, was to gather and report existing information on water resources in the Chehalis River Basin. The Chehalis Basin Level 1 Assessment, published in December 2000 (Envirovision et al., 2000), presents extensive analysis of the basin characteristics relevant to the planning effort. The sheer size of this document made it inaccessible to lay readers and policy makers, so in 2002 the Partnership authorized the creation of a Detailed Summary of the Level 1 Assessment.

Study Areas



map of study areas

Following the release of the Level 1 Assessment, the Partnership divided the Chehalis Basin into four Study Areas to facilitate receiving citizen input. The Citizen Advisory Committee took the lead in planning and conducting a public meeting in each of the following study areas:

- Study Area 1 consisted of the nine subbasins that drain directly to Grays Harbor or the mouth of the Chehalis River. The major surface water systems in this study area are the Humptulips, Hoquiam and Wishkah Rivers and tributaries south of Grays Harbor.
- Study Area 2 consisted of eight subbasins draining to the Chehalis River downstream of Porter Creek. The major surface water systems in this study area are the lower main stem of the Chehalis River, the Wynoochee and Satsop Rivers, and Cloquallum Creek.
- Study Area 3 consisted of three subbasins draining to the Chehalis River from Porter to near Grand Mound. The major surface water systems in this study area are a reach of the main stem of the Chehalis River, the Black River, and Cedar Creek.
- Study Area 4 consisted of 10 subbasins draining to the Chehalis River upstream of the Lewis/Thurston County line. The major surface water systems in this study area are three reaches of the main stem of the Chehalis River, the South Fork Chehalis, Newaukum and Skookumchuck Rivers, and Elk and Salzer Creeks.

Cost Considerations

THE PARTNERSHIP clearly expressed the desire to keep the Plan simple and to focus on cost-effective environmental improvements attained through voluntary, cooperative, proactive agreements when possible.

The Partnership clearly expressed the desire to keep the Plan simple and to focus on cost-effective environmental improvements attained through voluntary, cooperative, proactive agreements when possible. Although the Partnership does not have the resources to conduct full cost-benefit analyses on specific recommendations, the focus on cost effectiveness guided the approach of the STC and the Partnership in the development of solutions to issues of concern. It was also felt that this Plan should focus on the vision or direction for water resource management in the Chehalis Basin and that Phase 4 work would include consideration of the costs and benefits.

Water Quality Monitoring

Members of the Partnership have long been concerned about water quality, especially related to TMDLs, and they decided to form a Water Quality Committee to address such issues. This group was also in an ideal position to be involved in the water quality technical and policy work. Based on their work, the Water Quality Committee devised a water quality monitoring program for the Chehalis Basin and planned and hosted one workshop in spring 2003 on water quality monitoring in the basin. They also developed recommendations related to water quality and water quality governance.

Information on Water Issues

Individuals and organizations with knowledge of specific water resource issues were invited to provide informational briefings on specific water resource issues to the Steering/Technical Committee, the Water Quality Committee, and the Partnership.

Public Involvement

Since Partnership members represent many different citizen constituencies in the Chehalis Basin, the Partnership placed a high priority on ensuring plentiful and meaningful involvement in this planning process (by residents of the Basin.) The Citizens Advisory Committee was formed with the intent to provide an avenue for local citizens to become involved in water resource issues and give input on watershed planning issues. In late 2001 and early 2002, this Committee put together a public involvement plan for the remainder of the watershed planning process.

The centerpiece of the public involvement plan was a series of meetings held in each of the four Study Areas in the spring of 2002:

1. February 26, Ocean Shores
2. March 19, Montesano
3. April 16, Tumwater
4. May 21, Chehalis

At these meetings, the Partnership presented an overview of the watershed planning process and issues identified to date. Citizens asked questions, addressed by various Partnership representatives. Attendees also commented on the planning process both verbally and in writing, adding several new water resource issues to the list of those to be addressed in the Plan. *Complete summaries of these meetings are included in this Plan, beginning in Section VII–31.*

With the understanding that Partnership members would keep their respective policy makers and constituencies apprised of the development of the Watershed Plan, the Citizens Advisory Committee and the Partnership opted to wait until a draft of the Watershed Plan was complete before undertaking further direct outreach to individual citizens, other efforts were undertaken. These included the Drops of Water publication, responses to individual citizen questions, articles in local newspapers, the websites of Grays Harbor County and the Chehalis River Council (sources for documents), and other informal contacts and actions.

Stakeholder Meetings

Throughout the spring and summer of 2003, representatives of the Partnership also met with policy makers of stakeholder organizations to brief them on the planning process and water resources issues and to gather their input and issues of concern. These meetings were held with:

- Mason County Commissioners and staff, January 27, 2003
- Boistford Water District, March 20, 2003
- Water District #2, May 5, 2003
- Quinault Tribal Nation Council, Business Committee, and staff, March 20, 2003
- Confederated Tribes of the Chehalis (Council Member and staff), May 12, 2003

Legal and Regulatory Framework

In addition to the requirements of the 2514 Watershed Management Act (Chapter 90.82 RCW) and the Supplemental Technical Funds Act (ESHB1832) described above, a wide range of government laws, rules and regulations, and court decisions affect the elements considered in the Chehalis Basin Watershed Management Plan. Early in the planning process the Partnership requested a comprehensive listing of these. (A full list is included in the Appendix.) Below is a selected list of the laws, rules, regulations and court decisions that are most pertinent to the Chehalis Basin.

Federally Reserved Water Rights, including Tribal Water Rights[1]

The federal and state water rights systems have evolved largely independently over the past century. Planning units must consider federally-reserved water rights, which include tribal water rights, along with state-based water rights in assessing the water quantity element under the Watershed Management Act. Federally-reserved water rights, including those reserved for national parks and Indian tribes, have a higher legal priority than state water rights. (See Table IV-1.) Tribes possess what are arguably the earliest priority rights to water in the state for both on-reservation use and for flows related to treaty fishing rights. However, for the most part, the water rights of tribes and other federal reservations have not been verified and quantified. Washington State does not have the authority to quantify, outside of a general adjudication, or to alter federally reserved water rights. These rights must, however, be considered in any meaningful watershed planning effort because, in some cases, they may represent a significant limitation on water available for other instream or out-of-stream purposes.

A U.S. Supreme Court decision in 1908 established the "*Winters* doctrine," which today defines both tribal and federally reserved water rights. The original case arose when a member of the Fort Belknap Reservation in Montana complained to federal authorities that a non-Indian (*Winters*) living upstream from the reservation was illegally diverting water from the Milk River. The government sued, arguing that under federal law, certain tribal rights to land and water resources are not granted to the tribe by the United States, but rather are retained by the tribe because of the tribe's status as a sovereign entity. The Court found it inconsistent that the government would in good faith create a reservation and the Indian would cede land in exchange for permanent homes on land rendered valueless without sufficient water. The Court held in its *Winters* decision that Indian reservations include an exclu-

1. Sources: *Guide to Watershed Planning*, Department of Ecology, Jan 11, 1999, pp 11-10 and 11-11; *Indian Water Rights: An Analysis of Current and Pending Indian Water Rights Settlements*, Confederated Tribes of the Chehalis Reservation, Office of Trust Responsibilities, Bureau of Indian Affairs; 1997, pp 1-4.

sive possession of enough water to fulfill the purpose of the reservation. The *Winters* doctrine was later expanded to include the principle that other reservations of land by the federal government — national forests, wetlands, wildlife refuges, and military bases also carry an implicit reservation of water in an amount sufficient to fulfill the purposes of that reservation.

Tribal *Winters* rights date from either "time immemorial" (aboriginal water rights) or from the establishment of the reservation (reserved by the United States). The priority date is found by examining the original treaty, statute, or executive order establishing the reservation. Typically, Indian reservations were established well before non-Indian settlement, giving tribes very senior and reliable priority dates. *Winters* rights are not administered by the state and differ from state-based water rights in that they are not subject to abandonment or forfeiture for non-use; they are fully vested as of their priority date.

Under the 1952 McCarran Amendment, Congress allowed state courts to adjudicate water rights held in trust by the United States, but few *Winters* rights in the State of Washington have been quantified. In an adjudication, *Winters* rights are evaluated by examining the treaties, statutes, and/or executive orders establishing the reservation to determine the purposes of the reservation; the proper standard to be used to quantify; and the date the reservation was established, which becomes the priority date of the right.

In addition to water necessary for fulfilling the purposes of reservation land, tribes also have more geographically-extensive water right claims arising from treaty-reserved fishing rights off-reservation. This instream flow right is based on the amount of water sufficient to sustain fish runs for commercial, ceremonial, and subsistence purposes in the tribe's "usual and accustomed" treaty fishing area. This includes water of sufficient quality and quantity to comply with the five elements of anadromous fish habitat set out in the Joint Biological Statement in *United States v. Washington 1974* (commonly referred to as the *Boldt Decision*): 1) access to and from the sea; 2) an adequate supply of good quality water; 3) a sufficient amount of suitable gravel for spawning and egg incubation; 4) an ample supply of food; and 5) sufficient shelter. One of the central issues posed by *Winters* rights and treaty reserved fishing rights is how much water is available in a basin once these rights have been taken into account. Since they are unquantified, they add to the uncertainty associated with water resource uses.

The Chehalis Basin Partnership understands that taking tribal treaty obligation specifically into account will promote balanced, sustainable decisions and respectful relations with tribal neighbors. It is with the understanding that tribal and other federally-reserved water rights supercede state-based water rights that this watershed plan is written and presented.

Table IV-1: Comparison of Federally-based and State-based Water Rights

Federally-based water rights	*State-based water rights*
• Higher legal priority	• Second legal priority
• Reserved rights system	• Appropriative rights system (Western Water Law)
• Generally unquantified	• Quantified
• Reserved rights system	• Appropriative rights system (Western Water Law)
• Permanent	• Use or lose
• Types: mostly instream & some withdrawals	• Types: mostly withdrawals and storage with some instream

Washington State Water Law

Washington State law requires certain users of public waters to receive approval from the state prior to use of the water — in the form of a water right permit or certificate. Any use of surface water (lakes, ponds, rivers, streams, or springs) which began after the state water code was enacted in 1917 requires a water-right permit or certificate. The same is true for ground water withdrawals that began after 1945.

A **water right** is a legal authorization to use a predefined quantity of public water for a designated purpose. This purpose must qualify as a beneficial use.

Beneficial use involves the application of a reasonable quantity of water to a non-wasteful use, such as irrigation, domestic water supply, or power generation.

A **water right permit** is permission given to water right applicants by the state to develop a water right. Water rights are developed when water right applicants follow the provisions outlined in their permit, using water for the purposes and up to the limits stated in the permit. Water right permits remain in effect until the water right certificate is issued, if all terms of the permit are met, or the permit has been canceled.

A **water right certificate** is issued by the Department of Ecology to certify that water users have the authority to use a specific amount of water under certain conditions. These conditions are based on beneficial use of water under user's water right permit. The water right certificate is a legal document recorded at a county auditor's office. The certificate completes the process of obtaining a water right. Once a certificate is issued, no expansion is allowed under the water right.

An **exempt ground water withdrawal** is a water right for use of ground water that is exempt from the need to obtain a water right permit or certificate. Exempt ground water withdrawals allow for the use of 5000 gallons per day or less for:

- Stock watering
- Single or group domestic purposes
- Industrial purposes
- Watering a lawn or non-commercial garden that is not larger than one-half acre

A **water right claim** is a statement of claim to a water use that began before the State Water Codes were adopted and is not covered by a permit or certificate. A claim may represent a valid water right if it describes a surface water use that began before 1917 or a ground water use that began before 1945, a water right claim that was filed with the state during an open filing period designated under RCW 90.14 (the Water Rights Claim Registration Act), or is covered by the ground water exemption.

A water right is subject to **relinquishment** if it is unused, without sufficient cause, for five or more consecutive years. One exception is water claimed for municipal water supply purposes.

*State Laws, Rules, Regulations and Court Decisions**

Water Resources Act of 1971 (Chapter 90.54 RCW)

The Water Resources Act of 1971 provides the guiding principles for much of the water resource policy and law in Washington State. Its provisions apply to the water quantity, instream flow, water quality, and habitat components of watershed planning under Chapter 90.82 RCW. The purpose of the Water Resources Act of 1971 was to set forth the fundamentals of state water resource policy to ensure that the waters of the state are protected and fully utilized for the greatest benefit of the people of the State of Washington and to provide direction to the Department of Ecology and other state agencies as well as local governments in carrying out water and water-related resource programs. The following fundamentals guide the utilization and management of the waters of the state and provide the underlying framework for Watershed Plans prepared under Chapter 90.82 RCW:

Beneficial Uses

Uses of water for domestic, stock watering, industrial, commercial, agricultural, irrigation, hydroelectric power production, mining, fish and wildlife maintenance and enhancement, recreational and thermal

*See Draft EIS for Watershed Planning under Chapter 90.82 RCW, March 2003, pp 3-1 through 3-72 for state and federal laws, rules, and regulations.

production purposes; preservation of environmental and aesthetic values; and all other uses that are compatible with the enjoyment of public waters of the state are declared to be beneficial.

Water Allocation

Allocation of waters among potential uses and users must be generally based on securing the maximum net benefits for the people of the state. Maximum net benefits shall constitute total benefits minus costs including opportunity costs (water allocated for one purpose may not be available for another).

Instream Resources

Perennial rivers and streams of the state must be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic, and other environmental values as well as navigational values. Similarly, lakes and ponds must be retained substantially in their natural condition. Withdrawals of water that would adversely affect necessary stream base flows or the natural conditions of lakes and ponds can only be permitted in those situations where it is clear that overriding considerations of the public interest will be served.

Interrelationship of Surface and Ground Waters

In the administration of water allocation and water use programs, full recognition must be given to the natural interrelationships between surface and ground water.

Water Quality and Antidegradation Policy

Waters of the state must be of high quality. All wastes and other materials proposed for entry into waters of the state must be provided with all known, available, and reasonable methods of treatment (referred to as AKART) prior to entry. Wastes and other materials and substances are not allowed to enter waters of the state if they will reduce the existing quality of such waters except in those situations where it is clear that overriding considerations of the public interest will be served.

Potable Water Supplies

To satisfy human domestic water needs, adequate and safe supplies of water must be preserved and protected in a potable condition.

Storage

Multiple-purpose impoundment structures are preferred over single-purpose structures. The development of multi-purpose water storage facilities is to be a high priority of state programs for water allocation, planning, management, and efficiency.

Conservation

Federal, state, and local governments, individuals, corporations, groups, and other entities are encouraged to implement water conservation practices. Improved water use efficiency and conservation must be emphasized in the management of the state's water resources and in some cases will be considered a potential new source of water to meet future needs throughout the state.

Public Water Systems

Development of public water systems on a regional basis is encouraged. The act discourages the development of new public water systems in areas where service is available from an existing public water system.

Water Management Programs

Water management programs, such as Watershed Plans, are deemed under the Act to be in the public interest.

Expressions of Public Interest

During all stages of water planning and allocation processes, expressions of public interest will be sought.

Regulation of Public Ground Waters of 1945 (Chapter 90.44 RCW)

Regulation of Public Ground Waters was established by the state legislature as a supplement to the Water Code (Chapter 90.03 RCW) and was intended to extend the application of surface water statutes to the appropriation and beneficial use of ground water. The chapter defines *ground water* as: all waters that exist beneath the land surface or beneath the bed of any stream, lake, or reservoir, or other body of surface water within the boundaries of this state, whatever may be the geological formation of structure in which such water stands or flows, percolates or otherwise moves. It recognizes two types of ground water: 1) Underground storage owing wholly to natural processes, and 2) Artificially stored ground water, which includes water that has been intentionally stored (e.g., artificial storage and recovery projects) and incidentally stored (recharge from irrigation facilities).

The chapter declares ground water to be waters of the state and stipulates that the *appropriation and beneficial use of ground water* is subject to a system of permitting and certification similar to that described under the Water Code. It provides an *exemption* to the permitting requirements for small withdrawals of ground water for stock-watering, lawn or garden watering not exceeding one-half acre in area, single or group domestic uses and industrial purposes not exceeding five thousand gallons per day. Water appropriated under this exemption is entitled to a right equal to that established by permit (e.g., priority date) provided it is regularly used beneficially. The permitting requirements do not apply to use of reclaimed water by the owner of a wastewater treatment facility nor to the use of agricultural process water.

Water Code of 1917 (Chapter 90.03 RCW)

The Water Code establishes the authority of the state to regulate and control beneficial use of the waters of the state of Washington. The act establishes the doctrine of *prior appropriation* as the basis for allocation of surface waters of the state. Under that doctrine, ownership of water is vested in the state as a common property of the public. Right to put water to a beneficial use is granted to appropriators by the state in the form of a water right. An appropriator that is first in time to put a specific source or increment of water to a beneficial use has a priority right to its use. Subsequent appropriations are generally not allowed if they are injurious to priority water right holders.

Decision-making concerning water quantity in the state of Washington is primarily governed by three state laws: Water Resources Act of 1971 (Chapter 90.54 RCW), the Water Code (Chapter 90.03 RCW), and the Regulation of Public Ground Waters Act (Chapter 90.44 RCW).

The Salmon Recovery Planning Act (Chapter 77.85 RCW)

The 1998 state legislative session also passed ESHB 2496, the Salmon Recovery Planning Act. ESHB 2496 established, in part, a statewide process to identify habitat factors limiting salmon production in the state. A major goal of the Salmon Recovery Act was to retain state responsibility for managing Washington's natural resources rather than abdicate those responsibilities to the federal government. Thus, the state legislature created the Lead Entity Program which is made up of voluntary organizations that solicit, develop, prioritize and submit local salmon habitat protection and restoration projects for funding to the Salmon Recovery Funding Board. There are currently 26 Lead Entities in place. Lead Entities typically are established by Water Resource Inventory Areas or WRIAs. The habitat element of 2514 Watershed Planning overlaps with the mandate of 2496 Lead Entity organizations, and it is important for these two planning groups to coordinate efforts.

Growth Management Act of 1990(Chapter 36.70A RCW)

The state's Growth Management Act was enacted by the state legislature in 1990 in response to concerns over rapid, unplanned, and uncoordinated growth that was occurring in some portions of the state. The legislature found that such growth *"together with a lack of common goals expressing the public's interest in the conservation and wise use of our lands pose a threat to the environment, sustainable economic development, and the health, safety, and high quality of life enjoyed by residents of this state."* The legislature further found that *"it is in the public interest that citizens, communities, local governments, and the private sector cooperate and coordinate with one another in comprehensive land use planning."*

The Growth Management Act establishes goals for land use planning and a number of mandatory planning requirements that serve to express the state's

interest in local land use planning decisions. The state's fastest growing counties, as well as cities in those counties, are required to prepare *comprehensive plans* consistent with the goals and mandatory requirements of the Act. Counties and cities that are not required plan can chose to plan under the Act.

The goals set forth under the Growth Management Act address a wide range of issues associated with land use planning, including goals related to water resources, water quality, and habitat. Among these are goals related to:

- Retention of open space, enhancement of recreational opportunities, and conservation of fish and wildlife habitat; and
- Protection of the environment and enhancement of the state's high quality of life, including air and water quality as well as the availability of water (RCW 36.70A.020).

In addition, the legislature added the goals and policies set forth in the state's Shoreline Management Act of 1971 (Chapter 90.58 RCW) – described below – to the goals of the Growth Management Act. The Growth Management Acts goals also provide direction concerning where counties and cities should direct additional development. Development is to be encouraged in urban areas where adequate public facilities and services can be provided. The goals further stipulate that public facilities and services adequate to serve additional development must be available at the time the additional development occurs.

Critical Areas regulations formulated under authority of the state Growth Management Act include regulations intended to protect wetlands, fish and wildlife habitat conservation areas, as well as to control development in frequently flooded areas.

Shoreline Management Act of 1971 (Chapter 90.58 RCW)

The Shoreline Management Act of 1971 (Chapter 90.58 RCW) establishes as the policy of the state to "*provide for the management of shorelines of the state by planning for and fostering all reasonable and appropriate uses*" (RCW 90.58.020). The primary policy objectives of the Shoreline Management Act are to:

- Protect against adverse effects to the public health, the land, its vegetation and wildlife and the waters of the state and their aquatic life;
- Plan for and foster all reasonable and appropriate uses of the shoreline; and
- Protect public rights of navigation and public access to the shoreline (RCW 90.58.020).

The Shoreline Management Act applies to the following classes of waters of the state, together with lands underlying them:

- All marine waters of the state;

- Streams and rivers with a mean annual flow of 20 cubic feet per second (cfs) or more;
- Lakes and reservoirs larger than 20 acres in area; and
- Wetlands associated with the above (RCW 90.58.030; RCW 90.58.040).

The Shoreline Management Act designates certain shorelines as *Shorelines of Statewide Significance*. These shorelines are defined in the act as:

- The Pacific Coast, Hood Canal, and certain Puget Sound shorelines;
- All waters of Puget Sound and the Strait of Juan de Fuca;
- Lakes or reservoirs with surface acreage of 1,000 acres or more;
- Any western Washington river downstream of a point where mean annual flow is 1,000 cubic feet per second;
- Any eastern Washington river downstream of a point where mean annual flow is 200 cubic feet per second, or any portion of a river downstream of the first 300 square miles of drainage basin, whichever is longer; and
- Wetlands associated with the above (RCW 90.58.030).

The Shoreline Management Act establishes preferences for uses of shorelines of the state and shorelines of statewide significance. These preferences are to be reflected in guidance developed by Ecology and in local Shoreline master programs.

Counties and cities are required to prepare **Shoreline Master Programs** in accordance with provisions of the Shoreline Management Act and guidance developed by Ecology. Shoreline master programs consist of both planning and regulatory elements. The planning element provides a comprehensive vision of how shoreline areas will be used or developed. The regulatory element provides standards that shoreline projects and uses must meet (Ecology 1999).

Aquifer Protection Areas (Chapter 36.36 RCW)

Chapter 36.36 RCW allows for creation of local Aquifer Protection Areas to finance protection and/or rehabilitation of ground water quality through fees placed on water connections and/or on-site sewage systems. A county legislative authority (commission or council) can adopt a resolution identifying: 1) the boundaries of a proposed Aquifer Protection Area, 2) the amount of fees to be levied, 3) the uses to which the fees will be put, and 4) the number of years the fees will be collected. The proposed Aquifer Protection Area must be approved by a simple majority of voters within the identified boundaries.

Forest Practices Act (Chapter 76.09 RCW)

The Forest Practices Act provides for management of public and private commercial forest lands in a manner that is intended to balance maintenance of a viable forest products industry with the need to protect natural resource attributes including forest soils, fisheries, wildlife, water quantity and quality, air quality, recreation, and scenic beauty. Forest practices include all practices related to growing, harvesting, and processing timber, including such activities as road construction and maintenance, thinning, salvage, harvesting, reforestation, brush control, and application of fertilizers and pesticides.

Flood Plain [sic] Management (Chapter 86.16 RCW)

This act establishes the authority of the state to regulate navigable and nonnavigable waters, subject to applicable federal laws, for purposes of managing floodplains and alleviating flood damage. Ecology is assigned responsibility for providing technical assistance to local governments in the development, administration, and enforcement of *local floodplain management ordinances*; establishing minimum state flood plain management requirements that are consistent with minimum requirements of the National Flood Insurance Program; and assisting local governments in identifying 100-year flood plains. The act also allows for local adoption of flood plain management ordinances, subject to approval by Ecology, that are in compliance with the requirements of the National Flood Insurance Program.

On-Site Sewage Systems Rules and Regulations of the state (Chapter 248-272 WAC)

This rule, administered by the Washington Department of Health (DOH), serves as the minimum requirements for the design, construction, and operation and maintenance of on-site sewage systems with flows of less than or equal to 14,500 gallons per day. (Flows above 14,500 are regulated by Ecology under Chapter 173-216, Chapter 173-221 WAC, and Chapter 173-240 WAC.) It also establishes limitations on density of such systems as well as requirements for setbacks to wells, springs, and surface water bodies. Local health jurisdictions are required to adopt onsite sewage regulations at least as restrictive as the state requirements. Systems with flows of at least 3,500 gallons per day, but less than 14,500 gallons per day are regulated by DOH, unless that authority is delegated to a local health jurisdiction. Chapter 248-272 contains standards for on-site sewage system performance, referred to as Treatment Standard 1 and Treatment Standard 2, and includes provisions for use of alternative systems.

Local clearing, filling, and/or grading ordinances

In communities where adopted, such local ordinances attempt to control erosion and sedimentation impacts associated with land clearing and grading activities.

Federal Laws, Rules, Regulations and Court Decisions

Clean Water Act (Federal Water Pollution Control Act)

The federal Clean Water Act is the principal federal law that addresses surface water quality. It employs a variety of regulatory and non-regulatory tools to limit direct discharges of pollutants into waterways, finance municipal wastewater treatment facilities, and manage stormwater runoff from streets, construction sites, and farms. These tools are implemented to achieve the overall goal of the act, which is to restore and maintain the chemical, physical, and biological integrity of the navigable waters of the United States so they can support the protection and propagation of shellfish, fish, and wildlife (EPA 2002). The act makes it illegal for any person to discharge pollutants from a point source into navigable waters without a *National Pollutant Discharge Elimination System (NPDES)* Permit issued in accordance with Section 402 of the Clean Water Act. Such permits usually place limits on the quantity and concentration of pollutants that can be discharged and impose operational conditions that help ensure compliance with those limits. NPDES permits are required for wastewater discharges to surface water from industrial facilities and municipal wastewater treatment plants, stormwater discharges from industrial facilities and construction sites involving disturbance of five acres or more of land (in the process of being modified to one acre), and municipal stormwater systems serving populations of 100,000 or more (in the process of being modified to address some municipal stormwater systems serving populations of less than 100,000).

EPA is responsible for implementation of Section 303 of the Clean Water Act, which includes federal water quality standards and provisions for establishment of *Total Maximum Daily Loads (TMDLs)*. In Washington State, EPA has delegated its Clean Water Act authority to the Department of Ecology, including issuance of NPDES permits and establishment of TMDLs. TMDLs and water quality impairments are discussed in greater detail on pages IV-85 and IV-103.

Section 305(b) of the Clean Water Act requires each state to annually gather data regarding the quality of its navigable waters and conduct an analysis of the extent to which such waters provide for the protection and propagation of a balanced population of shellfish, fish, and wildlife and allow for water oriented recreation. This information is provided to the EPA, which compiles the water quality information from all states and delivers a report to Congress regarding the condition of the nation's waters.

Section 401 of the Clean Water Act requires applicants for a federal permit to conduct an activity that would involve deposition of fill or excavation in navigable waters or associated wetlands to obtain a certification from the state in which the project would occur that the project is consistent with

federal discharge requirements and the aquatic protection requirement of state law. Such certification is referred to as a *Section 401 Water Quality Certification*. In Washington State, Ecology is responsible for issuing such certifications.

Federal Endangered Species Act

The federal **Endangered Species Act** was enacted by the U.S. Congress in 1973 in response to concerns over the decline of a number of fish and wildlife species. The purposes of the Endangered Species Act are to protect endangered or threatened species and to provide a means for conservation of their ecosystems. Under the Endangered Species Act, the term endangered species is defined as *"any species which is in danger of extinction throughout all or a significant portion of its range."* The term *threatened species* is defined as *"any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."*

The U.S. Fish and Wildlife Service has primary jurisdiction over terrestrial and freshwater species, while NOAA Fisheries has jurisdiction over marine species such as salmon and marine mammals. These agencies are authorized under the Endangered Species Act to list species as endangered or threatened through administrative rule making. It is required that *critical habitat* for listed species can be designated at the time of listing or within one year after listing (Ryan and Schuler 1998). Section 7 (16 U.S.C. 1536) of the Endangered Species Act directs all federal agencies to apply their existing authorities to conserve endangered and threatened species and to ensure that their actions do not jeopardize listed species or destroy or adversely modify critical habitat. Section 9 (16 U.S.C 1538) of the Endangered Species Act makes it unlawful for a person to take an endangered species. Take is defined in the act as *"to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or to attempt to engage in any such conduct".*

For each species listed under the Endangered Species Act, the listing agency (U.S. Fish and Wildlife Service or NOAA Fisheries) is required to prepare a recovery plan describing the steps that would be needed to restore the species to health. The act encourages participation of the public and stakeholders in the development of recovery plans.

Safe Drinking Water Act

The purpose of the Safe Drinking Water Act passed in 1974 is to protect the quality of drinking water in the U.S. This law focuses on all waters actually or potentially designed for drinking use, whether from above ground or underground sources. The Safe Drinking Water Act (SDWA) Amendments of 1996 require states to develop and implement Source Water Assessment Programs (SWAP) to analyze existing and potential threats to the quality of the public drinking water throughout the state.

Chehalis River Basin Fishery Resources Study and Restoration Act of 1990.

The legislation authorized a joint federal, state, and tribal study for the restoration of the fishery resources of the Chehalis River Basin. The purposes of the Act are (1) to require a comprehensive study of the cause of the decline of fishery resources originating in the Chehalis Basin; (2) to develop recommendations for a program to address the cause of those declines; and (3) to restore those fishery resources in a reasonable period of time.

Court Cases

Several legal and policy issues have also affected water resource management in Washington. Some of these court cases are described below:

- The State Supreme Court ruled in *Rettkowski v. Department of Ecology* (1993, commonly known as Sinking Creek) that Ecology may not attempt to resolve disputes among conflicting water uses if one or more of them is based on an unadjudicated vested claim to a water right.
- The State Supreme Court in *Grimes v. Department of Ecology* (1993) set down important case law regarding the obligations of water users to maintain efficient water delivery and use systems that are not wasteful. The opinion also provides important criteria relating to beneficial use.
- The State Supreme Court in *PUD No. 1 of Jefferson County v. Department of Ecology* (1993, commonly known as the Elkhorn case) ruled that Ecology could use instream flow conditions on a permit that provide a high level of protection for instream values (optimum fish flows based on state of the art studies). This case was subsequently appealed to the United States Supreme Court on other issues and resulted in a landmark opinion regarding the relationship of water quantity and quality.
- The State Court of Appeals ruled in *Hubbard v. Department of Ecology* (1994) that the connection between ground water and surface water (referred to as hydraulic continuity) may exist even when the point of withdrawal of the ground water is several miles removed from the affected stream. It upheld Ecology's conditioning of a ground water right with instream flows in the Okanogan River, based on continuity between the aquifer and river, even if the effect of pumping on the flow of the river would be small and delayed. The decision also affirmed that where surface and ground water is connected, minimum flows established by rule are treated as appropriations and should be protected from impairment by any subsequent ground water appropriation.

- The State Supreme Court ruled in *Hillis v. Department of Ecology* (1997) that Ecology must involve the public when making broad policy decisions on setting priorities for water rights permit decisions. That opportunity is provided through Ecology's rule-making process. The court refused to invalidate individual water right decisions Ecology made on the basis of an existing watershed assessment process. The court also found that Ecology may conduct watershed assessments but may not make the completion of an assessment a requirement or prerequisite to making decisions on applications without first adopting rules.
- In *Okanogan Wilderness League v. Town of Twisp and Department of Ecology* (1997) the State Supreme Court ruled that Ecology's decision granting a change in the point of diversion for the town of Twisp's surface water right was in error because the water right had been abandoned and was therefore no longer valid. Municipal water rights, while not subject to relinquishment, remain subject to loss through abandonment. The State Supreme Court also held that only the quantity of water that has been put to actual beneficial use is valid for change under an existing water right. In reviewing change and transfer applications, Ecology must first determine the quantity that has been put to historical beneficial use under the existing water right, and then determine that the right was never relinquished or abandoned.
- The State Supreme Court ruled in *Department of Ecology v. George Theodoratus* (1998) that Ecology is authorized to place new conditions on extensions for water right permits and to issue certificates for water rights only when and to the extent that the water is put to beneficial use.